VIRGINIA STATE UNIVERSITY

2025 - 2026
Academic Catalog

This catalog describes academic courses, programs, and standards for student progress and retention at time of publication. However, the provisions of this publication are not to be regarded as an irrevocable contract between the student and Virginia State University. There are established procedures for making changes, which protect the institution's right to make changes that are deemed appropriate. A change of curriculum or graduation requirement is not made retroactive unless the alteration is to the student's advantage and can be accommodated within the span of years normally required for graduation.

Virginia State University is committed to a policy of equal opportunity in education and employment without regard to race, creed, sex or national origin. There are affirmative programs at VSU that support the commitment to this democratic approach to public education.

Rev. 2 – Sept. 2024

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HOME

Virginia State University

Since its founding in 1882, Virginia State University has been guided by the vision and leadership of its Presidents, each of whom has played a pivotal role in advancing the University's growth, academic distinction, and societal impact. This legacy of transformative leadership continues to shape the University's trajectory today.

Virginia State University is governed by a dedicated Board of Visitors, appointed by the Governor of Virginia, whose primary responsibilities include establishing policy, overseeing the university's strategic direction, and ensuring fiscal integrity. The Board serves as the institutional authority in matters of governance, providing leadership that supports the university's mission of academic excellence, student success, and community engagement.

The University's day-to-day operations are managed by the President and an accomplished team of administrative leaders. The President, appointed by the Board of Visitors, is the chief executive officer responsible for the overall administration of the University. The President's Cabinet, composed of vice presidents and senior leadership, ensures that all academic, administrative, and operational units function cohesively to uphold the University's values and priorities.

Virginia State University's administration is committed to fostering a culture of transparency, accountability, and innovation. Through collaborative leadership, the administration advances the institution's land-grant mission and vision, ensuring a supportive environment for teaching, research, and service that addresses the evolving needs of the Commonwealth of Virginia and beyond.

Access the Academic Catalogs Below
Undergraduate Catalog (p. 28)
Graduate Catalog (p. 410)

BOARD OF VISITORS

Board of Visitors

Mr. Victor Branch, Rector
Richmond, Virginia

General Dennis Via, Vice Rector
United States Army (Retired)
McLean, Virginia

Ms. Verndell Robinson, Secretary
Woodbridge, Virginia

Dr. Valerie K. Brown[1]
Chesapeake, Virginia

Dr. Joseph A. F. Chase, Jr.
Washington, District of Columbia

Mr. Thomas Cosgrove
Williamsburg, Virginia

Dr. Robert Denton, Jr.
Blacksburg, Virginia

Dr. Harold Green, Jr.
Quinton, Virginia

Dr. Leonard L. Haynes, III
Silver Spring, Maryland

Mr. M. Peter McPherson
Arlington, Virginia

Ms. Daphne Meeks[1]
Norfolk, Virginia

Ms. Morenike Miles
Richmond, Virginia

Mr. Jon Moore
Richmond, Virginia

Mr. Robert Thompson
Richmond, Virginia

Mr. Kishore S. Thota
Richmond, Virginia

[1] *Alumnus of The Virginia State University*

PRESIDENTS

Presidents

John Mercer Langston, LL.D.
1886 - 1887

James Hugo Johnston, Ph.D.
1887 - 1914

John Manuel Gandy, LL.D.
1914 - 1942
(President Emeritus 1942 - 1947)

Luther Hilton Foster, LL.D.
1942 - 1949

James Hugo Johnston, Ph.D.
1949 - 1950 (Acting)

Robert Prentiss Daniel, PhD., LL.D.
1950 - 1968

Walker Henry Quarles, Jr., LL.D.
1968 (Acting)

James Franklin Tucker, Ph.D.
1968 - 1970

Walker Henry Quarles, Jr., LL.D.
1970

Wendell Phillips Russell, Ed.D.
1970 - 1974

Walker Henry Quarles, Jr. LL.D.
1974-1975

William Everett Terry, B.A.
January - June 1976
(Interim Chief Administration)

Thomas M. Law, E.D., L.H.D.
1976 - 1982

Curtis E. Bryan, Ph.D.
1982 - 1983 (Interim)

Wilbert Greenfield, Ph.D.
1983 - 1988

Wesley Cornelius McClure, Ed.D.
1988 - 1992

Nathaniel Pollard, Jr. Ph.D.
1992 - 1993

Eddie Nathaniel Moore, Jr. LL.D.
1993 - 2010

Keith T. Miller, Ph.D.
2010 - 2014

Pamela V. Hammond, Ph.D.
2015 - 2016 (Interim)

Makola M. Abdullah, Ph.D.
2016 - Present

ADMINISTRATION

Administration

Makola M. Abdullah, Ph.D.
President

Tia A. Minnis, Ed.D.
Provost and Vice President for Academic Affairs

Kevin W. Davenport
Senior Vice President for Finance and
Administration and Chief Financial Officer

Willis W. Walter, Ph.D.
Interim Vice President for Advancement and External Engagement

Annie C. Redd, Ed.D.
Chief of Staff and Director of Board Operations and Relations

Shawri King-Casey, J.D.
Vice President for Institutional Integrity and Compliance

Alexis Brooks-Walter, Ph.D.
Vice President for Student Affairs and Enrollment Management

ACCREDITATION

SACSCOC Accreditation

Virginia State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctorate degrees. Virginia State University also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Virginia State University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org (https://www.sacscoc.org/)).

View additional information (https://sacscoc.org/institutions/?institution_name=Virginia+State+University&results_per_page=25&curpage=1&institution=0011N00001h9EIGQA2) on the VSU accreditation with SACSCOC, the SACSCOC accreditation process and/or the process to file a complaint against a SACSCOC institution.

Specialized Accreditation

- Association to Advance Collegiate Schools of Business ((http://www.aacsb.edu/)AACSB) (http://www.aacsb.edu/)
- Accreditation Board for Engineering and Technology (ABET) (http://www.abet.org/)
- Accreditation Council for Education in Nutrition and Dietetics (ACEND) (https://www.eatrightpro.org/)
- Accreditation Commission for Programs in Hospitality Administration (ACPHA) (http://www.acpha-cahm.org/)
- Association of Technology Management and Applied Engineering (ATMAE) (http://www.atmae.org/)
- Council on Social Work Education (CSWE) (https://www.cswe.org/)
- National Association of Schools of Art and Design (NASAD) (https://nasad.arts-accredit.org/)
- National Association of Schools of Music (NASM) (https://nasm.arts-accredit.org/)
- Council for the Accreditation of Educator Preparation (NCATE/CAEP) (http://www.caepnet.org/)

The full list of most recent colleges and programs (https://www.vsu.edu/opie/accreditation/specialized-accreditation.php) with specialized accreditation is available.

VSU Professional Licensure Disclosures (https://www.vsu.edu/opie/accreditation/pld.php)

AFFILIATIONS

University Affiliations

Major affiliations and memberships of the University include:

- American Association for Higher Education
- American Association of Collegiate Registrars and Admissions Officers
- American Association of State Colleges and Universities
- American Association of University Women
- American Home Economics Association
- American Society for Engineering Education
- American Society for Mechanical Engineering
- American Society of Quality
- Association to Advance Collegiate School of Business
- Association for Computing Machinery
- Association for Continuing Higher Education
- Association of American Colleges
- Association of Governing Boards of Universities and Colleges
- Association of Institution Research
- Association of International Education
- Association of Physical Plant Administrators of Universities and Colleges
- Association of Virginia Colleges
- Conference of Southern Graduate Schools
- Council for the Advancement and Support of Education
- Council of 1890 Presidents/Chancellors
- Council of Cooperative College Projects
- Council on Hotel Restaurant and Institutional Education
- Council on Social Work Education
- HBCU Summit on Retention
- International Technology Education Association
- Nation Academic Advising Association
- National Association for the Advancement of Colored People
- National Association of African-American Honors Program
- National Association of African American Studies and Affiliates
- National Association of Business Teacher-Education
- National Association of College Admissions Counseling
- National Association of College Deans, Registrars and Admissions Officers
- National Association of Mentors in Higher Education
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of State Universities and Land-Grant Colleges
- National Association of Student Affairs Professionals
- National Collegiate Athletic Association
- National Commission for Cooperative Education
- National Collegiate Honors Council
- National Citizens Commission on Alcoholism of the National Council on Alcoholism, Inc.
- National Honor Society
- National Orientation Directors Association
- National Society of Black Engineers
- Oak Ridge Associated Universities
- Society of Manufacturing Engineers
- Southeastern Universities Research Association, Inc.
- Southern Education Foundation
- Southern Regional Educational Board
- Southern Regional Honors Council
- Southern Universities Research Association
- Technology Education Collegiate Association
- Technology Student Association
- The Association to Advance Collegiate Schools of Business
- The Association for General and Liberal Studies
- The Central Intercollegiate Athletic Association
- The College Board
- The Institute of Electrical and Electronics Engineers
- The Society of Automotive Engineers
- The University Center in Virginia
- Virginia Association of College Registrars and Admissions Officers
- Virginia Collegiate Honors Council
- Virginia Social Science Association
- Virginia Technology Education Association

THE UNIVERSITY

The History of Virginia State University

Virginia State University was founded on March 6, 1882, when the legislature passed a bill to charter the Virginia Normal and Collegiate Institute. The bill was sponsored by Delegate Alfred W. Harris, a Black attorney whose offices were in Petersburg, but who lived in and represented Dinwiddie County in the General Assembly. A hostile lawsuit delayed opening day for nineteen months, until October 1, 1883. In 1902, the legislature revised the charter act to curtail the collegiate program and to change the name to Virginia Normal and Industrial Institute. In 1920, the land-grant program for Blacks was moved from a private school, Hampton Institute, where it had been since 1872, to Virginia Normal and Industrial Institute. In 1923 the college program was restored, and the name was changed to Virginia State College for Negroes in 1930. The two-year branch in Norfolk was added to the college in 1944; the Norfolk division became a four-year branch in 1956 and gained independence as Norfolk State College in 1969. Meanwhile, the parent school was renamed Virginia State College in 1946. Finally, the legislature passed a law in 1979 to provide the present name, Virginia State University.

In the first academic year, 1883-84, the University had 126 students and seven faculty (all of them Black), one building, 33 acres, a 200-book library, and a $20,000 budget. By the centennial year of 1982, the University was fully integrated, with a student body of nearly 5,000, a full-time faculty of about 250, a library containing 200,000 books and 360,000 microform and non-print items, a 236-acre campus and 416- acre farm, more than 50 buildings, including 15 dormitories and 16 classroom buildings, and a biennial budget of $31,000,000, exclusive of capital outlay.

The University is situated in Chesterfield County at Ettrick, on a bluff across the Appomattox River from the city of Petersburg. It is accessible via Interstate Highways 95 and 85, which meet in Petersburg. The University is only two and a half hours away from Washington, D.C. to the north, the Raleigh-Durham- Chapel Hill area to the southwest, and Charlottesville to the northwest.

Virginia State University has a long history of outstanding faculty and administration. The first person to bear the title of President, John Mercer Langston, was one of the best-known blacks of his day. Until 1992, he was the only black ever elected to the United States Congress from Virginia (elected in 1888), and he was the great-uncle of the famed writer Langston Hughes. From 1888 to 1968, four presidents - James H. Johnston, John M. Gandy, Luther H. Foster, Robert P. Daniel-served an average of 20 years, helping the school to overcome adversity and move forward. The next twenty years, 1968-1992, saw six more presidents —James F. Tucker, Wendell P. Russell, Walker H. Quarles, Jr., Thomas M. Law, Wilbert Greenfield, and Wesley Cornelious McClure. On June 1, 1993, Eddie N. Moore, Jr., the former Treasurer of the Commonwealth of Virginia, became the twelfth President of Virginia State University. Dr. Keith T. Miller became Virginia State University's 13th president from 2010 to 2014. In 2015, Dr. Pamela V. Hammond became the first woman to lead Virginia State University in 133 years. She was appointed as interim president on January 1, 2015. Since that time, she has made it a top priority to establish VSU as a catalyst for innovation in higher education.

On February 1, 2016, Dr. Makola M. Abdullah became the 14th President of VSU. Before coming to VSU, Dr. Abdullah served as the Provost and Senior Vice President at Bethune-Cookman University – a private, historically Black University in Daytona Beach, Florida. Dr. Abdullah is committed to: providing a transformative experience for VSU students; strategically investing in academic programs; embracing our position as a top Land Grant University; embracing our role as Virginia's Opportunity University; and partnering together as a University to tell our story.

Mission Statement

Virginia State University, a public, comprehensive 1890 Land Grant institution and historically black college/university, is committed to the preparation of a diverse population of men and women through the advancement of academic programs and services that integrate instruction, research, extension, and outreach. The University endeavors to meet the educational needs of students, graduating lifelong learners who are well equipped to serve their communities as informed citizens, globally competitive leaders, and highly effective, ethical professionals.

OUR VALUES

- **Student Centered** - Promoting the intellectual, physical, social, and emotional development of students in all facets of University life.
- **Integrity** - Displaying the highest degree of ethical commitment in the pursuit of knowledge.
- **Engagement** - Developing civically engaged citizens who value all persons and demonstrate the desire to positively impact their immediate surroundings, nation, and world.
- **Customer Service** - Creating an atmosphere of respect, collegiality, and responsiveness to provide excellent service to our internal and external constituents.
- **Excellence** - Utilizing a balanced approach to create a high expectation of achievement, awareness, and intellectual development among our students, faculty, and staff.
- **Scholarly Research** - Conducting scholarly activity is at the forefront of our disciplines and applying translational discoveries and intellectual pursuits to benefit the community.
- **Global** - Preparing globally aware citizens that respect and appreciate cultural differences of all people through service and the dissemination of knowledge to the world.
- **Teaching** - Providing learning environments and activities consistent with best educational practices to create a framework where scholarship is intentional, transformational, and deepens understanding in the preparation of future leaders.
- **Diversity** - Fostering a community that identifies, values, and respects difference of all people by creating a positive experience for students, faculty, staff, and the community.

Virginia State University is committed to upholding standards of academic integrity, excellence, and accountability. The policies outlined in this section are designed to ensure a fair, consistent, and transparent academic environment for all students, faculty, and staff. These policies govern key areas of academic life and define the expectations, as well as, responsibilities associated with academic participation at the University.

Policies and procedures may include, but are not limited to:

- **Academic Integrity**: Standards related to honesty in academic work, including definitions of academic misconduct and procedures for resolution.

- **Grading Policies**: Information on grading scales, grade point averages (GPA), grade changes, and the process for grade appeals.
- **Enrollment and Registration**: Guidelines for course registration, course loads, add/drop periods, and withdrawal procedures.
- **Attendance Requirements**: Institutional expectations for class attendance and participation, including policies on excused and unexcused absences.
- **Progression and Retention**: Criteria for satisfactory academic progress, academic standing (good standing, probation, suspension), and reinstatement procedures.
- **Transfer Credit and Prior Learning**: Evaluation of transfer credit, advanced placement (AP), dual enrollment, and credit for prior learning experiences.
- **Degree Completion Requirements**: Institutional policies for fulfilling degree requirements, including minimum credit hours, residency requirements, and graduation application procedures.
- **Appeals and Grievances**: Processes available for students to appeal academic decisions or file grievances regarding academic matters.

All students are expected to familiarize themselves with and adhere to these policies throughout their academic journey. For more information or inquiries about the policy statements at Virginia State University, contact the Office of the Registrar.

The History of Virginia State University

The History of Virginia State University

Virginia State University was founded on March 6, 1882, when the legislature passed a bill to charter the Virginia Normal and Collegiate Institute. The bill was sponsored by Delegate Alfred W. Harris, a Black attorney whose offices were in Petersburg, but who lived in and represented Dinwiddie County in the General Assembly. A hostile lawsuit delayed opening day for nineteen months, until October 1, 1883. In 1902, the legislature revised the charter act to curtail the collegiate program and to change the name to Virginia Normal and Industrial Institute. In 1920, the land-grant program for Blacks was moved from a private school, Hampton Institute, where it had been since 1872, to Virginia Normal and Industrial Institute. In 1923 the college program was restored, and the name was changed to Virginia State College for Negroes in 1930. The two-year branch in Norfolk was added to the college in 1944; the Norfolk division became a four-year branch in 1956 and gained independence as Norfolk State College in 1969. Meanwhile, the parent school was renamed Virginia State College in 1946. Finally, the legislature passed a law in 1979 to provide the present name, Virginia State University.

In the first academic year, 1883-84, the University had 126 students and seven faculty (all of them Black), one building, 33 acres, a 200-book library, and a $20,000 budget. By the centennial year of 1982, the University was fully integrated, with a student body of nearly 5,000, a full-time faculty of about 250, a library containing 200,000 books and 360,000 microform and non-print items, a 236-acre campus and 416- acre farm, more than 50 buildings, including 15 dormitories and 16 classroom buildings, and a biennial budget of $31,000,000, exclusive of capital outlay.

The University is situated in Chesterfield County at Ettrick, on a bluff across the Appomattox River from the city of Petersburg. It is accessible via Interstate Highways 95 and 85, which meet in Petersburg. The University is only two and a half hours away from Washington, D.C. to the north, the Raleigh-Durham- Chapel Hill area to the southwest, and Charlottesville to the northwest.

Virginia State University has a long history of outstanding faculty and administration. The first person to bear the title of President, John Mercer Langston, was one of the best-known blacks of his day. Until 1992, he was the only black ever elected to the United States Congress from Virginia (elected in 1888), and he was the great-uncle of the famed writer Langston Hughes. From 1888 to 1968, four presidents - James H. Johnston, John M. Gandy, Luther H. Foster, Robert P. Daniel-served an average of 20 years, helping the school to overcome adversity and move forward. The next twenty years, 1968-1992, saw six more presidents —James F. Tucker, Wendell P. Russell, Walker H. Quarles, Jr., Thomas M. Law, Wilbert Greenfield, and Wesley Cornelious McClure. On June 1, 1993, Eddie N. Moore, Jr., the former Treasurer of the Commonwealth of Virginia, became the twelfth President of Virginia State University. Dr. Keith T. Miller became Virginia State University's 13th president from 2010 to 2014. In 2015, Dr. Pamela V. Hammond became the first woman to lead Virginia State University in 133 years. She was appointed as interim president on January 1, 2015. Since that time, she has made it a top priority to establish VSU as a catalyst for innovation in higher education.

On February 1, 2016, Dr. Makola M. Abdullah became the 14th President of VSU. Before coming to VSU, Dr. Abdullah served as the Provost and Senior Vice President at Bethune-Cookman University – a private, historically Black University in Daytona Beach, Florida. Dr. Abdullah is committed to: providing a transformative experience for VSU students; strategically investing in academic programs; embracing our position as a top Land Grant University; embracing our role as Virginia's Opportunity University; and partnering together as a University to tell our story.

The Mission of Virginia State University

Mission Statement

Virginia State University, a public, comprehensive 1890 Land Grant institution and historically black college/university, is committed to the preparation of a diverse population of men and women through the advancement of academic programs and services that integrate instruction, research, extension, and outreach. The University endeavors to meet the educational needs of students, graduating lifelong learners who are well equipped to serve their communities as informed citizens, globally competitive leaders, and highly effective, ethical professionals.

OUR VALUES

- **Student Centered** - Promoting the intellectual, physical, social, and emotional development of students in all facets of University life.
- **Integrity** - Displaying the highest degree of ethical commitment in the pursuit of knowledge.

- **Engagement** - Developing civically engaged citizens who value all persons and demonstrate the desire to positively impact their immediate surroundings, nation, and world.
- **Customer Service** - Creating an atmosphere of respect, collegiality, and responsiveness to provide excellent service to our internal and external constituents.
- **Excellence** - Utilizing a balanced approach to create a high expectation of achievement, awareness, and intellectual development among our students, faculty, and staff.
- **Scholarly Research** - Conducting scholarly activity is at the forefront of our disciplines and applying translational discoveries and intellectual pursuits to benefit the community.
- **Global** - Preparing globally aware citizens that respect and appreciate cultural differences of all people through service and the dissemination of knowledge to the world.
- **Teaching** - Providing learning environments and activities consistent with best educational practices to create a framework where scholarship is intentional, transformational, and deepens understanding in the preparation of future leaders.
- **Diversity** - Fostering a community that identifies, values, and respects difference of all people by creating a positive experience for students, faculty, staff, and the community.

Policy Statements

ACADEMIC SANCTIONS

The following guidelines provide the minimum academic standards of the University and required maintenance of grade point averages for a student to avoid academic sanctions.

1. A new student (first time in college freshmen or transfer student without an Associate Degree) must earn a cumulative grade point average (GPA) of 1.5. each semester during the first two regular semesters in residence. Thereafter, the student must earn at least a 2.0 semester average each regular semester (to avoid Academic Warning) or have a cumulative average of a 2.0 (to avoid Probation or Suspension).

   Transfer students with the Associate Degree must maintain a 2.0 semester GPA each regular semester (to avoid Academic Warning) or have a cumulative GPA of 2.0 (to avoid Probation or Suspension)

2. Academic Warning will occur when a student's semester average falls below the required minimum.

3. Academic Probation occurs when a will occur when a student's semester and cumulative average falls below the required minimum for two semesters.

4. Academic Suspension for poor scholarship will occur when a student's semester and cumulative average falls below the required minimum for three semesters. Students will not be readmitted to the university except under the following circumstances:
   a. A. Students who return to the university, having earned an Associate Degree (college-prep track) will be readmitted under the same terms and conditions as a transfer student.
   b. B. Under exceptional circumstances (such as serious and documented health or financial difficulties), a student may appeal his/her suspension to the department chair and college dean who may then, in turn, recommend readmission to the Academic Credits Committee (ACC). Such an appeal can only be made after the student has been out for the period of one year. The student must present a letter from at least one faculty member in support of his or her appeal. If the appeal is successful, the student will be readmitted on" warning".

5. If a student voluntarily withdraws from the university for a semester (for any reason), that student will return on the same status with which he/she left. (That is, if the student left on "warning," he/she will return on "warning;" if he/she left on "probation," he/she will return on "P\probation.")

STUDENT MUST MAINTAIN EITHER THE SEMESTER OR CUMULATIVE GPA, AS SPECIFIED

Completed Semesters	Semester GPA	Cumulative GPA
1	1.5	N/A
2	1.5	N/A
3+	2.0 ~OR~	2.0

Each request for readmission is evaluated by the ACC. The appellant must demonstrate that he/she is prepared to succeed academically via written recommendation from the appellant's dean and department chairperson and documentation of academic pursuits/activities (e.g., college course work successfully completed at other accredited institutions, college-equivalency experiences, relevant internships, military service, etc., as applicable).

- If the request for readmission is approved, the ACC may require stipulations with regard to: maximum number of credit hours in which the applicant may enroll, change of major, required cumulative or term grade point average, among others as deemed appropriate to the student's academic progress during previous enrollment and work completed during the period of suspension.
- If the request for readmission is denied, the ACC will inform the applicant in writing as to what the student can do to reapply in the future, or the application may be denied and permanent expulsion imposed.

Alcohol and Drug Policy

I. PURPOSE

Virginia State University, a community of students, faculty, and staff, is committed to preserving a living and learning environment where individuals can safely and successfully complete their college career free from the negative impact and disruptive influence of alcohol and other drugs. Aware of certain risks associated with alcohol and other drug-use, the University community views substance abuse as an obstacle to the attainment of a student's educational goals and to the University's mission. The responsibility to create and maintain a culture less vulnerable to alcohol and other drug use and one that promotes responsible attitudes and lifestyles will be shared by all members of the University community.

The University acknowledges that learning occurs both outside and inside the classroom, making the living and learning environment an integral part of the educational experience of students. While the University values the diversity of ideas, backgrounds, and life experiences

that students bring, there also exists the expectation that students will learn to adapt and adopt the high standards of conduct expected at an institution of higher learning. Admission and membership to the University is understood to mean that each person is afforded certain rights and responsibilities. Every effort will be made to protect those rights that are within the University's policy and local, state, and federal laws. The University will not serve as a sanctuary for those who disregard the law.

Recognizing substance abuse as a prevalent social issue, Virginia State University accepts its role and responsibility in helping find solutions to this problem. The University will educate members of the University community about the serious consequences and health risks associated with alcohol and other drug use. The University will help dispel faculty beliefs that suggest alcohol abuse and drug use are acceptable on a college campus.

II. POLICY

The Virginia State University Alcohol and Drug Policy prohibit the possession, use, manufacture, distribution, selling or consumption of alcohol and illicit drugs anywhere on campus. The Policy pertains to the activities of all students on University property, and the activities of students at University sponsored events or at off-campus activities. While representing the University community students, faculty and staff are expected to comply with all local, state, and federal alcohol and drug related laws.

VSU complies with the Drug Free Schools and Communities Act of 1989 and is a member of the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse.

Virginia State University expects staff and academic members of the University community to respond to the use of alcohol and other drugs in a responsible manner that includes but is not limited to:

1. Knowing and abiding by University Alcohol and Drug Policy.
2. Becoming informed about the consequences and risks associated with the use of alcohol and other drugs.
3. Supporting norms that convey the non-use of alcohol and other drugs as a responsible choice.
4. Being alert and responsive to the needs of persons who experience problems due to the irresponsible use of alcohol and other drugs, by helping persons identify and seek appropriate sources for assistance.
5. Integrating alcohol and other drug related information into topics of discussion as deemed appropriate.
6. Following procedures and enforcing sanctions established to hold persons accountable for their actions and encouraging compliance with regulations.

Virginia Drinking Age Law

Virginia's Alcohol Beverage Control Act contains laws governing possession, use and consumption of alcoholic beverages. Pertinent laws are summarized below:

- It is illegal for anyone under age 21 to purchase, possess, or consume any alcoholic beverage.
- It is illegal for any person to sell alcoholic beverages to persons under the age of 21 years.
- It is illegal for any person to purchase or provide alcoholic beverages for another when, at the time of the purchase, he/she knows or has reason to know that the person for whom the alcohol is purchased is under 21 years of age.
- It is illegal for any underage person to use a forged or otherwise deceptive driver's license to obtain beer or alcoholic beverage.

Controlled Substances and Illicit Drugs

The unlawful possession, distribution, and use of controlled substances and illicit drugs, as defined by the Virginia Drug Control Act, are prohibited in Virginia.

Sanctions for Policy Violations

Any member of the campus community who violates the University Alcohol and Drug Policy will face appropriate disciplinary action. Students in violation are subject to disciplinary action by the University judicial system or criminal prosecution by federal, state or local authorities or both. Violation of the University Alcohol and Drug Policy by students addressed through the Judicial Affairs System may be subject to but not limited to referral for assessment and/or treatment, community service, probation, suspension or expulsion as well as loss of eligibility for federal financial aid. Complete information about the Judicial System is available in the student handbook.

Health Risks

Virginia State University is dedicated to the education of students and employees about health risks associated with the abuse of alcohol and other drugs. Descriptions of some of these health risks are described below. In addition, behavioral difficulties at work, in school, or in relationships and with the law can be linked to the abuse of alcohol and other drugs.

Alcohol, a potentially addictive drug with significant physical and psychological consequence, is a central nervous system depressant that causes a number of marked changes in behavior. Even at relatively low levels, alcohol can impair judgment and decision-making. Low doses can also impair judgment and coordination required to drive a car safely, placing the driver and others at risk of injury. At higher levels, alcohol impairs the functioning of one's vital organs and can result in coma or death. If combined with other depressants, much lower doses of alcohol can produce the effects just described.

Repeated use of alcohol can lead to dependence. Sudden interruption of alcohol intake can produce withdrawal symptoms, including severe anxiety, tremors, hallucinations, and convulsions. Alcohol withdrawal can be life threatening. Prolonged and excessive use of alcohol, especially when combined with poor nutrition, can cause progressive damage to vital organs. Mothers who drink during pregnancy may give birth to infants with fetal alcohol syndrome. In many cases FAS infants have physical abnormalities and mental retardation.

Marijuana is an illegal drug that impairs memory, perception, judgment and hand-eye coordination skills. The tar content in cannabis is at least 50% higher than that of tobacco and thus smokers run the added risk of lung cancer, chronic bronchitis, and other lung diseases. Recent findings in the medical community suggest that an "A motivational syndrome" affects moderate to chronic users and produces symptoms of loss of energy, motivation, concentration, inability to carry out long-term plans, and decreased performance in school and work. This finding has significant implications for students and institutions of higher learning.

Americans with Disabilities Accessibility Policy

I. PURPOSE

The purpose of this policy is to address the commitment of the University to provide reasonable accommodations to applicants for employment,

employees, and students under Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990.

II. POLICY

The Virginia State University Board of Visitors, the administration and the faculty are committed to a policy of equal opportunity in education and employment prohibiting unlawful discrimination on the basis of race, color, creed, religion, marital status, sex, age, disability, political affiliation, or national origin.

The University will provide reasonable accommodations upon request to otherwise qualified disabled individuals who require such accommodations in technical standards of a University academic program or to have an equal opportunity to participate in University programs or activities. Accommodation request related to conditions of employment must be made directly to the Office of Human Resources. All accommodations requests must be written and consistent with the current documented needs of the individual requesting said accommodation(s).

Any student requiring an accommodation must request such services directly from the Office of Student Enhancement and Engagement or the Office of the Provost. In the event a program, class, or activity is located in an inaccessible facility, the University will take such action(s) as necessary to provide reasonable accommodations to ensure accessibility. All accommodation requests must be written and consistent with the current documented needs of the individual requesting said accommodation(s). A disability will be defined according to the parameters of Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990.

Inquiries regarding interpretation or compliance with this policy should be directed to the Office of Human Resources, Virginia State University, P.O. Box 9412, Petersburg, Virginia 23806, (804) 524-5085.

Family Educational Rights and Privacy Act of 1974 (FERPA)

I. POLICY STATEMENT CONCERNING THE CONFIDENTIALITY OF STUDENT RECORDS

Students attending, or who have attended, Virginia State University are afforded certain rights concerning their education records the Family Educational Rights and Privacy Act of 1974 (FERPA), as amended (20 U.S.C 1232g), and regulations of the United States Department of Education (34 C.F.R. Part 99).

It is the policy of Virginia State University not to release education records or personally identifiable information contained therein, other than directory information, without the student's written consent. Such prohibition against release generally does not extend to record requests from other school officials at the University with a legitimate educational or administrative interest, other schools to which a student is transferring, State and Federal education authorities, accrediting organizations, appropriate officials in cases involving health and safety organizations conducting studies on behalf of the University, and education record requests pursuant to judicial orders or lawfully issued subpoenas. Questions concerning this Policy may be referred to the Office of the University Registrar.

Directory information at Virginia State University includes:

- Student's Name
- Address(es)
- Telephone Number(s)
- Electronic E-mail Address(es)
- Photographs
- Date and Place of Birth
- Major/Field of Study
- Whether a student is currently enrolled
- Enrollment Status (Full-time, Part-time, etc.)
- Classification
- Academic Level
- Anticipated date of graduation
- Certification that the student has applied for a degree
- Dates of attendance
- Degree(s) Earned, including Date and Level of Distinction
- Honors and Awards received
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams

The University may disclose personally identifiable information designated as directory information from a student's records without a student's prior written consent unless the student informs University officials, including the University Registrar, that specified categories of directory information are not to be released. Requests to withhold directory information from campus directories and other University publications must be submitted to the Registrar's Office no later than 5 p.m. on Friday of the second week of classes for the fall semester.

II. NOTIFICATION OF RIGHTS UNDER FERPA FOR POSTSECONDARY INSTITUTIONS

FERPA affords students certain rights with respect to their education records. These rights include:

The right to inspect and review the student's education records within 45 days of the day the University receives a request for access. Students must submit to the Office of the University Registrar written or electronic requests with their electronic signatures that identify the record (s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the University official to whom the request was submitted does not maintain the records, that official shall advise the student of the correct official to whom the request should be addressed.

The right to request the amendment of the student's education records that the student believes is inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write or send an electronic message with their electronic signatures to the University official responsible for the record, clearly identify the part of the record they want changed, and specify what is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisor, academic or research,

or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Visitors; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by Virginia State to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202 4605

III. PARENTAL ACCESS TO STUDENT EDUCATION RECORDS

Under FERPA, the word "student" refers to an individual who has reached the age of eighteen or is attending an institution of post-secondary education. The word "parent" means a parent of a student and includes a natural parent, a guardian, or an individual acting as a parent in the absence of a parent or guardian. At the post-secondary or collegiate level, FERPA provides that parents have no inherent rights to inspect a student's education records. Normally the right to inspect education records at the University is limited solely to the student. FERPA does, however, authorize the University to release education records and personally identifiable information to parents, as defined above, where one of the following conditions have been met:

1. the student has given written consent to the release of records to the parents; or
2. the parents produce sufficient documentary evidence that they (or either of them) declared the student as a dependent on their most recent federal income tax return as authorized by the federal income tax laws. See Section 152, Title 26 of the United States Code, for definition of "dependent" for income tax purposes.

GRADE REVIEW PROCEDURE AND APPEAL POLICY

I. Grade Review Procedure

Requests to make any change in the grade assigned originally shall be made only in unusual circumstances. Such changes threaten the integrity of the academic process. The instructor is expected, therefore, to review course requirements and calculations carefully before submitting final grades. The appeal procedure for a student with a complaint about grading requires contact with the instructor involved, and further contact with the instructor's department chairperson if the matter is not resolved between the instructor and student.

If the matter is not resolved at the departmental level, contact should be made with the dean of the college in which the instructor teaches. If the situation is not resolved at the dean's level, the student should submit a written request, containing the signatures of the chairperson and dean, to the Academic Credits Committee.

II. Grade Appeal

College Grade Appeal Committees consisting of at least three (3) faculty members from various departments shall deliberate requests for grade appeals and recommend an action to the college dean. The dean shall review the recommendation and make a decision on the outcome of the appeal. The dean shall serve as the final arbiter on the matter. At the end of each semester, the dean shall submit to the Academic Credits Committee a summary report of the dispositions of grade appeals handled at the college level.

The appeal procedure for a student with a complaint about grading requires initial contact with the instructor involved and further contact with the instructor's department chairperson if the matter is not resolved between the instructor and student. If the matter is not resolved at the departmental level, a grade appeal should be submitted to the dean of the college in which the instructor teaches. The dean shall then forward the request to the grade appeal committee for deliberation.

Normally, students may appeal final grades based upon documented evidence that a grade was incorrectly awarded. Typically, grade changes are warranted based upon the following:

- The Professor did not have information or documentation at the time the grade was awarded;
- The Professor made an error of calculation or other error or entry of a grade;
- A grade of "I" (incomplete) was entered and the student completed the necessary work for the course.

The student will follow the steps below:

1. Make his/her case (with documentation) to the faculty member who awarded the grade. If the faculty member is no longer employed by the University, the student may approach the Department Chairperson for the unit through which the course was offered.
2. If the student is not satisfied with the disposition of the faculty member, he/she may repeat this process with the Department Chairperson.
3. If the student remains dissatisfied, he/she may appeal to the college grade appeal committee via a letter which states the student's case with supporting documentation appended.
4. After deliberation, the college grade appeal committee makes a positive or negative recommendation to the dean.
5. The dean will consider the appeal, entering one of two dispositions:
    - The appeal has no merit and the faculty member's grade stands as entered;
    - The appeal has merit and is remanded to the department chairperson and faculty member for reconsideration. In these cases, the disposition of the faculty member is reported to the dean and is final.

III. Guidelines for Writing the Appeal Letter

Communication regarding appeals should be routed as follows: academic advisor, department chair, and college dean. The student's request for action should then be forwarded to the Academic Credits Committee. Academic advisors, department chairs, and academic deans are encouraged to review the University's academic policies with the student to determine that the student is eligible to file an appeal. An appeal for readmission can only be made after the student has been out for a period of one year. Students seeking readmission should remember that they

can be reinstated only ONCE. The Academic Credits Committee does not consider financial aid appeals or judicial affairs appeals.

Students should complete the "Appeal Action Request" form and attach it to the appeal letter following the guidelines below. All letters must first be reviewed by the department chair and academic dean BEFORE they are received by the Academic Credits Committee.

The appeal letter should be typed, grammatically correct, and signed by the student requesting consideration by the Academic Credits Committee. It is imperative that the letter contain the student's PERMANENT address, not campus address, to avoid delay. Documentation in support of the appeal must be submitted with the letter. This should be the same documentation that is presented to the academic advisor, department chair, and academic dean unless the additional documents were not available for review. If the appeal seeks readmission, it MUST be accompanied by a letter of support from at least one faculty member

POLICY EXCEPTIONS AND APPEALS

The following are the policies and procedures for addressing/requesting exceptions to, or appeals of, academic policies and/or sanctions. The policies and procedures are administered by the University's Academic Credits Committee.

I. PURPOSE AND DUTIES

Purpose

The purpose of the Academic Credits Committee (ACC) is to deliberate requests for exceptions to academic policies in the areas of readmission to the University after suspension for poor academic performance, residency requirements and proficiency examinations, and other areas not assigned to the colleges. This committee serves as the final arbiter for these issues, and its policies and procedures are applicable to undergraduate students and programs.

Duties

ACC is charged with the following duties and responsibilities:

1. Providing adjudication and disposition on student appeals of academic sanctions and other academic matters, including (but not limited to) the following:
2. Administrative withdrawal
3. Residency requirements and proficiency examinations
4. Readmission after academic sanctions
5. Monitoring and making recommendations to the Provost/Senior Vice President for Academic and Students Affairs (SVPASA) relative to academic policy and procedure.

II. COMPOSITION

ACC is a group organized under the auspices of Office of the Provost/SVPASA. The committee is convened and facilitated by the Provost or his/her designee(s). The following positions comprise the committee membership:

- Provost (or designee), who will serve as chair
- Recorder (non-voting member designated by the Provost)
- Registrar (or designee)
- Vice President for Student Affairs(or designee)
- Deans of the Colleges (or their designees)
- Four Faculty Representatives
  - Chair of the Faculty Senate [or designee],
  - Chair of the Admission and Retention Subcommittee of the Faculty Senate, and
  - two faculty members at large designated by the Faculty Senate.
- Director of Student Financial Aid

III. MEETINGS

ACC meetings are held at least twice during each fall and spring semester. Meeting are generally scheduled prior to the opening and closing of each semester. All meetings are scheduled by the Provost/SVPASA (or his/her designee), who communicates with the Deans of the Colleges to establish due dates for written appeals from students. A calendar of meeting dates shall be published. In addition, the ACC shall meet at least once each academic year to address policy matters and concerns relevant to the committee's work. Minutes of all meetings shall be housed in the Office of the Vice President for Academic Affairs.

IV. DISPOSITIONS

ACC renders dispositions based upon students' appeals for exceptions to established University policy. Each appeal is considered on the basis of its individual merit, and exceptions are granted only if documentation clearly demonstrates at least one the following:

1. Sanctions or other negative decisions based on incorrect or missing information;
2. Extraordinary circumstances beyond the student's control; or
3. Situations where there is malfeasance on the part of the University.

The dispositions of ACC are the final recourse for students, i.e., students may not appeal to any other authority at the University. However, ACC decisions may be reviewed by the Provost, who has the authority to reconvene the ACC if additional information relative to a particular case becomes available after a disposition is rendered. ACC decisions are communicated to students via a letter from the Office of the Provost with copies to the student's dean and department chairperson, as well as, the Office of the Registrar.

Minutes of the proceedings of the ACC are completed by the committee's recorder; hard copies are maintained in the Office of the Provost in accordance with the University's record retention policy. A summary of dispositions of the ACC shall be submitted annually to the Provost/SVPASA. Members of the ACC must recuse themselves from deliberation on any case in which they have direct or indirect involvement, including familial relationship, personal ties to the appellant, or any other connection which might pose a conflict of interest.

V. ACTION ITEMS

Administrative Withdrawal: Administrative withdrawal (grade of "W" for all courses in a semester) is warranted based upon irrefutable documentation relative to attendance or other extreme circumstances (e.g., military deployment, medical emergencies, etc.).

Prohibition of Workplace Harassment

I. Purpose

It is the goal of Virginia State University to provide a productive and challenging educational environment, free from any form of harassment. It is the responsibility of all members of the University community to ensure that individuals are provided equal access to education,

employment and services without being subjected to any form of harassment. Harassment is a type of discrimination and is prohibited misconduct, which undermines the mission of the University. This revision, which brings the University into compliance with current federal law, addresses workplace harassment, sexual harassment, and the ethical considerations presented by consensual relations between faculty/staff members and students or supervisors and employees.

II. Authority, Responsibility and Duties

This policy governs the conduct of all University employees including faculty, administrators, staff, and students when on the campus of Virginia State University or on other University property, or on other University property or in facilities, owned, or controlled by Virginia State University, or being used for a university-related event. Any exceptions in the application or enforcement of these policies must be approved by the President or his designee. The Associate Vice President for Human Resources is responsible for the official interpretation of this policy. Questions regarding the application of this policy should be directed to the Office of Human Resources.

III. Definitions

Workplace harassment (hereinafter referred to as harassment) is defined as any unwelcome verbal, written, or physical conduct that is based on race, color, sex, religion, national origin, disability, and/or age, that:

1. has the purpose or effect of creating an intimidating, hostile, or offensive work or academic environment;
2. has the purpose or effect of unreasonably interfering with an individual's work or academic performance; or
3. affects an individual's employment opportunities or compensation. A work or academic environment is "hostile" when unwelcome verbal, non-verbal or physical behavior of a sexual or nonsexual nature is severe and pervasive enough to interfere with the victim's work or academic performance or create a work or academic environment that is intimidating, offensive, or abusive.

Sexual harassment, a form of workplace harassment, is defined as unwelcome sexual advances, requests for sexual favors or other conduct of a sexual nature, or action taken in retaliation for reporting such behavior, when:

1. submission to such conduct is made explicitly or implicitly a term or condition of an individual's employment, academic status, or participation in a university-sponsored educational program or activity, or;
2. submission to, or rejection of, such conduct by an individual is used as a basis for decisions affecting that individual's employment, academic standing, or other benefits, or;
3. such conduct has the purpose or effect of unreasonably interfering with a person's work or academic performance or creating a hostile and offensive work or learning environment.

Sexual harassment may include, but is not limited to:

1. Sexually suggestive conduct or remarks about clothing, body, or sexual activities directed personally at a member of the University community;
2. Whistling in a suggestive manner directed personally at others in the University community;
3. Sexual propositions, invitations, or other unwanted pressures for sexual contact;
4. Obscene gestures direct personally at other members of the University community;
5. Patting, pinching, or any other sexually suggestive touching or feeling;
6. Attempted or actual kissing or fondling;
7. Coerced sexual acts;
8. Assault;
9. unwanted nonsexual conduct or language that pressures for the development or continuation of a relationship, and
10. Explicit or implicit requests for sexual favors as a condition of employment, e.g., promising or granting continued employment, promotion, training, or favorable evaluation, or academic performance in return for sexual favors.

IV. Policy Statements

Virginia State University prohibits any conduct by any member of the University community that constitutes harassment as outlined in Title VII of Sect. 703 of the Civil Rights of 1964, as amended, Title IX of the Education Amendments of 1972, Virginia's Human Rights Act, or other applicable state or federal laws and regulations. The University will not tolerate any form of retaliation directed against an employee, student, or faculty/staff member who either complains about harassment or who participates in an investigation.

Through grades, wage increases, recommendations for graduate study, training, promotion, and the like, a faculty member or supervisor can have a decisive influence on a student's, staff members, or faculty member's career at the University and beyond. While harassment most often takes place in situations of a power differential between the persons involved, the University also recognizes that it may occur between persons of the same University status. Harassment may also occur between persons of the same sex. The University will not tolerate behavior between or among members of the University community that creates an unacceptable working or educational environment.

It should be understood by all members of the University community that consensual amorous or sexual relationships (hereinafter referred to as consensual relationships) that occur in the context of educational or employment supervision and evaluation present serious ethical concerns. Consensual relationships violate this policy when a party is involved or positioned to influence directly or indirectly an activity or evaluation that may reward or penalize the other party in the relationship. Faculty/staff members or supervisors involved in consensual relationships must remove themselves from any activity or evaluation that may reward or penalize the student or employee. Consensual relationships between faculty/staff members and students enrolled in their classes or students for whom they have professional responsibility as advisor or supervisor are in violation of this policy and may be a violation of the University's Conflict of Interest Act procedure. Similarly, consensual relationships between supervisors and employees for whom they have supervisory responsibility are in violation of this policy.

Faculty/staff members and supervisors should be aware that conducting consensual relationships with students or employees for who they have supervisory responsibility makes them liable for formal action. Even when both parties have consented to the development of such a relationship, it is the faculty/staff member or supervisor who, by virtue of his or her special responsibility, will be held accountable for unprofessional behavior. Faculty/staff members and supervisors must be aware that even when they have no direct professional or supervisory responsibility for student or employees, consensual amorous relationships may

still be asymmetrical and/or disruptive to the community. Complaints alleging sexual harassment may be filed by either party of the consensual relationship or by an aggrieved party outside the relationship. Complaints alleging harassment may be filled by third parties - individuals who are not University employees, but who have business interactions with University employees (customers, vendors, contractors, and volunteers). Note that control over the employment of an immediate family member is governed by the Virginia Conflict of Interests Act.

V. Policy Violations

Any employee or faculty member who engages in conduct determined to be harassment or who encourages such conduct by others, will be subject to corrective action which may include discharge from employment. Managers and/or supervisors who allow harassment to continue or fail to take appropriate action upon becoming aware of the conduct will be subject to disciplinary action, including demotion or discharge.

VI. Obligations and Responsibilities

A formal, written complaint is needed from complainants to manage the investigative process effectively. However, federal law requires employers to investigate and resolve complaints as soon as they have knowledge of a problem or in cases where administrators, faculty, and supervisors (hereinafter referred to as supervising management) should have known.

Administrators, Faculty, and Supervisors

University supervising management and others performing instructional or academic advising duties have an added responsibility to create and maintain a work and learning environment free from any form of harassment. University supervising management and others performing instructional or academic advising duties have an added responsibility to create and maintain a work and learning environment free from any form of harassment. When a supervising management staff member becomes aware of an incident that might reasonably be construed as constituting harassment, he/she must take prompt and appropriate action to address the charge presented by the complainant. In such cases, such members should immediately refer the matter to the Human Resources Manager (EEO) in order to coordinate any further action that may be necessary.

1. Supervising management staff members have a legal obligation to act whenever they learn either directly or indirectly about harassment. This obligation exists even if the complainant requests that no action be taken. It is not the responsibility of the complainant to correct the situation.
2. Supervising management staff members have the legal responsibility to: protect a complainant from continued harassment or retaliation; protect persons accused of harassment from potential damage by false allegations; and take necessary steps to prevent harassment.
3. Supervising management staff members are responsible for informing their employees and students of this policy.

Employees, Students, And Those Experiencing Harassment

Anyone who believes they have been subjected to or observed instances of harassment should take one or more of the following steps:

1. create a detail record of the offending behavior, and any response thereto;
2. ask the perpetrator to cease the offending behavior;
3. seek the help of a supervisor, faculty member, or university administrator; and/or
4. contact the Office of Human Resources.

The complainant is not required to confront or complain to the harassing party. He/she may instead pursue steps 3 and/or 4 above.

vii. Procedures

Upon notification of a harassment complaint, the University shall take prompt and appropriate action in response to the charge presented by the complainant. Informal and formal complaint procedures are described in the University's Procedures Governing the Prohibition of Sexual Harassment, #801. Any employee of the University being advised of a complaint of harassment shall immediately refer the matter to the Human Resources Manager (EEO). All complaints under the policy should be filed within 30 days[1] from the date of the alleged harassment.

The University shall provide mandatory workplace harassment prevention training for all faculty, administrators and staff as follows:

- Even years – University online training
- Odd years - certified trainer
- New employees - University online training within 30 days of employment

Each employee of the University is responsible for ensuring his/her attendance at such training by affixing his/her signature to the sign-in roster. The Office of Human Resources shall maintain an account of attendance at such training.

Students shall be made aware of the University's prohibition on harassment through the Office of the Provost/Vice President for Academic and Student Affairs. Informational sessions shall be conducted minimally once, at the beginning of each semester.

This policy shall be distributed throughout the campus community, or made available to all members of the campus community through the Office Human Resources and the Office of the Provost/Vice President for Academic and Student Affairs. Additionally, this policy shall be made available by posting on a bulletin board in all dormitories and University buildings.

[1] The University reserves the right to accept and review complaints that are filed later than 30 days from the date of the alleged harassment if, upon preliminary review by the Human Resources Manager (EEO), the President or his designee determines that there is just cause for the delay in reporting the matter, or that it is in the best interest of the University to review the matter.

Sexual Harassment Policy

I. Purpose

It is the goal of Virginia State University to provide a productive and challenging educational environment, free from sexual harassment. It is the responsibility of all members of the University community to ensure that individuals are provided equal access to education, employment and services without being subjected to sexual harassment. Sexual harassment is a type of sex discrimination and is prohibited misconduct which undermines the mission of the University.

II. Definition of Sexual Harassment

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors or other conduct of a sexual nature, or action taken in retaliation for reporting such behavior, when:

1. submission to such conduct is made explicitly or implicitly a term or conditions of an individual employment or participation in a university-sponsored educational program or activity, or;
2. submission to, or rejection of, such conduct by an individual's employment, academic standing or other benefits, or;
3. such conduct has the purpose of effect of unreasonably interfering with a person's work or academic performance or creating a hostile and offensive work or learning environment.

Sexual harassment may include, but is not limited to:

1. Sexually suggestive conduct or remarks about clothing, body, or sexual activities directed personally at a member of the University community;
2. whistling in a suggestive manner directed personally at others in the University community;
3. sexual propositions, invitations, or other unwanted pressures for sexual contact;
4. obscene gestures directed personally at other members of the University community;
5. patting, pinching, or any other sexually suggestive touching or feeling;
6. attempted or actual kissing or fondling;
7. coerced sexual acts;
8. assault; and
9. expressed or implied requests for sexual favors as a condition of employment, promotion or favorable academic performance.

III. Policy

Virginia State University will not tolerate any conduct by any member of the University community that constitutes sexual harassment as outlined in TITLE VII of Sect. 703 of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, Virginia's Human Rights Act, or other applicable state or federal laws and regulations. Upon notification of a sexual harassment complaint, the University shall take prompt and appropriate action in response to the charge presented by the complainant. Any employee of the University being advised of a complaint of sexual harassment shall immediately refer the matter to the Human Resources Manager (EEO). All complaints under the policy should be filed within 30 days[1] from the date of the alleged harassment.

The University shall provide sexual harassment training each academic year for all faculty, administrators and staff. Each employee of the University is responsible for ensuring his/her attendance at such training by affixing his/her signature to the sign-in roster. The Office of Human Resources shall maintain an account of attendance at such training. Students shall be made aware of the University's prohibition on sexual harassment through the Office of the Vice President for Academic and Student Affairs. Informational sessions shall be conducted minimally once, at the beginning of each semester.

This policy shall be distributed throughout the campus community, or made available to all members of the campus community through the Office of Human Resources, the Office of Student Affairs and the Office of the Provost. Additionally, this policy shall be made available by posting on a bulletin board in all dormitories and University buildings.

The University reserves the right to accept and review complaints that are filed later than 30 days from the date of the alleged harassment if, upon preliminary review by the Human Resources Manager (EEO), the President or his designee determines that there is just cause for the delay in reporting the matter, or that it is in the best interest of the University to review the matter.

The Student Academic Code

A student's conduct at Virginia State University is expected to reflect that of a person engaged in a serious endeavor the pursuit of an academic degree. The Student Academic Code includes aspects of both behavioral and ethical conduct within the academic setting. The Student Code of Conduct contains rules and regulations governing student behavioral conduct and represents a means by which the orderly development of appropriate student conduct is assured. The Student Code of Conduct as it applies to academics is reproduced herein. The Student Academic Code ensures that students maintain the highest ethical standards when in the academic setting, when performing work in the classroom and when completing work outside the classroom.

Code of Conduct

Students are expected to abide by all University rules and regulations, standards, and by the laws of Chesterfield County, the Commonwealth of Virginia and Federal government. It is not possible to list all acts of misconduct/disorderly conduct that can occur on campus, but students are required to exhibit the highest forms of good manners, behavior and respect for the University community and its inhabitants.

Classroom Conduct

Inappropriate classroom conduct is a violation of the Student Code of Conduct. Tardiness, talking during lecture, use of cell phones and similar distracting behavior all lead to an environment that is not conducive to learning. Each instructor is responsible for maintaining a classroom environment that facilitates effective teaching, learning and safety. The classroom environment should be such that it prepares students for behavior that is expected in the professional and corporate environments in which they are preparing to live and work.

Disruptive and disrespectful behavior on the part of any student will not be tolerated. The instructor has the right to determine appropriate standards of behavior in the class as long as the requirement does not infringe upon the individual's rights. Appropriate classroom decorum should be described in the course syllabus. Classroom decorum may also be defined and disseminated as a department policy for each discipline or school. Science laboratory classrooms that may introduce a safety hazard to the student under certain circumstances may inherently require strict regulation of safety protocol in addition to normal rules of behavior.

The instructor shall identify students who are in violation of the appropriate decorum or safety procedures and shall provide reasonable warning to the students of the consequences of such conduct. A reasonable warning would include a verbal reminder or a written note handed to the student regarding the expected expulsion from the class or laboratory for the day in question and notice to the student's Department Chair. Return of the student to the classroom or laboratory will require a written pledge by the student to abide by the rules of expected classroom decorum or safety. Continued inappropriate conduct or safety violations will be grounds for expulsion from the course in question for the remainder of the semester. Further action could be taken through channels for charges against students and by enforcement listed

in the Student Handbook. Students have the right to dispute any action in accordance with the Student Grievance Procedure.

Code of Ethics

Students are expected to exhibit exemplary ethical behavior as part of the University community and society as a whole. Acts of academic dishonesty including cheating, plagiarism, deliberate falsification and other unethical acts that may be specifically defined by a student's individual discipline are considered breaches of the Student Code of Ethics.

Academic Dishonesty

Academic dishonesty is a violation of the Student Academic Code. By accepting admission to Virginia State University students are automatically subject to the provisions of the Student Academic Code, and are expected to uphold and support this Code without compromise or exception.

The Student Pledge of Academic Integrity

Students are expected to comply with reporting procedures when they notice a violation, and all cases of academic dishonesty shall be reported by the instructor to the chairman of the department in which the incident occurred. The chairman of the department shall report the incident to the chairman of the department for the student in question, if different, and the Dean of the Colleges. Penalties for academic dishonesty may be loss of credit for the work in question, loss of credit for the course, suspension or expulsion from the University. Students have the right to dispute any action in accordance with the Student Grievance Procedure. Ignorance of any aspect of the Student Academic Code is not a defense to an alleged violation.

Cheating

Cheating is obtaining an unearned academic advantage either through deliberate deception or indifference to the student academic code. A student is considered to be cheating if, in the opinion of the person administering an examination or test, the student gives, seeks, or receives aid during the test, examination or other assigned class work.

Cheating also includes, but is not limited to:

1. deliberate alteration of graded material for a re-grade or grade correction;
2. submitting without authorization the same assignment for credit in more than one course;
3. collaborating on any work when not allowed, either in or outside the classroom setting;
4. forging the signature of another or allowing forgery by another for any classroom related document such as class roll or an academic pledge;
5. use of unauthorized material stored or recorded on electronic devices during an exam or quiz;
6. use of crib notes or other unauthorized written material during an exam or quiz;
7. attempting to or allowing impersonation by another in order to take one's exam or quiz;
8. copying, alteration or fabrication of data such as that collected in a teaching laboratory or as part of a research project; and
9. intentionally or knowingly helping or attempting to help another commit an act of academic dishonesty.

Plagiarism

Part of the college experience is the discovery of one's own voice. The Virginia State University teaching community is committed to helping each student find their voice. Plagiarism contradicts this end. Plagiarism is the presentation of others' ideas or written works as one's own. Written works can take the form of electronic or print media and could include - among other items - opinions, facts and statistics.

1. Citing a source is necessary when an idea or written work can be attributed in any way to someone else.
2. Direct copying requires a very specific acknowledgment, either using quotation marks or a clear statement describing how that material was reproduced.
3. An indication of how a source is used is necessary if unique words or phrases from the source are one's work. Words or phrases are considered unique if they would not be spoken or expressed the same way coincidentally. The use of unique language requires incorporation of quotation marks or a direct statement who is responsible for the word, phrase, sentence or group of sentences.
4. Finally, one should always acknowledge the contribution of any person who is a significant contributor to a work through discussion or any other such collaboration. Although, common knowledge does not require a reference, one may not be aware of what constitutes common knowledge. The golden rule is, when in doubt, cite.

Transfer Policy

Transfer Students. Applicants who have attended an accredited college or university are considered for admission for the Fall and Spring sessions. Applicants must have a cumulative grade point average of "C" (2.0 on a 4.0 scale) or above and be in good standing at the previous institutions.
Applicants must:

1. complete and return the application for admission,
2. request the Registrar of all colleges attended to send official transcripts of college records, and
3. request the last college attended to complete and return the Confidential Report Form.

A transfer student with fewer than 24 semester hours is required to meet the entrance requirements for freshmen. An applicant transferring from a Virginia Community College or Richard Bland College (RBC), who has completed the requirements for the associate in arts or associate in science degree in the College Parallel/College Transfer Program, will be granted junior status at VSU. An applicant who has not completed the requirements for an associate degree will be designated class standing based on a course-by-course credit evaluation. For these students, the application fee is waived.

Any student who transfers to Virginia State University with an associate's degree (college prep track) from a community college in Virginia or RBC (students with associates' degrees from other states will be designated on a course-by-course credit evaluation) is guaranteed a minimum of 60 credit hours of transfer credit. The student will be given credit for general education requirements, with residual hours coming from major, minor or elective course requirements. Some majors may have more requirements resulting in the need to take additional lower-level courses after transferring to VSU.

Official transcripts will be received and evaluated by the Transfer Admissions Office. If additional evaluation is needed as it relates to course equivalency, this will be determined by the departments and reviewed by the University Registrar.

Veterans Affairs and Military Personnel

Service personnel on active duty and veterans of the U.S. Armed Forces who intend to study under the Federal Acts should consult the Veterans Affairs Counselor, who is associated with the Office of Student Affairs.

Veterans desiring advanced pay should register with the Veterans Counselor at least 60 days prior to the beginning of the semester. Veterans studying under Public Law 87-815 should receive clearance from the Veterans Counselor to register. The Veterans Administration pays the cost of tuition, fees, books, and supplies.

Virginia State University has been approved under the provisions of Public Law 550, Public Law 634, and Public Law 89-358. Veterans eligible under Public Law 550 receive a monthly allowance paid directly to them while in attendance at the University. It is intended to cover the costs of fees, books, and basic living expenses. Individuals who are children of deceased veterans are eligible for certain educational benefits under Public Law 634. Veterans with more than 180 days of active duty, any part of which occurred on or after February 1, 1955, are eligible for one month of college, vocational, or similar education for each month or fraction of a month on active duty. A veteran who wishes to receive the benefits of Public Law 550 and Public Law 89-358 should contact the Office of Veterans Affairs to initiate paperwork for benefits.

PROTECTION FROM DELAYED VETERANS AFFAIRS PAYMENT POLICY

Purpose

The policy codifies Virginia State University's compliance with Section 103 of the Veterans Benefits Transition Act of 2018, which takes effect on August 1, 2019. Known as the Service Members Improved Transition through Reforms for Ensuring Progress Act of the SIT-REP Act (H.R.4830), this bill authorizes the Department of Veterans Affairs (VA) to require educational institutions, in order to be eligible for educational payments, to adopt policies that prohibit penalizing student veterans for delayed disbursement of VA assistance payments to institutions on behalf of eligible student veterans, survivors, or dependents. The legislation applies to VA benefits paid directly to the school, such as the Post 9-11 *GI BILL*®.

Authority, Responsibility, and Duties

The Board of Visitors has delegated to the President the authority to manage the University. As such, this policy applies to the VSU President, Vice Presidents, Associate Vice Presidents, Assistant Vice Presidents, Deans, Directors, and Department Chairs. Those responsible for monitoring adherence to this and related policies are the University Bursar, the Registrar, and the University's VA Benefits Certifying official.

Definitions

Covered individual: Any individual who is entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post 9-11 *GI BILL*® benefits.

Chapter 31: The Vocational Rehabilitation and Employment program is authorized under Title 38, U.S. Code, Chapter 31. It is referred to as the Chapter 31 program. It assists entitled veterans with service-connected disabilities and an employment handicap to prepare for, find, and maintain a job. It also helps entitled transitioning service members.

Chapter 33: The Post 9-11 *GI BILL*® provides educational benefits to individuals who served in active duty after September 11, 2001.

Policy Statements

For those students who have been certified to use Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post 9-11 *GI BILL*® benefits and whose financial obligations to the University have not been met due to delayed disbursement of *GI BILL*® payments, Virginia State University shall not undertake the following punitive measures.

- Prevent enrollment;
- Assess a late penalty; fee
- Require the securing of alternative or additional funding; or
- Deny access to any school resources (access to classes, libraries, or other institutional facilities) that are available to other students that have paid their academic fees.

However, the University will require that students provide the University's VA Certifying Official with the Certificate of Eligibility and any other relevant documents needed to certify students properly.

Any covered individual will be permitted to attend or participate in the course of education during the period beginning on the date which the individual provides to Virginia State University a certificate of eligibility for entitlement to educational assistance under Chapter 31 or Chapter 33 and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.
2. 90 days after the date that Virginia State University certified tuition and fees following the receipt of the certificate of eligibility.

Grievance Policy: "The Virginia State Approving Agency (SAA) approves education and Virginia training programs. Our office investigates complaints of *GI BILL*® beneficiaries. While most complaints should initially follow the school grievance policy, if the situation cannot be resolved at the school, the beneficiary should contact our office via email at saa@dvs.virginia.gov". This policy shall be published in the University Catalog and made accessible to students.

References

HR.4830-SIT-REP Act. https://www.congress.gov/bill/115th-congress/house-bill/4830/text
U.S. Department of Veteran Affairs. "Post-9/11 *GI BILL*® (Chapter 33)." https://www.va.gov.education.about- gi-

bill-benefits/post-9-11/ (https://www.va.gov.education.about-%20gi-bill-benefits/post-9-11/)
U.S. Department of Veteran Affairs. "Vocational Rehabilitation and Employment Services: Chapter 31 Fact Sheet." https://www.benefits.va.gov (https://www.benefits.va.gov/)
Sec.103. Disapproval for Purposes of Educational Assistance Programs of Department of Veterans Affairs. https://www.govinfo.gov (https://www.govinfo.gov/)

TITLE 38 UNITED STATES CODE SECTION 3679(C)

The following individuals shall be charged the in-state rate, or otherwise considered a resident for tuition purposes:

- A veteran using educational assistance under either Chapter 30 (Montgomery *GI BILL*® – Active Duty Program) or Chapter 33 (Post 9-11 *GI BILL*®), of Title 38, United States Code, who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal state of residence).
- Anyone using transferred Post 9-11 *GI BILL*® benefits, who lives in the state where the IHL is located, and the transferor is a member of the uniformed service serving on active duty.
- A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C.& 3311(b)(9)) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her formal state of residence).
- A spouse or child using benefits under Survivors' and Dependents' Education Assistance (Chapter 35) living in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of their formal state of residence).
- An individual using educational assistance under Chapter 31, Veteran Readiness and Employment (VR&E) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of their formal state of residence) effective for courses, semesters, or terms beginning after March 1, 2019.
- Anyone described above remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same institution. Therefore, the described person must be enrolled in the institution and use educational benefits under Chapters 30, 31, 33, or 35 of Title 38, United States Code.

VA Pending Payment Compliance Addendum to Catalog

As part of Colonel John M. McHugh, section 3679 of title 38, United States Code was amended, and educational institutions will be required to sign the given compliance form to confirm their compliance with the requirements as outlined.

Effective August 1, 2022, the State approving agency, or the Secretary when acting in the role of the State approving agency, shall disapprove a course of education provided by an educational institution that has in effect a policy that is inconsistent with the areas below:

NOTE: ***A Covered Individual*** is any individual who is entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, Chapter 33, post 9-11 *GI BILL*® benefits, or Chapter 35, Dependents Education Assistance.

- Your policy must permit any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under Chapters 31, 33, or 35 (a "certificated of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for Chapter 31 authorization purposes) and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.
2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

- Your policy must ensure that your educational institution will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrows additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapters 31, 33, or 35.
- In addition, this statute allows your policy to require the Covered Individual to take the following additional actions:
  1. Submit a certificate of eligibility for entitlement to educational assistance no later than the first day of a course of education.
  2. Submit a written request to use such entitlement.
  3. Provide additional information necessary for the proper certification of enrollment by the educational institution.
  4. Your policy may also require additional payment or impose a fee for the amount that is the difference between the amount of the student's financial obligation and the amount of the VA education benefit disbursement.

"GI Bill® is a registered trademark of the U.S. Department of Veteran Affairs (VA). More information about education benefits offered by the VA is available at the official U.S. government website at http://www.benefits.va.gov/gibill."

Grade Appeal Procedure Policy

Accuracy and fairness in grading a student's work are required of faculty members. Every effort should be made to consider all related factors at the time the final grade is assigned. Requests to make any change in the grade assigned originally shall be made only in unusual circumstances. The instructor is expected, therefore, to review course requirements and calculations carefully before submitting final grades.

The appeal procedure for a student in the case of a complaint about perceived inaccurate or unfair grading begins with contacting the faculty member and further contact with the instructor's department chairperson, and then, the Dean of the College of Graduate Studies, if necessary.

The appeal procedure for a student with a complaint about grading requires initial contact with the instructor involved and further contact with the instructor's department chairperson if the matter is not resolved between the instructor and student. If the matter is not resolved at the departmental level, a grade appeal should be submitted to the dean of the

college in which the instructor teaches. The dean shall then forward the request to the PPC for deliberation.

Normally, students may appeal final grades based on documented evidence that a grade was incorrectly awarded. Typically, grade changes are warranted based on the following:

- The Professor did not have information or documentation at the time the grade was awarded;
- The Professor made an error of calculation or other error or entry of a grade;
- A grade of "I" (incomplete) was entered and the student completed the necessary work for the course.

The student will follow the steps below:

Make his/her case (with documentation) to the faculty member who awarded the grade. If the faculty member is no longer employed by the University, the student may approach the Department Chairperson for the unit through which the course was offered to resolve the matter.

1. If the student is not satisfied with the disposition of the faculty member, he/she may repeat this process with the Department Chairperson.
2. If the student remains dissatisfied, he/she may appeal to the college grade appeal committee via a letter that states the student's case with supporting documentation appended.
3. After deliberation, the college grade appeal committee makes a positive or negative recommendation to the dean.

The dean will consider the appeal, entering one of two dispositions:

1. The appeal has no merit and the faculty member's grade stands as entered;
2. The appeal has merit and is remanded to the department chairperson and faculty member for reconsideration.

In these cases, the disposition of the faculty member is reported to the dean and is final.

If the appeal is not resolved at any of the above levels, the student may submit a written request for a review of the situation by the Policies and Petitions Committee. The chair of this committee is the Graduate College Dean. **Grade appeals must be requested within one year of the semester in which the grade was awarded.**

General Student Appeals

A student who considers any of the regulations of the College of Graduate Studies to have an adverse effect on his/her academic progress may request relief by addressing a written petition setting forth the particulars of the situation with the approval of his/her advisor. The request should be addressed to the Policies and Petitions Committee (PPC), in care of the Dean of the College of Graduate Studies. The Committee is composed of six (6) graduate faculty members, plus the graduate dean.

Communication regarding appeals should be routed as follows: academic advisor, department chair, and college dean. If there is no resolve within the student's program, then the student's request for action should then be forwarded to the Policies and Procedures Committee via the Graduate School. Academic advisors, department chairs, and academic deans are encouraged to review the University's academic policies with the student to determine that the student is eligible to file an appeal.

An appeal for readmission can only be made after the student has been out for a period of one year. Students seeking readmission should remember that they can be reinstated only ONCE. The Policies and Procedures Committee does not consider financial aid appeals or judicial affairs appeals.

Students should send the appeal letter following the guidelines below:

- All letters must first be reviewed by the Graduate School BEFORE they are received by the Policies and Procedures Committee.
- The appeal letter should be typed, grammatically correct, and signed by the student requesting consideration by the Policies and Procedures Committee.
- It is imperative that the letter contain the student's PERMANENT physical and email address to avoid delay in correspondence.
- Any documentation in support of the appeal must be submitted with the letter. This should be the same documentation that is presented to the academic advisor, department chair, and academic dean unless the additional documents were not available for review.
- If the appeal seeks readmission, it MUST be accompanied by a statement of support from at least one faculty member.

Transfer Credit from Another Institution

In a 30-hour program, nine semester hours earned at another accredited graduate school may be accepted toward the master's degree at Virginia State University. In a 36-semester hour program, 12 semester hours may be accepted. In any case, transfer credit from another institution must be approved by the department and must be of "B" quality or higher. Transfer of credit in the core courses is not permitted. The core courses are Foundations of Education, Statistical Procedures in Education and Psychology, and Educational Research.

All transfer credit will be applied after the student's application for advancement to candidacy. Transfer credit cannot be over six years old by the date of graduation; this limit cannot be extended.

General Information

Student Services and Facilities

Virginia State University is committed to fostering a supportive, inclusive, and engaging campus environment that promotes student success inside and outside of the classroom. The University offers a wide range of student services and facilities designed to enhance academic achievement, personal development, well-being, and community engagement.

Academic Support Services

To empower students in reaching their academic goals, VSU provides a comprehensive suite of support services:

- **Academic Center for Excellence (https://www.vsu.edu/ace/)** (ACE)
  - Academic Advising through the University College and departmental advisors

  - University Tutoring and Writing Centers for subject-specific and general academic assistance
- **Office of Student Accessibility Services (OSAS)** for students with documented disabilities
- **TRIO** and other federally funded programs at VSU to enhance retention and graduation for first-generation and underrepresented students

Career and Professional Development

The **Office of Career Services** offers individualized career counseling, resume development, job and internship search assistance, career fairs, and graduate school preparation. Students are encouraged to participate in professional development workshops and connect with VSU's robust employer network.

Counseling and Wellness

The **University Counseling Center** provides confidential mental health services, including individual and group counseling, crisis intervention, and wellness education. The **Health and Wellness Center** offers primary health care, immunizations, health screenings, and referrals to off-campus providers when necessary.

Residential Life and Housing

Living on campus is an essential part of the Trojan experience. **Residential Life and Housing** fosters community through safe, inclusive living environments and student engagement programs. Various residential options are available to meet the needs of a diverse student body.

Campus Dining

At VSU, **Dining Services** offers a variety of dining options across campus that cater to diverse dietary needs and preferences. Meal plans are available to all students, with flexible options that promote both convenience and nutritional wellness.

Student Engagement and Leadership

The **Division of Student Affairs** oversees numerous opportunities for student involvement through registered student organizations (RSOs), fraternities and sororities, leadership development programs, civic engagement, and multicultural affairs. Students are encouraged to explore their interests and develop leadership skills through active participation.

Recreational Facilities

Recreation and Leisure Services offer fitness programs, intramural sports, and wellness activities. Students have access to a modern fitness center, walking trails, athletic fields, and a variety of recreational events throughout the year. **Student Activities** hosts a number of events for students in Foster Hall, also.

Transportation and Campus Safety

VSU offers campus shuttle services and transportation support for student activities. **VSU Police Department** along with the **Campus Safety Office (https://www.vsu.edu/police/about/campus-safety-office.php)** ensures a safe and secure learning environment through 24/7 patrol, emergency response, and community-oriented policing.

Other Services Offered Include:

- **VSU Alumni Association (https://www.vsuaaonline.com/)** - fosters lifelong engagement and support between Virginia State University and its alumni community. Through networking, mentoring, and philanthropic initiatives, alumni remain connected and contribute to the success of future Trojans.
- **Department of Athletics (https://govsutrojans.com/)** - Virginia State University competes in NCAA Division II as a member of the CIAA. The Department of Athletics offers a range of men's and women's sports and promotes excellence, sportsmanship, and school spirit across the campus community.
- **Parking Enforcement Division** - manages vehicle registration and parking enforcement on campus. Designated lots and permits ensure safe and accessible parking for students, faculty, staff, and visitors.
- **International Student Advisement (https://www.vsu.edu/academics/services-support/international-student-advising.php)** - provides specialized advising, cultural adjustment support, and immigration guidance to ensure international students thrive academically and socially at VSU.
- **National Student Exchange (https://www.vsu.edu/academics/special-programs/international-education.php)** - offers students the opportunity to study at partner universities across the United States and its territories, providing academic diversity and cultural enrichment without leaving the country.
- **New Student Orientation - Trojan Introduction Program (https://www.vsu.edu/orientation/) (TIP)** - welcomes new students and their families to the Trojan community through orientation programming focused on academic expectations, student life, campus resources, and transitional support.
- **Office of Financial Aid (https://www.vsu.edu/financial-aid/)** - assists students in identifying and securing financial resources, including federal and state aid, scholarships, grants, and work-study opportunities.
- **Office of International Education (https://vsu.abroadoffice.net/about.html)** - supports global engagement through study abroad programs, international partnerships, and cross-cultural learning initiatives that expand students' worldviews and academic experiences.
- **Sexual Assault Prevention (https://www.vsu.edu/counseling/sexual-assault/)** - promotes a culture of consent and respect through education, advocacy, and campus-wide iniatives. Support services are available for survivors, including confidential counseling and reporting resources.
- **Student Government Association (https://www.vsu.edu/student-life/student-activities/student-government.php) (SGA)** - the official representative body of the undergraduate student population, advocating for student interests, allocating resources, and fostering dialogue between students and administration.
- **Substance Abuse Prevention (https://www.vsu.edu/counseling/substance-abuse/)** - raise awareness through education and outreach initiatives about the risks of alcohol and drug use. Support services are available to help students make informed decisions and access resources when needed.
- **Trojan Card Office (https://www.vsu.edu/trojancard/)** - the official VSU student ID, providing access to campus buildings, dining services, library resources, and university-sponsored events, as well as TrojanCard account purchases.
- **University Libraries (http://library.vsu.edu/)** - The Johnston Memorial Library and online collections provide access to academic resources, research assistance, study spaces, and technology to support scholarly achievement across disciplines.

- **Veterans Affairs and Veteran Student Advisement (https://www.vsu.edu/academics/services-support/international-student-advising.php)** - supports military-connected students with academic advising, VA benefits coordination, and transition assistance, ensuring a smooth integration into the university community.
- **VSU Bookstore (https://www.bkstr.com/virginiastatestore/home)** - offers textbooks, school supplies, university apparel, and convenience items. Online ordering and textbook rental options are also available.

Several services and programs are available to graduate students through the College of Graduate Studies Office. An orientation program is offered each year in cooperation with this office to acquaint new graduate students with services and facilities.

UNDERGRADUATE CATALOG

Virginia State University
2025-2026
Undergraduate Catalog

Virginia State University
1 Hayden Drive
Virginia State University, Virginia

This catalog describes academic courses, programs, and standards for student progress and retention at time of publication. However, the provisions of this publication are not to be regarded as an irrevocable contract between the student and Virginia State University. There are established procedures for making changes, which protect the institution's right to make changes that are deemed appropriate. A change of curriculum or graduation requirement is not made retroactive unless the alteration is to the student's advantage and can be accommodated within the span of years normally required for graduation.

Virginia State University is committed to a policy of equal opportunity in education and employment without regard to race, creed, sex or national origin. There are affirmative programs at VSU that support the commitment to this democratic approach to public education.

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ACCT: Accounting (ACCT)

ACCT 200. Introd Finc & Managerial Acct. (3 Credits)
A nontechnical introduction to the principles of financial and managerial accounting with emphasis on the use and interpretation of financial reports, managerial planning and control. The course is for the individual who seeks a basic knowledge of accounting and its uses. It is designed for the user of accounting information rather than the preparer. This course cannot be substituted for COBU 201 or 202 for business majors. Prerequisite: None.

ACCT 201. Introductory Accounting I. (3 Credits)
This course is a study of fundamental principles of financial accounting as applied to the contemporary business environment. Problems of measuring and reporting income, assets, liabilities, and equity as shown on financial statements are discussed. Prerequisite: COBU 101 and MATH 120 or equivalent.

ACCT 202. Introductory Accounting II. (3 Credits)
This course is a study of introductory management accounting principles as applied to the competitive business environment. Emphasis is on using data from an organization's management information system to formulate and implement business strategy. Prerequisite: ACCT 201 or COBU 201.

ACCT 301. Intermediate Accounting I. (3 Credits)
The course provides an in-depth study of generally accepted accounting principles as they relate to business entities. Emphasis is on data analytics and visualization tools for financial statement analysis and presentation. Prerequisite: COBU 201 and COBU 202.

ACCT 302. Intermediate Accounting II. (3 Credits)
Continuation of ACCT 301. This course provides an in-dept study of generally accepted accounting principles as they relate to special topics of business entities. Emphasis is on data analytics and visualization tools for financial statement analysis and presentation. Prerequisite: ACCT 301.

ACCT 306. Cost Accounting. (3 Credits)
This course studies cost accumulation of inventory, income determination, and special topics using cost accounting systems. The focus is on using data analytics and visualization tools to measure and present cost analysis. Prerequisite: COBU 201 and COBU 202.

ACCT 307. Federal Income Tax I. (3 Credits)
This course studies how federal income tax principles apply to and affect individual taxpayers and corporations. Prerequisite: COBU 201 and COBU 202.

ACCT 308. Federal Income Tax II. (3 Credits)
This course studies advanced topics in how federal income tax principles apply to and affect individuals, corporation, and other business entities. Prerequisite: COBU 201 and COBU 202.

ACCT 315. Accounting Information Sys. (3 Credits)
This course focuses on understanding, designing, and controlling accounting information systems. Emphasis is on equipping students with the latest data analytics systems for analyzing and reporting of financial data. Prerequisite: COBU 201 and COBU 202.

ACCT 375. Internship in Accounting. (3 Credits)
The internship course allows students to obtain practical work experience in accounting positions under supervised conditions. The internship provides real-world application of accounting education under the critical supervision of an on-site administrator and an accounting faculty member. Prerequisites: ACCT 302.

ACCT 403. Advanced Accounting. (3 Credits)
The financial accounting issues related to consolidations, partnerships, foreign currency translations, hedging and segment reporting are examined. Prerequisite: ACCT 302.

ACCT 406. Advanced Cost Accounting. (3 Credits)
This course covers selected topics in management accounting, such as responsibility accounting, transfer pricing, JIT manufacturing, activity-based costing, and relevant costs for special decisions. Ethical and international aspects of management accounting are also discussed. Prerequisite: ACCT 306.

ACCT 407. Auditing. (3 Credits)
The analysis and application of the theory and techniques of auditing principles and procedures, with emphasis on the duties and responsibilities of the auditor. Prerequisite: ACCT 302.

ACCT 408. Accounting Data Analytics. (3 Credits)
This course examines how business financial and non-financial data connect with and to business financial performance. The focus of this course will be to use data analytics and software packages to assess, gain insights, and predict trends in financial performance. In the application of data science, students who are successful in this course will understand and model how that data interact using computer databases, programming, statistics and visual analytics to enable a business enterprise to forecast performance, optimize operations and develop business strategy. Prerequisite: ACCT 315.

ACCT 410. Forensic Accounting. (3 Credits)
Fraud and abuse are costly, pervasive problems in business, nonprofit and government organizations. This course introduces a specialty field in accounting, the practice of which utilizes accounting, audition and investigative skills to provide support in legal matters. Prerequisites: ACCT 302.

ACCT 411. Seminar Acct Theory & Prac. (3 Credits)
This course is designed to investigate contemporary accounting theories and applications in the various areas of accounting to include financial, managerial, cost and auditing. Students will be exposed to pronouncements issued by the American Institute of Certified Public Accountants, the Security Exchange Commission, the Public Company Accounting Oversight Board, the International Accounting Standards Board, and the Financial Accounting Standards Board. Prerequisite: ACCT 302.

ACCT 415. Govt'L & Not-For-Profit Acct. (3 Credits)
The course is a study of accounting principles and their application for governmental and not-for-profit agencies/organizations and their related financial reporting and disclosure requirements. The objectives of financial reporting for these entities and the theoretical structure underlying these principles will be examined. Prerequisite: ACCT 302.

ACCT 495. Special Topics In Accounting. (1-3 Credits)
The course offers selected special topics in accounting, which may include: ethics and professionalism, EDP auditing, accounting history, international accounting, and other appropriate subjects. Prerequisite: ACCT 302 or permission of the instructor.

AGME: Agriculture Mechanics (AGME)

AGME 140. Agricultural Mechanics. (2-3 Credits)
AGME 140 Agricultural Mechanics - 2-3 semester hours (variable) Emphasis on organization and management of the agricultural mechanics laboratory. The selection, care and use of supplies, tools and equipment to plan and make practical application of mechanical skills in the area of welding, woodworking (hand and power) soldering, pipe fitting, painting, sketching, drawing and plan reading. The 3 semester hours course will consist of additional workshop lab series.

AGME 141. Agricultural Mechanics. (2 Credits)
The selection, care and use of supplies, tools and equipment to plan and make practical application of mechanical skills in the area of welding, woodworking (hand and power) soldering, pipe fitting, painting, sketching, drawing and plan reading.

AGME 242. Intro Agric Engineering. (3 Credits)
A study of the basic engineering principles in the areas of agricultural power and machinery, rural electrification, agricultural structures, and soil and water management. Prerequisites: MATH 120, 121 sophomore or above standing.

AGME 346. Agricultural Power Machinery. (3 Credits)
A study of the construction, operation, adjustment and management of agricultural implements and power machinery. Primary emphasis is on tractor and machinery management. Prerequisites: AGME 242.

AGME 442. Adv Agricultural Mechanics. (3 Credits)
Emphasis on organization and management of the agricultural mechanics laboratory, selection, care, and use of power equipment in construction and repair jobs. Special emphasis is placed on developing skills in areas where the student is deficient. Prerequisites: AGME 140, AGME 242.

AGME 444. Electricity In Electricity In. (3 Credits)
A study of the practical application of electricity in the home and in the agricultural industry with emphasis on planning the wiring systems, selection, operation and maintenance of electrical equipment. Prerequisites: AGME 242.

AGME 445. Internal Combustion Engines. (3 Credits)
A study of internal combustion engines to include principles of designing, operating, rating, testing, overhauling, and the application for agricultural uses. Primary emphasis is on the basic operation of air cooled engines. Prerequisites: AGME 242, AGME 346.

AGME 446. Agric Power Machinery. (3 Credits)
A study of construction, operation, and adjustment of agricultural implements, and power machinery. Prerequisites: AGME 346.

AGME 447. Adv Internal Combustion Eng. (3 Credits)
A study of multi-cylinder internal combustion engines, including designing, operating, testing, repairing, overhauling, and the application of agricultural uses. Prerequisites: AGME 445.

AGRI: Agriculture (AGRI)

AGRI 100. General Earth Science. (1-4 Credits)
A survey course in earth science designed for non-science majors. Lab Co-requisite: AGRI 100.

AGRI 140. Introd Sustain Agric & Society. (3 Credits)
Sustainable agriculture integrates three main goals--environmental health, economic profitability, and social and economic equity. A variety of philosophies, policies and practices have contributed to these goals. Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, this course emphasizes the importance of stewardship of both natural and human resources with specific focus on agriculture and society in general.

AGRI 150. Intro Environmental Science. (4 Credits)
Introduces the principles and basic facts of the natural environment. The course will focus on land forms, vegetation and soils, air and water pollution, water quality monitoring, acid rain, the greenhouse effect, biodiversity, sustainability, and global change. Emphasis is placed on the application of basic science to the understanding and mitigation of current environmental problems. Course format demonstrates how the environment works and how the human use of resources perturbs the environment, citizen action for past, present, and future decisions. A laboratory is taken in conjunction and provides hands on laboratory exercises related to selected lecture topics.

AGRI 200. Foundation in Internat'l Agric. (3 Credits)
The course aims to provide instruction in assisted preparation for the Foreign Service Exam, and instruction on how to be successful during the assessment phase of the FAS/APIHS-IS workforce process. The course will offer fundamentals on how to become an International Agriculture Diplomat, and information on the emerging Global Biosecurity and Food Security issues that influence safety of the food supply in the United States. Course offered online during Summer Session Only.

AGRI 250. Climate Change & Adapt Science. (3 Credits)
This course explores the science of climate change through evidence for changes in global atmospheric circulation, water, heat, and heat transfer, air/sea interactions, global water cycle, ocean temperature, sea level and acidity due to global warming changes. Students will learn how the climate system works; what factors cause climate to change across different time scales and how those factors interact; how climate has changed in the past; how scientists use models, observations and theory to make predictions about future climate; and the possible consequences of climate change for our planet. Finally, the course looks at the connection between human activity and the current warming trend and considers some of the potential social, economic and environmental consequences of climate change.

AGRI 280. Prin Geographic Info Systems. (3 Credits)
The course is designed to introduce students to the fundamental Principles of Geographic Information Systems (GIS). The course provides students with a general view of the applications of GIS in a host of disciplines, an exposure to geographic data structures, and an understanding of computerized spatial display and analysis. Special emphasis will be placed on natural resource management, including agriculture and environment. The course is recommended for juniors and seniors from any discipline and will involve instruction, discussion on assigned topics, hands-on activities using GIS software programs, and field trips.

AGRI 290. Intro To Remote Sensing. (3 Credits)
The course will introduce students to the fundamental concepts and applications of remote sensing in the areas of agriculture, biological, computer, political, and social sciences, and engineering. To complement classroom instruction, there will be extensive hands-on exercises based on computer software dedicated to remote sensing and integrating it in GIS. Field trips will be organized to visit governmental agencies or institutions where remote sensing is being done. Prerequisites: AGRI 280.

AGRI 295. Contemporary Global Studies. (3 Credits)
This course is designed to introduce global issues on food security and its relationship to sustainable development. It is a multidisciplinary course to explore interrelationships between food, population, the environment, and socio-economic development through a case study/discussion approach. It also examines the psychological implications of food security and sustainable development issues and their psychological impact.

AGRI 301. Global Field Exp Interna'l Ag. (3 Credits)
This course aims to prepare Globally Competent Students to address the needs of the Foreign Agriculture Service (FAS) and Animal Plant and Health Inspection Service International (APIHS-IS). Students will conduct specific research projects addressing Animal Food Security and Biosecurity and participate in a travel abroad field practicum.

AGRI 341. Research Methods In Agricultur. (3 Credits)
This course aims to train students in fundamental principles and practices related to research in agricultural sciences; literature search; preparation and review of scientific publications; preparation and presentations of scientific seminars; and preparation of resume/thesis/dissertation. Topics related to Ethics in Research and Reporting would also be discussed. Prerequisites: Completion of core agriculture courses, and STAT 210.

AGRI 342. Methods Of Teaching Agric. (3 Credits)
Prepares students to organize and provide instruction to all types of agriculturally oriented groups. A practicum is used to provide an opportunity for the student to observe methods of teaching by experienced teachers. Prerequisite: Academic advisor's approval; junior or above standing.

AGRI 343. Priniciples/Practices Agri Ed. (3 Credits)
Students will develop an insight into the history and philosophy of a program of agricultural education program in secondary schools. Special emphasis will be given to planning, conducting and managing a department. A practicum will be used to observe teachers in as they perform management tasks involved in operating a successful educational program for youth and adults. Prerequisites: Academic advisor's approval; junior or above standing.

AGRI 400. Internship. (3 Credits)
Assignment of students to an Agricultural Science or related agency in their junior year for practical on- the-job experience. This assignment involves career counseling, ethics in the work place, cooperating with others, and following the instructions of supervisors.

AGRI 401. Independent Study. (3 Credits)
An opportunity for students to work independently on Agricultural Science related issues and problems under the guidance of a single professor. Prerequisite: Academic advisor's approval; junior or above standing.

AGRI 402. Stud Teaching In Agriculture. (3 Credits)
This course is designed to provide supervision on the content area for pre-service secondary agriculture candidates. Prerequisite: Department approval Co-requisite: EDUC 402, EDUC 402.

AGRI 441. Organized Instruction. (3 Credits)
Evaluation of instructional proceedings, planning programs of instruction, and evaluation of instructional outcomes. Prerequisite: Junior Standing, Academic Advisor's approval.

AGRI 444. Genetics. (1-4 Credits)
An in-depth study of the fundamental principles, mechanisms, and heredity of plants and animals. Emphasis will be placed on genetic engineering and gene transfer of crops and animals. Lab An in-depth study of the fundamental principles, mechanisms, and heredity of plants and animals. Laboratory emphasis will be placed on engineering and gene transfer of Animals and Plants.

AGRI 446. Principles of Cooperative Ext. (3 Credits)
A study of the philosophy, history and development of the Cooperative Extension Service. In addition, attention is given to leadership training, and instructional methods and techniques. Each student will be required to complete a practicum with a selected extension agent. Prerequisites: AGRI 140, AGEC 342; sophomore or above standing.

ANSC: Animal Science (ANSC)

ANSC 140. Principles Of Animal Science. (3 Credits)
Gives an overview of the biological principles applicable to the animal sciences. Concentrates mainly on reproduction, genetics, nutrition, lactation, and other facets of the animal industries.

ANSC 241. Livestock Farm Practices. (2-3 Credits)
Supervised farm practices in feeding, handling, and managing farm animals. Prerequisites: ANSC 140 Principles of Animal Science, sophomore or above standing.

ANSC 242. Princple Of Poultry Production. (3 Credits)
Principles and practices underlying the reproduction and growth of the domestic fowl. Includes the study of breeds, varieties and types of poultry.

ANSC 246. Intro To Equine Science. (3 Credits)
A study of the fundamental principles of equine science to include: Horse terminology, impact of horses on society, history, breeds, management, genetics, reproduction, health, nutrition, behavior, riding, and the business aspects of horse industry.

ANSC 343. Swine Production. (3 Credits)
Feeding and management practices used in purebred and commercial swine production Prerequisite: ANSC 242 Poultry Production.

ANSC 344. Beef Cattle Production. (3 Credits)
Methods of producing, managing, and marketing commercial and purebred cattle. Prerequisites: ANSC 140 Principles of Animal Science, sophomore or above standing.

ANSC 345. Veterinary Anatmy & Physiology. (3 Credits)
A consideration of gross anatomy and physiological functions of animals as a background for the studies in nutrition, reproduction and diseases. Prerequisites: ANSC 140 Principles of Animal Science, BIOL 241 Introduction to Microbiology, BIOL 313 General Zoology sophomore or above standing.

ANSC 346. Physiology Of Reproduction. (3 Credits)
Study of reproductive processes with special emphasis upon reproduction efficiency of domestic animals. Prerequisite: ANSC 345 Veterinary Anatomy and Physiology; junior or above standing.

ANSC 348. Dairy Farming. (3 Credits)
Teaches the basic principles of dairy management, current knowledge in the many areas of dairy science and present day practices of successful dairy persons. Prerequisites: BIOL 120 Principles of Biology I, ANSC 140 Principles of Animal Science, BIOL 313 General Zoology; sophomore or above standing.

ANSC 349. Vet Medicine Term & Hygiene. (3 Credits)
ANSC 349 Veterinary Medical Terminology and Hygiene - 3 semester hours The study of veterinary medical terminology, to include the meaning and use of medical terms. Hygiene topics covered are causes and symptoms of infections, parasitic and nutritional diseases with emphasis on prevention and control through management and sanitation. Prerequisite(s): BIOL 120 Principles of Biology, ANSC 140 Principles of Animal Science: sophomore or above standing.

ANSC 350. Small Ruminant Management. (3 Credits)
Principles and practices of production, management, and marketing of small ruminants (ex. sheep, goats). The role of genetics, nutrition, reproduction and animal health will also be emphasized. Prerequisite: Junior or above standing Co-requisite: ANSC 349 Veterinary Hygiene.

ANSC 351. Feeds And Feeding. (3 Credits)
Basic nutritional principles, composition and value of feeds and the formulation of rations for farm animals. Prerequisites: BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science; junior or above standing.

ANSC 441. Animal Nutrition. (3 Credits)
Course matter focuses on nutrients and their digestion, metabolism, biological role and the principles of animal nutrition. Prerequisites: BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science, junior or above standing.

ANSC 446. Special Topics. (1-4 Credits)
Presentation and discussion of papers on animal industry subjects. Prerequisites BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science; academic advisor's approval and junior or above standing.

ANSC 447. Special Problems. (3 Credits)
Lectures and assignments relating to industry problems in breeding, nutrition, diseases, market products, and management of farm animals. Prerequisites: BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science; academic advisor's approval and junior or above standing.

ANSC 448. Adv Livetock Production. (3 Credits)
A study of economic, nutritional and managerial factors affecting the operation of livestock enterprises. Field trips required. Prerequisites: BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science; academic advisor's approval and junior or above standing.

ANSC 449. Seminar. (1-3 Credits)
Research and presentation of important literature related to the animal sciences. Areas of economic importance to the agricultural community will be emphasized. Prerequisites: BIOL 120 Principles of Biology, BIOL 313 General Zoology, ANSC 140 Principles of Animal Science; academic advisor's approval and junior or above standing.

AQSC: Aquatic Science (AQSC)

AQSC 201. Introduction To Aquaculture. (3 Credits)
Principles of sustainable aquatic production of plants and animals will be discussed. A survey of the history of aquaculture, including an overview of major aquaculture products in Virginia, the United States and abroad. Environmental considerations, alternative facilities, required inputs, marketing, and job opportunities will also be discussed. Field trips to aquaculture industry sites will be conducted.

AQSC 301. Aquatic Culture Sys Design. (3 Credits)
Application of engineering principles to aqua cultural production systems. Relationships between cultured organisms, management requirements, and facilities will be discussed. Emphasis will be on system designs for open, semi-closed, and closed aquatic systems.

AQSC 302. Mgmt Of Aquaculture Weeds. (3 Credits)
The environments of algal, floating, immersed, and submersed weeds are examined. Impact of aquatic weeds on resource use is discussed. A comparison is made of preventive, chemical, biological, and mechanical control of aquatic weeds. Collection of characteristic aquatic weeds is required.

AQSC 401. Fish Pond Management. (3 Credits)
Techniques of pond management are explored with emphasis on aquatic production. Focus is on identification of standard and maintenance of environmental quality, the chemistry of water quality testing, and use of testing kits and devices. Pond safety and integration of aquatic environment with other uses are discussed. Hands-on field activities are incorporated into classroom discussions.

AQSC 402. Fish Pathology. (3 Credits)
Prevention of fish health concerns is emphasized. Primary bacterial, parasitic and other fish pathogen are identified. Procedures for sample collection, preparation and analysis are presented. Practical laboratory techniques are performed. Prerequisites: AQSC 201 Introduction to Aquaculture, BIOL 120 Principles of Biology, BIOL 241 Introduction to Microbiology, BIOL 313 General Zoology; junior or above standing.

AQSC 404. Limnology. (3 Credits)
A study of inland waters – lakes (both freshwater and saline), reservoirs, rivers, streams, wetlands, and groundwater – as ecological systems interacting with their drainage basins and the atmosphere. An integration of the functional relationships of growth, adaptation, nutrient cycles, and biological productivity with species composition, and description and evaluation of how physical, chemical, and biological environments regulate these relationships.

AQSC 405. Fish Breeding And Genetics. (3 Credits)
An overview of the history of genetics and fish breeding will be presented. Emphasis is placed on aqua cultural fish cultured in Virginia. Basic genetic principles are discussed as they apply to selected fish breeding programs. Prerequisites: AQSC 201 Introduction to Aquaculture, BIOL 120 Principles of Biology, BIOL 313 General Zoology; junior or above standing.

AQSC 406. Salmonids. (3 Credits)
Focus is on an overview of salmonid fish and salmonid aquaculture in Virginia. Principles of salmonid aquaculture including spawning, incubation, feed formulation, disease control, genetics, systems management, harvesting, and marketing are presented. Class participates in practical rainbow trout culture exercises. Prerequisites: AQSC 201 Introduction to Aquaculture, BIOL 120 Principles of Biology, BIOL 313 General Zoology; junior or above standing.

AQSC 407. Fish Processing Technology. (3 Credits)
Chemical and biological aspects of fishery products as related to the use of these products for human foods; principles of preservation; unit operation in processing, packaging, storage and distributions. Prerequisites: AQSC 201 Introduction to Aquaculture, BIOL 120 Principles of Biology, BIOL 241 Introduction to Microbiology, BIOL 313 General Zoology, junior or above standing.

AQSC 408. Aquatic Resource Biochem. (3 Credits)
Occurrence, distribution, and role of carbohydrates, lipids, proteins, vitamins, nucleic acids, and other compounds in fish and other aquatic organisms. Topics include digestion, absorption, respiration, excretion, growth, reproduction, body fluids, general metabolism, intermediary metabolism, energy metabolism, and detoxification. Emphasis on biochemistry as it related to nutrition, fish and other aquatic organisms. Prerequisites: CHEM 151 General Chemistry I CHEM 152 General Chemistry II; junior or above standing.

AQSC 409. Aquacultural Economics. (3 Credits)
Operation of hatcheries for the production of cold water and warm water food fish, game fish, and bait minnows; care of brood fish; methods of stocking, fertilizing, supplementary feeding; and related hatchery problems. Emphasis on spawning, rearing, harvesting and distribution. Prerequisites: AGEC 142 Principles of Agricultural Economics; junior or above standing.

ARTS: Arts (ARTS)

ARTS 101. Drawing I. (3 Credits)
Introduction to the fundamentals of drawing expression. Pencil, charcoal, conte, and wash media are explored. Course includes weekly critiques and discussions.

ARTS 102. Drawing II. (3 Credits)
Continuation of drawing expression. Introduction to linear perspective, foreshortening, and the use of color. Pencil, charcoal, conte, pastels, prismacolor, and wash media are explored. Course includes weekly critiques and discussions. Prerequisites: ARTS 101.

ARTS 103. Two Dimensional Design. (3 Credits)
Introduction to the fundamental concepts of two dimensional design, color theory, form relationships and their function in various design situations. Contemporary and traditional concepts of design principles and elements are explored. Course includes critiques and discussions. Art & Design Majors & Minors Only Course.

ARTS 104. 2 Dimenl Design;Color Theor. (3 Credits)
Examination of the interaction of color through studio experience and the manipulation of color to achieve various effects for problem solving and individual expression. Course includes critiques and discussions. Prerequisites: ARTS 101 and 103.

ARTS 108. Computers for Artists. (3 Credits)
An introductory course in the hardware, software, set-up, and use of computers, specifically designed for the needs of artists. Basic hardware and peripherals set-up, use of operating systems and artist-based programs for both Macintosh and PC systems. Art & Design Majors Only Course.

ARTS 131. World Art Survey I. (3 Credits)
ARTS 131 - 3 Semester Hours Examination of the key stages in the evolution of art and architecture from around the world until approximately 1400 CE. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives. Prerequisite(s): None Corequisite(s): None.

ARTS 132. World Art Survey II. (3 Credits)
ARTS 132 World Art Survey II - 3 semester hours Examination of the key stages in the evolution of art and architecture from around the world from approximately 1400 CE to today. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives. Prerequisite(s): None Corequisite(s): None.

ARTS 199. Art Appreciation. (3 Credits)
An introduction to the study and understanding of the visual arts. The various methods through which humans are able to access, interpret, and interact with art will be discussed. Topics include various cultural definitions of art and its use, the elements of design, the characteristics of art media, and the interpretation of content. Emphasis is placed on the areas of painting, sculpture, and architecture, but other areas (drawing, graphics, crafts, etc.) are discussed.

ARTS 200. Art Crafts. (3 Credits)
Introduction to the functional and decorative handicrafts through a variety of media.

ARTS 202. Life Drawing I. (3 Credits)
Continuation of drawing fundamentals and expression introduced the previous year using the human figure as the means of study. Pencil, charcoal, conte and wash media are explored. Course includes weekly critiques and discussions. Prerequisites: ARTS 102 and 103.

ARTS 203. Printmaking I. (3 Credits)
Fundamentals of graphic expressions employed in woodcuts, etchings, lithography and other vehicles for graphic reproductions. Course includes weekly critiques and discussions. Prerequisites: ARTS 102.

ARTS 204. Printmaking II. (3 Credits)
Fundamentals of graphic expressions employed in woodcuts, etchings, lithography and other vehicles for graphic reproductions. Course includes weekly critiques and discussions. Prerequisites: ARTS 203.

ARTS 206. Watercolor. (3 Credits)
Introduction to the fundamentals of transparent and opaque watercolor painting techniques. Prerequisites: ARTS 102.

ARTS 207. Three Dimensional Design. (3 Credits)
Introduction to the functional concepts of three-dimensional design. Form relationships as applied to the elements and principles of design. Course includes critiques and discussions. Prerequisites: ARTS 102.

ARTS 208. Perspective Drawing. (3 Credits)
Examination of perspective as a technique of depicting volumes and spatial relationships on a flat surface. Emphasis on the development of comprehension in perspective through drawing exercises and projects. Prerequisites: ARTS 102 and 103.

ARTS 209. Cognitive Develop for Artist. (3 Credits)
Increasing the creativity of artists through the mental processes of perception, memory, judgment, and reasoning. Emphases on different methodologies for creative development of individual and group artwork. Prerequisites: ARTS 102 and 104.

ARTS 212. Life Drawing II. (3 Credits)
Advanced development of drawing skills using the human figure as means of expression. Techniques such as gesture, abstraction, composition, and foreshortening are explored using a variety of wet and dry media. Prerequisites: ARTS 202.

ARTS 215. Introduction to Animation. (3 Credits)
Introduction to the history and methodology of animation. Regular animation screenings of commercial and experimental works with students responding to the work orally and/or in written form. Prerequisites: ARTS 225.

ARTS 216. 2D Methods & Materials. (3 Credits)
Overview of the tools, materials, and processes of two-dimensional media. Emphasis on the manipulation and safe handling of materials and tools, their use in artistic expression, and historical development. Prerequisites: ARTS 102 and 104.

ARTS 217. 3D Methods & Materials. (3 Credits)
Overview of the tools, materials, and processes of three-dimensional media. Emphasis on the manipulation and safe handling of materials and tools, their use in artistic expression, and historical development. Prerequisites: ARTS 102 and 104.

ARTS 225. Electronic Animation. (3 Credits)
Introduction to the various software, hardware, and equipment used in the creation of animation. Prerequisite: ARTS 215.

ARTS 301. World Art Survey I. (3 Credits)
Examination of the key stages in the evolution of art and architecture from around the world until approximately 1400 CE. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives.

ARTS 302. World Art Survey II. (3 Credits)
Examination of the key stages in the evolution of art and architecture from around the world from approximately 1400 CE to today. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives.

ARTS 303. Sculpture - Wood. (3 Credits)
Odd Exploration of sculptural fundamentals, emphasizing materials (cardboard and wood) and methods (both additive and subtractive). Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 304. Sculpture - Mold MakingI. (3 Credits)
In-depth exploration of the three-dimensional concepts, skills, and processes for mold making and plaster casting as generated from clay models. Emphasis is placed on the development of design and construction skills, concept realization, and creative personal invention. Course includes weekly critiques and discussions. Prerequisite: ARTS 207.

ARTS 305. Painting - Still Life. (3 Credits)
Fundamentals of painting in oil and acrylics introduced through the imagery of the still life. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. Prerequisites: ARTS 216.

ARTS 306. Painting - Landscape. (3 Credits)
Continuation of painting in oil and acrylics using the imagery of the landscape. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. Prerequisites: ARTS 216.

ARTS 307. Modern Art: 1860-1960. (3 Credits)
Examination of the historical styles and artists of the 'Modern' period from 1860 through 1960, how they compare and relate to previous periods, and how they have been influenced by social and political conditions. Prerequisites: Students must have junior status or special permission from the instructor.

ARTS 309. Ceramics - Hand Building. (3 Credits)
Exploration of ceramic design, basic forming, and firing techniques. Focus is on the basic construction techniques (pinch, coil, and slab), and finishing techniques in ceramic media including hand building; fabrication, surface design, glazing and kiln firing. Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 310. Ceramics - Wheel Throwing. (3 Credits)
Development of skills with a focus on wheel throwing. In addition to being introduced to the potter’s wheel, students develop their glazing techniques, knowledge of ceramics, and its terminology. Emphasis is placed on the development of design and construction skills with ceramic materials, concept realization, and creative personal invention. Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 312. Advanced Drawing. (3 Credits)
An advanced exploration of the traditional history, methods, and materials of drawing for students who have mastered basic drawing skills and who wish to develop them to enhance visual thinking. Studio approach using live model, via anatomical and perspective approaches to drawing. Emphasis is placed on the technical mastery of drawing techniques and media. Prequisite: ARTS 312.

ARTS 313. Black & White Photography I. (3 Credits)
An introduction to the basics of black and white photography will be covered to include: Basic features and operation of an SLR (manual) camera, black and white film processing, and darkroom procedures. Students will participate with basics of composition, design, lighting, printing, processing, and final print presentation. Students will learn how to develop film, process prints, and other printing controls such as dodging, burning, and the use of filters. The concentration is placed on photography as a fine art medium. Students should have a 35mm film camera that includes manual controls. Prerequisites: VCAD 206.

ARTS 314. Black & White Photography II. (3 Credits)
A continuation of the exploration of traditional wet process photography, with emphasis on developing film, processing prints, and other printing controls such as dodging, burning, and the use of filters. The concentration is placed on photography as a fine art medium. Students should have a 35mm film camera that includes manual controls. Prerequisites: ARTS 313.

ARTS 315. Sound for Animation. (3 Credits)
Examination of the basic theory and methodology of sound design. Project emphasis is on the creation of sound for use in animation. Prerequisite: ARTS 225.

ARTS 325. Animation Basic I. (3 Credits)
Examination of the principles that govern animation. Student will explore these principles through various exercises and projects. Prerequisite: ARTS 225.

ARTS 330. Animation I. (3 Credits)
Examination of animation components for the identification of individual strengths in animation methodology through the completion of animation exercises and projects. Prerequisite: ARTS 325.

ARTS 335. Animation Basic II. (3 Credits)
Exploration of the principles of special effects animation. Exploration of these principles through various exercises and projects. Sound will also be incorporated into their animation. Prerequisite: ARTS 325.

ARTS 403. Survey African American Art. (3 Credits)
Examination of art produced by African-Americans in the United States from the Colonial Period to present. Exploration of the social and political climates influencing the art of African-Americans. Prerequisites: Students must have junior status or special permission from the instructor.

ARTS 404. Art of the Motion Picture. (3 Credits)
Discussion in a seminar setting of the artistic development of the motion picture from its early beginnings to the present, with both technical (editing, production) and aesthetic (cinematography) consideration. Students engage in analysis and discussion after viewing selected films. Prerequisites: Students must have at least junior status or special permission from the instructor.

ARTS 405. Survey Of African Art. (3 Credits)
Exploration of the major forms of art and architecture produced by various cultures of Africa. Examination of the art forms and their places within society for pre-historic and ancient civilizations, medieval empires, and the peoples of the Colonial Period in northern, western, central, southern, and east Africa. Prerequisites: Students must have junior status or special permission from the instructor.

ARTS 407. History of Photography. (3 Credits)
A visually oriented history of the development of photography from its earliest manifestations to today and explores photography's applications as a commercial enterprise, a documentary tool, a cultural force and a means of personal expression. Although the emphasis is on photography as a fine art and its relationship to the other arts, topics include documentary photography and photojournalism, fashion and portraiture, and the use of photography in mass media. Prerequisites: Students must have at least junior status or special permission from the instructor.

ARTS 409. Ceramics - Mold Making. (3 Credits)
Examination of ceramic mold making, slip casting, and clay/glaze formulation. Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 410. Ceramics - Mixed Media. (3 Credits)
Exploration of mixed media formats and techniques to begin the development of a personal style through the creation of a series of related ceramic pieces. Prerequisites: ARTS 207.

ARTS 412. Experimental Drawing. (3 Credits)
An exploration of the contemporary conceptual and creative approaches to drawing. Emphasis on the expansion of the definition of drawing through the use of unfamiliar/unexpected materials, methods, and theories for visual thinking. Prerequisite: ARTS 312.

ARTS 413. Sculpture - Metal. (3 Credits)
Even Exploration of three-dimensional concepts, skills, and processes with an emphasis on metal fabrication. Using the machinery of the woodshop, expand technical vocabulary with tools such as MIG welders, oxy- acetylene torches, grinders, and chop saws. Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 414. Sculpture - Mixed Media. (3 Credits)
Exploration of conceptual and expressive problems in a variety of sculptural media and various sculptural processes which may include casting, metal fabrication, and/or wood sculpture techniques. Course includes weekly critiques and discussions. Prerequisites: ARTS 207.

ARTS 415. Painting - Figure. (3 Credits)
Fundamentals of painting in oil and acrylics introduced through the imagery of the human figure. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. Prerequisites: ARTS 216.

ARTS 416. Painting - Mixed Media. (3 Credits)
Odd Continuing in-depth study of painting formats and techniques integrating various media to begin the development of a personal style through the creation of a series of related paintings. Prerequisites: ARTS 216.

ARTS 425. Animation Basic III. (3 Credits)
Examination of experimental animation. Exploration of any available methodology/technology for animation exercises and projects. Prerequisite: ARTS 335.

ARTS 430. Animation II. (3 Credits)
Writing and production of individiual animation(s) in prepartation for senior studio. Prerequisites: ARTS 330.

ARTS 435. Animation Team. (3 Credits)
Examination of animation production management. Students will take turns in different roles from pre- production to post-production of animation projects. Prerequisite: ARTS 425 and 430.

ARTS 440. Senior Animation Studio. (3 Credits)
Preparation for the transition from formal academic study to animation career pursuit. Emphasis on creation of a demo reel, resumes, and portfolio. Prerequisite: ARTS 425 and 430.

BIOL: Biology (BIOL)

BIOL 116. Biological Science. (4 Credits)
Covers fundamental biological concepts and processes of living organisms. Designed to familiarize the student with relevance of science in their everyday lives. Topics stressed will include: scientific inquiry, chemistry and cells, reproduction, development, genetics, evolution and adaptation, and ecology. Course integrates science processing (laboratory) skills with lecture. This course does not serve as a prerequisite for any other biology course.

BIOL 120. Principles Of Biology I. (1-4 Credits)
Presents the latest developments and advances in the field of biology and prepares students for the major course sequence in the biology/pre-med and endorsement curriculums. Emphasis will be placed on chemistry, cell biology, cell division, genetics, and biotechnology. This course is a pre-requisite for all other Biology courses. Co-requisite: BIOL 120 Principles of Biology I Laboratory Lab A laboratory course required to be taken in conjunction with BIOL 120 Principles of Biology I lecture course. This course will involve hands on laboratory exercises related to selected lecture topics. Co-requisite: BIOL 120 Principles of Biology I Lecture.

BIOL 121. Principles Of Biology II. (1-4 Credits)
Presents the latest developments and advances in the field of biology with emphasis on evolution, ecology, diversity of life, and classification of plants and animals. This course is required of all biology majors. Prerequisite: BIOL 120 Principles of Biology I. Co-requisite: BIOL 121 Principles of Biology II laboratory Lab A laboratory course required to be taken in conjunction with BIOL 121 Principles of Biology II lecture course. This course will involve hands on laboratory exercises related to selected lecture topics. Co-requisite: BIOL 121 Principles of Biology II.

BIOL 122. Biology Investigations Lab I. (2 Credits)
A laboratory course introducing principles of biological research through hands-on experimental work. Students will complete directed experiments in areas of interest related to selected BIOL 120 and 121 lecture topics under the direction of faculty. BIOL 120 lecture toopics place emphasis on chemistry, cell biology, cell division, genetics, and biotechnology. BIOL 121 lecture topics focus on the latest developments and advances in the field of biology with emphasis on evolution, diversity of life, and classification of plants and animals. Prerequisite: Permission of instructor.

BIOL 123. Biology Investigations Lab II. (2 Credits)
A laboratory course focusing on the analysis and presentation of data generated through earlier work or from sources determined by instructor. Application of analytical methods and scientific reporting will be emphasized. Prerequisite: BIOL 122 Biological Investigations Lab I or permission of instructor.

BIOL 130. Professional Practices Biology. (2 Credits)
A course designed to familiarize students with the requirements and expectations of professional careers in biology and related disciplines including obtaining relevant research or career experiences, preparing personal statements, obtaining letters of reference, preparing successful applications and ethics in science. This course is for Biology majors only.

BIOL 200. Technical Writing In Biology. (3 Credits)
A study of the content, structure and presentation of written communication in Biology (e.g. reports, abstracts, posters, journal articles etc.). The course includes study of previously prepared and published materials, as well as original written work prepared by students. Prerequisite: BIOL 121 Principles of Biology II.

BIOL 201. Cell And Molecular Biology. (1-4 Credits)
A study of the principles of eukaryotic cellular and molecular biology. This course is designed to provide students planning to attend a graduate or medical program with an understanding of the structure and function of eukaryotic cells, with emphasis on multicellular organisms. Prerequisite: BIOL 121 Principles of Biology II. Co-requisite: BIOL 201 Cell and Molecular Biology laboratory Lab A laboratory course required to be taken in conjunction with BIOL 201 Cell and Molecular Biology. This course will give students a laboratory experience to complement their lecture material. The laboratory will expose students to the eukaryotic cell structure and function, and molecular biology techniques. Co-requisite: BIOL 201 Cell and Molecular Biology lecture.

BIOL 202. Terminology for the Health Sci. (3 Credits)
This course will introduce the learners to common terms essential for professionals working in a health career. The course is an introductory course to the world of terminology with an emphasis on health terms. This course will provide an overview of terminology with an emphasis on prefixes, suffixes, and root words. The course will highlight major anatomy and physiology of the human body. The course will identify major diagnostic tests and therapeutic interventions. Finally the course will provide an introduction to pharmacological terms and major drug classifications. This is an elective course open to all currently enrolled students. This course may not serve as a Biology restricted elective for Biology majors.

BIOL 205. Integrative Organismal Biology. (1-3 Credits)
An integrative course examining how organisms cope with environmental challenges by investigating the requirements for life at the level of individual cells and multi-cellular organisms, the anatomical and physiological properties of cells, tissues and organ systems, and how these properties allow organisms to interact successfully with their environment. Emphasis will be placed on the study of eukaryotic groups particularly plants and animals. Prerequisite: BIOL121 Principles of Biology II. Co-requisite: BIOL205 Integrative Organismal Biology laboratory.

BIOL 218. Human Anatomy & Physiology I. (1-3 Credits)
An introduction to the structure and function of the human body through lecture and laboratory experience. Emphasis is placed on understanding the relationships between structure and function at each level of organization, from molecules to organs and organ systems. Prerequisite: BIOL 120 Lecture and Lab.

BIOL 219. Human Anatomy & Physiology II. (1-3 Credits)
The second half of a two-semester course (with lab) describing the structure and function of the human body through lecture and laboratory experience. Prerequisite: BIOL 218 Lecture and Lab.

BIOL 241. Introduction To Microbiology. (1-4 Credits)
The study of fundamental principles of microbiology. Emphasis will be placed on medical, environmental, agricultural, and industrial microbiology. Concurrent enrollment in the laboratory is required. Prerequisite: BIOL 120 Principles of Biology I or consent of instructor. Co-requisite: BIOL 241 Introduction to Microbiology laboratory Lab A laboratory course to be taken in conjunction with BIOL 241 Introduction to Microbiology lecture course. The laboratory will consist of selected exercises that illustrate and clarify basic concepts in microbiology. Attention to basic microbiological laboratory techniques will be stressed. Co-requisite: BIOL 241 Introduction to Microbiology lecture.

BIOL 310. Plant Morphology. (1,3 Credits)
A study of the development, function and evolution of plant structures, including life histories and specific adaptations to native habitats. Concurrent enrollment in the laboratory is required. Prerequisite: BIOL 121 Principles of Biology II or PLSC 140 Principles of Plant Science or consent of instructor. Co-requisite: BIOL 310 Plant Morphology laboratory Lab A laboratory course required to be taken in conjunction with BIOL 310 Plant Morphology laboratory course. This laboratory experience will contribute to an understanding of the function of various morphological characteristics across plant groups. Co-requisite: BIOL 310 Plant Morphology lecture.

BIOL 311. Comparative Veterbrate Anatomy. (1,3 Credits)
A course detailing the comparative morphology of vertebrate systems at both the gross and microscopic levels of organization. The application of comparative anatomy to the study of the development and ancestry of the classes of vertebrates is included. Concurrent enrollment in the laboratory is required. Prerequisite: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 311 Comparative Vertebrate Anatomy laboratory Lab Dissection of vertebrate types found in the five basic classes of vertebrates in comparative purposes. Co-requisite: BIOL 311 Comparative Vertebrate Anatomy lecture.

BIOL 313. General Zoology. (1,3 Credits)
An upper division course designed to provide the student with an in depth examination of the structures, functions, adaptations, and evolutionary relationships among animal phyla. The evolutionary development of major systems and characteristics of the major groups will also be covered. Attention is given to the evolutionary and ecological interaction of animals and their environment. Concurrent enrollment in the laboratory is required. Prerequisite: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 313 General Zoology laboratory Lab A laboratory course required to be taken in conjunction with BIOL 313 General Zoology lecture course. The students will examine representative organisms, structures and organ systems to illustrate the evolutionary development of the animal kingdom. Co-requisite: BIOL 313 General Zoology lecture.

BIOL 316. Human Physiology. (3 Credits)
A non-laboratory introductory study of the human system at work and the ways and means by which various functions are integrated into a living unit. Prerequisite: BIOL 120 Principles of Biology I or consent of instructor.

BIOL 318. Hum Anatmy/Physiol (Nurs). (1-4 Credits)
An introduction to the structure and function of the human body through lecture and laboratory experience. Emphasis is placed on understanding the relationships between structure and function at each level of organization, from molecules to organs to organ systems. Prerequisites: BIOL 120 Principles of Biology I or consent of instructor Lab A laboratory to accompany BIOL 318 lecture. Co-requisite: BIOL 318 Human Anatomy and Physiology I.

BIOL 319. Hum Anatmy/Physio II i(Nurs). (1-4 Credits)
The second half of a two-semester course (with lab) describing the structure and function of the human body through lecture and laboratory experience. Prerequisite: BIOL318 Human Anatomy and Physiology I Lab A laboratory to accompany BIOL 319 lecture. Co-requisite: BIOL 319 Human Anatomy and Physiology II.

BIOL 320. Principles Of Genetics. (1-4 Credits)
An extensive study of the general fundamental principles of genetics, including special emphasis on the application of recombinant DNA technology in the study of DNA, RNA, and the mechanisms of gene expression. Laboratory will involve modern techniques of genetic experimentation. Prerequisites: BIOL 241 Introduction to Microbiology, CHEM 151 General Chemistry I, CHEM 153 General Chemistry Laboratory, or consent of instructor Lab The laboratory experience will confirm and expand on what is covered in the lecture and textbook. It will also provide the opportunity to function as a geneticist. Co-requisite: BIOL 320 Principles of Genetics.

BIOL 324. Ecology. (1-3 Credits)
This course will cover the basic principles of ecology. Ecology is a diverse subject in terms of topics and will be related to other disciplines of science. This course will provide the opportunities to understand the relationships among various areas of ecological sciences. The course will deal with the fundamental factual knowledge of natural ecosystems, distribution, abundance of organisms, and vegetation types, and the factors that influence the presence of flora and fauna at various locations. Emphasis is to be given on the understanding of the process of science that will augment the discovery and sharpen the abilities, skills, and knowledge through the study of ecology. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 324 Ecology laboratory Lab A field study of the relationships of organisms to their environment. Co-requisite: BIOL 324 Ecology.

BIOL 333. Biological Illustration. (3 Credits)
This course covers the history and techniques used to create biological illustrations. Students will use peer-reviewed literature to develop images that accurately convey complex biological concepts. Students will produce a final portfolio based upon their interest with the approval of the instructor. Prerequisite: BIOL 205.

BIOL 352. Intro to Mathematical Biology. (3 Credits)
designed to develop mathematical models in biology and study the behavior of such models using numerical techniques and review the mathematical concepts behind many important biological principles. Topics will be drawn from conservation biology, genetics, and physiology. Mathematics and computational methods to be reviewed include functions in biology, difference and continuous models, exponential and logarithmic functions, probability, numerical matrix algebra and curve fitting software. Students can receive credit for either MATH 352 OR BIOL 352 but not for both. Prerequisite: BIOL 121 Principles of Biology II, MATH 121 College Algebra and Trigonometry II, STAT 210 Elementary Statistics, or consent of instructor.

BIOL 360. Genomics. (1-4 Credits)
This course provides comprehensive and state-of-the-art information in the field of genomics, including structural composition and changes of simple and complex genomes, the epigenetic regulation affecting genome stability and gene activity at the global level (epigenomics), gene expression at the global level (transcriptomics), as well as newly developed tools like CRISPR for genomic editing and the related ethical issues. Lab This course provides practical and state-of-the-art training in a variety of molecular techniques used to prepare biological or environmental samples for genomic analyses and next-generation DNA sequencing technology commonly employed for genomic, transcriptomic, epigenomic, metagenomic studies.

BIOL 398. Intro to Prin. of Com-Eng Res.. (3 Credits)
This course will provide an introduction to the principles of community-engaged research to students from diverse disciplines. Students will be introduced to key community-engaged research competencies, including the fundamental principles, identifying key stakeholders, and developing a basic understanding of collaborations with community partners. Students will complete the course with the skills necessary to identify the key concepts, barriers, and opportunities to engage different stakeholders and to communicate with different audiences. This course will be highly interactive, and students will participate in online discussion groups and complete various assignments, which will provide a practical application of the key principles. Students will have the opportunity to use technology to create an interactive learning environment. Importantly, students will have the opportunity to learn from and with community members to further inform their understanding of community-engaged research.

BIOL 399. Topics in Cancer Disparities. (1 Credit)
This course will provide an overview of cancer health topics to students from diverse disciplines, including the humanities and sciences, where they will learn more about the continuum of cancer research and various cancer topics. The course will be highly interactive, with emphasis placed on engaging the learner with the course materials.

BIOL 401. Intro to Computational Biology. (3 Credits)
This course will expose the student to many of the fundamental tools needed to analyze and manipulate large biological data sets. This course will introduce different methods of data management, computer programming methods, and data analysis. The course format will be primarily hands-on activities with targeted lectures and assignments. The overall goal of the course is to give the students the basic tools needed for computational biology and data analysis with resources to allow them opportunities for deeper self-study in each topic area.

BIOL 402. Student Teaching In Biology. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary biology candidates. Prerequisite: Consent of instructor Co-requisite: EDUC 402 Student Teaching.

BIOL 404. Limnology & Oceanography. (3 Credits)
In this course, students will explore and examine inland and oceanic ecosystems in terms of their physics, chemistry, geology, and biology. This course investigates how physical interactions among atmosphere, water, landforms, and geography determine biological patterns and processes in aquatic ecosystems. Biological concepts are integrated through an interdisciplinary lens on topics ranging from physiology, primary production, exchange and cycling of energy and matter, energy flow through food webs and decomposition, and determinants of biodiversity. Pre-requisite: BIOL 324 Ecology.

BIOL 405. Animal Behavior. (1-3 Credits)
A course in the study of animal behavior in the field. Topics include: natural selection and evolution of behavior, behavioral genetics, neural and physiological mechanisms of behavior, communication, aggression, sexual reproduction, and mating systems. The course is an upper-level biology restrictive elective appropriate for junior and senior biology majors and others interested in zoology, animal science, entomology and experimental psychology. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 405 Animal Behavior laboratory Lab The study of animal behavior in the field to be taken as a co-requisite with BIOL 405 Animal Behavior lecture course. This course will emphasize methodology for collecting and analyzing animal behavior data. We will cover collection, statistical analysis, interpretation and written and oral presentation of behavioral data. Co-requisite: BIOL 405 Animal Behavior lecture.

BIOL 410. Systematic Botany. (1-4 Credits)
A laboratory ield and lecture course devoted to classifying seed plants, ferns, and mosses found in Virginia. Numerous field trips. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 410 Systematic Botany laboratory Lab A laboratory field course devoted to classifying seed plants, ferns and mosses found in Virginia. Co-requisite: BIOL 410 Systematic Botany lecture.

BIOL 412. Invertebrate Zoology. (1-4 Credits)
A comprehensive consideration of the biology of the invertebrates inclusive of the more important parasites particular to man. A balanced presentation of taxonomical, morphological, physiological and ecological treatment of the invertebrates is presented. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 412 Invertebrate Zoology laboratory Lab A systematic and morphological study of the invertebrates. Co-requisite: BIOL 412 Invertebrate Zoology lecture.

BIOL 413. Vertebrate Biology. (1-4 Credits)
A study of various vertebrate groups emphasizing their origin, comparative morphology, taxonomy, life histories, habitats, distribution and economic importance. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 413 Vertebrate Biology laboratory Lab A systematic and morphological study of the vertebrates. Co-requisite: BIOL 413 Vertebrate Biology lecture.

BIOL 414. Techn Of Molecular Biology. (1-3 Credits)
A course designed to acquaint students with the latest techniques in molecular biology. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 320 Principles of Genetics or consent of instructor. Co-requisite: BIOL 414 Techniques of Molecular Biology laboratory Lab A laboratory course to accompany and allow hands-on application of techniques discussed in BIOL 414 lecture. C-orequisite: BIOL 414 Techniques of Molecular Biology lecture.

BIOL 415. Vertebrate Histology. (1-3 Credits)
An intensive study of the cell and the cellular organization of the various tissues of the body, with an introduction to microslide preparation. Prerequisites: BIOL 201 Cell and Molecular Biology or consent of Instructor Lab A study of the identifying characteristics of animal tissues. Co-requisite: BIOL 415 Vertebrate Histology lecture.

BIOL 416. Quantitative Biology. (1-4 Credits)
In practice, the course will illustrate in a clear and useful way, the application and adaptation of general quantitative methods in the approach to specific biological problems and in the treatment of biological data. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 320 Principles of Genetics. Co-requisite: BIOL 416 Quantitative Biology laboratory Lab A laboratory course required to be taken in conjunction with BIOL 416 Quantitative Biology lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 416 Quantitative Biology lecture.

BIOL 417. General Physiology. (1-3 Credits)
A study of the integration of body function in higher animals with emphasis on the irritable tissues, nerves and muscles. Attention is given to nerve excitability impulse conduction, information processing, chemical transmission, receptor mechanisms and muscle bio-chemistry. Muscle irritability and contractibility are also considered, as well as humoral integration, nutrition, respiration and circulation. Prerequisites: BIOL 201 Cell and Molecular Biology, BIOL 205 Integrative Organismal Biology, BIOL 320 Principles of Genetics, CHEM 305 Organic Chemistry I Lab A demonstration of the various body functions. Co-requisite: BIOL 417 General Physiology lecture.

BIOL 418. Plant Physiology. (1-4 Credits)
A course involving studies of the internal and external factors affecting water relations, mineral nutrition, respiration, photosynthesis, growth and differentiation of plants, with an emphasis on plant metabolism. Concurrent enrollment in the laboratory is required. Prerequisite: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 418 Plant Physiology laboratory Lab A laboratory to accompany plant physiology lecture, with an emphasis on plant metabolism. Co-requisite: BIOL 418 Plant Physiology lecture.

BIOL 419. Cell Physiology. (1-4 Credits)
Designed to give the student a deeper understanding of cellular structure and function, this course emphasizes the application of basic principles of biology, chemistry, and physics to the evaluation and extension of the current state of knowledge of the cell. Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics Lab The study of the structure and function of cellular organelles. Co-requisites: BIOL 419 Cell Physiology lecture.

BIOL 422. Evolutionary Biology. (1-4 Credits)
Introduces students to the modern synthetic theory of evolution, beginning with Charles Darwin's seminal work (Origin of Species) and finishing with contemporary issues as laid out in the primary scientiic literature. This course will cover theoretical and empirical studies of evolutionary processes, with emphasis on the latter. Concurrent enrollment in the laboratory is required. Prerequisites: BIOL 205 Integrative Organismal Biology, BIOL 320 Principles of Genetics, BIOL 324 Ecology Co-requisite: BIOL 422 Evolutionary Biology laboratory Lab A demonstration of evolutionary processes. Prerequisites: BIOL 201 Cell and Molecular Biology, BIOL 320 Principles of Genetics. Co-requisite: BIOL 422 Evolutionary Biology lecture.

BIOL 423. Conservation Biology Lab. (1-3 Credits)
This course introduces the principles of conservation biology with an emphasis on ecological processes operating at population, community and ecosystem levels of organization. Threats to biological diversity, ranging from species introduction to habitat destruction and conservation solutions such as the design of protected areas and conservation legislation will be covered. Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 324 Ecology.

BIOL 425. Embryology. (1-3 Credits)
A study of the fundamental developmental stages of echinoids, fish and selected vertebrates with some consideration being given to mammals. The developmental processes of these organisms will be described and analyzed through early stages. Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 320 Principles of Genetics Lab A descriptive study of the early developmental sequences of the vertebrate animals. Co-requisite: BIOL 425 Embryology lecture.

BIOL 427. Science Process Skills. (1-3 Credits)
Designed to foster the development and understanding of principles and major concepts and processes of science as they relate to the elementary and or middle grades. The course will emphasize content and develop competency in the application and performance of specific basic and integrated skills in science. Prerequisite: Restricted to pre-service K-6 candidates. Co-requisite: BIOL 427 Science Process Skills laboratory Lab Practical experiences in conducting elementary science investigations. Co-requisite: BIOL 427 Science Process Skills lecture.

BIOL 428. Teaching Sci In Secdary Sch. (3 Credits)
The course is designed to foster the development and understanding of principles and major concepts of science as they relate to middle and secondary school teaching. It also incorporates current theories and practices in science teaching. Emphasis will be placed on teaching the concepts of science as inquiry, developing research skills, and applying research findings to the teaching and learning of science. Safety in the classroom and legal issues will be discussed. Students will discuss and analyze various classroom management techniques. Students will develop lesson and unit plans incorporating technological approaches to meet the diverse needs of learners, as well as, gifted and talented students. Students will be knowledgeable of Virginia's SOLs and design instruction reflective of the SOLs. Also, students will participate in a series of organized practicum experiences in a public school secondary science classroom. Prerequisite: Restricted to secondary education candidates.

BIOL 440. Virology. (1-3 Credits)
A study of the basic characteristics of plant, animal and bacterial viruses. The composition, morphology, multiplication, cultivation, and the control of viruses are included. Prerequisite: BIOL 201 Cell and Molecular Biology, BIOL 241 Introduction to Microbiology Lab Multiplication, cultivation, and control of viruses are demonstrated. Co-requisite: BIOL 440 Virology lecture.

BIOL 443. Immunology & Serology. (1-4 Credits)
The study of host-parasite relationships with emphasis on the response of vertebrates to antigens and the nature of the immune response. Among the topics included are antigens and antibody speciicities, hypersensitivity, immunological tolerance, autoimmunization, tumor and transplant immunology, and monoclonal antibodies. Prerequisite: BIOL 201 Cell and Molecular Biology, BIOL 241 Introduction to Microbiology Lab Experiments conducted that illustrate both innate and acquired immunity. Included are the preparation of various vaccines, the immunization of laboratory animals, the demonstration of hypersensitivity, the performance of serological tests of diagnostic and medico-legal importance, the performance of immunochemical methods of antigenic analysis. Co-requisite: BIOL 443 Immunology and Serology lecture.

BIOL 445. Pathogenic & Diagn Microbio. (1-4 Credits)
The study of the morphological and cultural characteristics and the pathogenic properties of micro- organisms. Emphasis is placed on the biological properties, isolation, identification and the control of pathogenic bacteria. Prerequisite: BIOL 201 Cell and Molecular Biology and BIOL 241 Introduction to Microbiology Lab The identification, isolation and control of pathogenic bacteria. Co-requisite: BIOL 445 Pathogenic and Diagnostic Microbiology lecture.

BIOL 446. Investigations and Research. (3 Credits)
Independent research course designed for the application of biological and chemical techniques under the guidance of a member of the biology faculty. Prerequisites: BIOL 320 Principles of Genetics, BIOL 324 Ecology, CHEM 305 & 307 Organic Chemistry, or consent of instructor.

BIOL 447. Seminar In Biology. (1 Credit)
A survey of current biological literature; the student prepares and presents reports on assigned projects. Prerequisite: BIOL 446 Investigations and Research.

BIOL 448. Research Project. (3 Credits)
Students conduct focused research with faculty suitable for continuation as thesis research in a master's Program. Students register for a section that lists their advisor of interest. Each section will have a maximum of three students. Pre-requisite: Available only to students in the Accelerated Bachelor's to Master's program.

BIOL 450. Intro To Bioinformatics. (3 Credits)
The study of how computers are used for processing, storing and analyzing biological data. Special emphasis is placed on current problems in genomics research and the common bioinformatics tools and resources used to resolve them. Prerequisites: BIOL 320 Genetics or consent of instructor.

BIOL 454. Programming for Bioinformatics. (3 Credits)
This course will help students to learn the current and most commonly used programming tools and algorithms for bioinformatic analysis of large-scale biological data. The students will also learn programming in command-line environment and apply the tools to solve real biological problems. Pre-requisite (s): CSCI 150 & CSCI 151 and BIOL 120 Lec. & Lab or Instructor permission.

BIOL 489. Independent Study in Biology. (1-4 Credits)
An independent investigation in the biological sciences conducted under the direction of a faculty member. This course is arranged on an individual basis and must be approved before the semester it is to be taken. Prerequisite: Consent of instructor.

BIOL 490. Topics in Biology. (3-4 Credits)
An in-depth exploration of recent developments in a field of biology based on faculty interest and expertise. Courses that include a laboratory experience will be 4 semester hours. Prerequisite: BIOL 320 Principles of Genetics and BIOL 324 Ecology or permission of instructor.

CBED: Community Based Ed (CBED)

CBED 200. Introd Community Based Ed. (3 Credits)
This course presents the role, function and operation of community based programs in agency and alternative school settings. Students learn about instruction, technology and assessment for 1) children and youth, 2) adults and 3) the elderly. An emphasis is placed on curriculum, developmental needs, collaboration and developing resources for the educational needs of these populations.

CBED 250. Emergent Literacy. (3 Credits)
This course provides a curriculum where communication skills including reading, writing, viewing and listening are incorporated for literacy training. Students learn the foundations of literacy, and develop an understanding about the nature of reading. They also explore the factors that influence learning for children, youth, adults and elderly populations. Literature resources are reviewed and reading needs assessments are explored.

CBED 351. Community Based Ed Progr Elder. (3 Credits)
This course examines the principles used in planning and developing educational programs for the elderly. All types of Community Based Programs are explored for this population. Students determine how to meet the instructional needs of this population through programming and evaluation.

CBED 352. Comm Skills Hearing Impaired. (3 Credits)
This course provides information and strategies to develop effective communication skills with deaf and hard of hearing individuals in the community. Topics covered will include: information regarding hearing loss, Deaf culture and Community, education for the deaf and hard of hearing, and development of expressive and receptive sign language skills.

CBED 402. Community Based Field Experien. (3 Credits)
Opportunities are provided to apply competencies in educational programming in a community based or alternative educational program environment. Students utilize the components of educational leadership and curriculum practice to demonstrate and present methods of meeting the real life educational needs of their field based learner population.

CBED 447. Program Planning Comm Based Ed. (3 Credits)
Effective use of the principles of program planning in community based educational environments is explored. A series of key topics include: needs assessment, collaboration, strategic planning, program implementation, collecting/analyzing data and reflection. Additionally, aspects of program coordination, program promotion in community settings, audience analysis and task analysis are discussed for an effective action plan.

CHEM: Chemistry (CHEM)

CHEM 100. Chemistry in Society. (1-4 Credits)
A development of the fundamental principles of chemistry focusing on elements and compounds and their role in environmental, biochemical, technological, and industrial applications relevant to society.

CHEM 105. Introductory Chemistry. (1-4 Credits)
A development of the fundamental basis for the further study of chemistry designed for students lacking the pre-requisites for General Chemistry (CHEM151). Emphasis will be placed on problem solving techniques. Topics will include: international system of units, dimensional analysis, properties of atoms and molecules, atomic structure and the periodic table, common chemical reactions, and stoichiometry calculations. The course and associated laboratory can be counted towards the general education science requirement. Lab Accompanying laboratory exercises for CHEM105 are designed to emphasize basic techniques in laboratory including measurements, basic graphical presentation and interpretation, basis data interpretation, laboratory statistics and laboratory safety practices. The laboratory can be counted towards the general education science requirement. Co-requisite: CHEM 105 Introductory Chemistry.

CHEM 132. Professional Practices in CHEM. (2 Credits)
A course designed to foster ethical practices and safety in chemistry and related fields. Pre-requisite: Permission of Instructor Co-requisite: CHEM 161 and CHEM 163.

CHEM 151. General Chemistry I. (3 Credits)
A development of the fundamental principles of chemistry and their applications. Chemical nomenclature, stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties, solution calculations, gas laws and the properties of solids and liquids are among the topics discussed. Pre-requisite: MATH 120 with a C or better or higher placement or CHEM 105 with a C or better. Co-requisite: CHEM 153 General Chemistry I Laboratory.

CHEM 152. General Chemistry II. (3 Credits)
A continuation of the study of the principles of chemistry and their applications. The topics include solution properties, acids and bases, ionic equations, oxidation-reduction, equilibrium, kinetics, descriptive chemistry of the elements, nuclear chemistry and an introduction to organic chemistry. Pre-requisite: CHEM 151 General Chemistry I Co-requisite: CHEM 154 General Chemistry Laboratory II.

CHEM 153. General Chemistry I Laboratory. (1 Credit)
An introduction to the principles and techniques of experimental chemistry with emphasis upon formula investigations, equations, elementary laboratory statistics, and chemical reactivity. Co-requisite: CHEM 151 General Chemistry I.

CHEM 154. General Chemistry II Laborator. (1 Credit)
A continuation of CHEM 153 with emphasis upon solution properties, kinetics, equilibrium, acids and bases, and qualitative analysis. Pre-requisite: CHEM 153 General Chemistry Laboratory I Co-requisite: CHEM 152 General Chemistry II.

CHEM 161. Chemistry I. (3 Credits)
A development of the fundamental principles of chemistry and their application. Chemical nomenclature, stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties, solution calculations, gas laws and the properties of solids and liquids are among the topics discussed in depth. Emphasis will be placed on problem solving skills to better prepare students for careers in chemistry and related life science fields. Pre-requisite: Chemistry Majors or Permission from the Department Chair Co-requisites: CHEM 163 Chemistry Laboratory I.

CHEM 162. Chemistry II. (3 Credits)
A continuation of development of the fundamental principles of chemistry and their application. The topics that will be covered in depth include solution properties, acids and bases, ionic equations, oxidation reduction, equilibrium, kinetics descriptive chemistry of the elements, nuclear chemistry and an introduction to organic chemistry. Emphasis will be placed on problem solving skills to better prepare students for careers in chemistry and related life science fields. Pre-requisite: CHEM 161 Chemistry I with a C or better Co-requisite: CHEM 164 Chemistry Laboratory II.

CHEM 163. Chemistry Laboratory I. (1 Credit)
An introduction to the principles and techniques of experimental chemistry with emphasis upon the application of course material to problem solving in the laboratory. Co-requisite: CHEM 161 Chemistry I.

CHEM 164. Chemistry Laboratory II. (1 Credit)
A continuation of CHEM 163 with emphasis upon problem solving and presenting professional graphical data while exploring, solution properties, kinetics, equilibrium acids and bases, and qualitative analysis. Pre-requisite: CHEM 153 General Chemistry I Laboratory, CHEM 163 Chemistry Laboratory I Co-requisite: CHEM 162 Chemistry II.

CHEM 210. Hist of Blk & Underrep Chemist. (2 Credits)
A thorough assessment of the groundbreaking work of the Black and Underrepresented pioneers responsible for the current practice of the science of chemistry and biochemistry. Pre-requisites: CHEM 151 or CHEM161 of CHEM 100.

CHEM 214. Inorganic Chemistry. (3 Credits)
A detailed study of the representative elements and their compounds, involving both theoretical and descriptive approaches. Topics greatly expand upon the subject material in the Freshman level chemistry course and include atomic and molecular structure, descriptive chemistry of the elements, d metal complexes, molecular shape and symmetry, group theory, the structure of solids, acids/bases, oxidation/reduction and an introduction to ligand and crystal field theories. Pre-requisite: CHEM152 General Chemistry II or CHEM 162 Chemistry II.

CHEM 215. Inorganic Chemistry Laboratory. (1 Credit)
Experiments designed to complement inorganic chemistry lecture by introducing synthetic and instrumental methodology used in the study of inorganic compounds. Co-requisite: CHEM 214 Inorganic Chemistry.

CHEM 218. Analytical Chemistry I. (3 Credits)
A survey of the methods of inorganic quantitative analysis, including the methods of gravimetric and volumetric analysis with the use of simple instrumental methods included. Pre-requisites: CHEM 152/154 General Chemistry II or 162/164 Chemistry II.

CHEM 219. Analytical Chemistry Lab I. (1 Credit)
Laboratory experiences involving the qualitative and quantitative analysis of chemical compounds including gravimetric, volumetric and spectrophotometric methods. Pre-requisites: CHEM 154 General Chemistry Laboratory II or CHEM 164 Chemistry Laboratory II Co-requisite: CHEM 218 Analytical Chemistry I.

CHEM 305. Organic Chemistry I. (3 Credits)
A survey of the chemistry of carbon compounds, their nomenclature, physical properties, structure and reactions with an introduction to reaction mechanisms and instrumental analysis. Pre-requisite: CHEM 152 General Chemistry II or CHEM 162 Chemistry II Co-requisite: CHEM 307 Organic Chemistry Laboratory I.

CHEM 306. Organic Chemistry II. (3 Credits)
A continuation of CHEM 305. Pre-requisite: CHEM 305 Organic Chemistry I Co-requisite: CHEM 308 Organic Chemistry Laboratory II.

CHEM 307. Organic Chemistry Lab I. (1 Credit)
An examination of fundamentals of and practice in organic synthesis, separation, purification and the identification of organic compounds. Pre-requisites: CHEM 154 General Chemistry Laboratory II or CHEM 164 Chemistry Laboratory II Co-requisite: CHEM 305 Organic Chemistry I.

CHEM 308. Organic Chemistry Lab II. (1 Credit)
A continuation of the fundamentals of and practice in organic synthesis, separation, purification and the identification of organic compounds. Pre-requisite: CHEM 307 Organic Chemistry Laboratory I Co-requisite: CHEM 306 Organic Chemistry II.

CHEM 318. Analytical Chemistry II. (3 Credits)
An advanced course with emphasis on general principles and applications of analytical instrumental analysis. Pre-requisites: CHEM 218 Analytical Chemistry I; CHEM 219 Analytical Chemistry Laboratory I.

CHEM 319. Analytical CHEM Laboratory II. (1 Credit)
Experiments in Instrumental Analysis Co-requisite: CHEM 318 Analytical Chemistry II.

CHEM 320. Org Reaction Mech/Mod Inst. (3 Credits)
A course designed for a more in depth treatment of reaction mechanisms in organic chemistry and instrumental analytical techniques for structure determination of organic compounds, to include: Infrared spectroscopy; Ultraviolet-Visible spectroscopy; Mass spectrometry; and Nuclear Magnetic Resonance spectroscopy. Pre-requisite: CHEM 306 Organic Chemistry II.

CHEM 330. Intro Chemical Research. (2 Credits)
An aid to the student in making efficient use of chemical literature both online and in the printed form, with an emphasis upon obtaining the appropriate sources for a research project in the field of chemistry or biochemistry. Pre-requisite: CHEM 306 Organic Chemistry II and CHEM 308 Organic Chemistry II Laboratory.

CHEM 340. Forensics Chemistry. (3 Credits)
A course designed to give the forensics student the necessary background in specialized chemical methods and concepts as they apply to the field of forensics. Pre-requisite: CHEM 306, 308 Organic Chemistry & Laboratory II.

CHEM 341. Forensics Chemistry Laboratory. (1 Credit)
A laboratory course designed to give the forensics student the necessary practical experience in specialized chemical methods as they apply to the field of forensics. Co-requisite: CHEM 340 Forensics Chemistry.

CHEM 361. Environmental Chemistry I. (3 Credits)
Chemical aspects of the atmosphere and air pollution: greenhouse effect and global climate change; CFCs, the ozone layer, and the ozone hole; carbon monoxide, nitrogen oxides, and photochemical smog, particulate matter; radon, asbestos, indoor air pollution; sulfur oxides and acid deposition, particularly relating to atomospheric reactions and control options.

CHEM 362. Environmental Chemistry II. (3 Credits)
An in-depth look at chemical aspects of water and water pollution: alkalinity; acid deposition, particularly relating to lake and stream aciidification and forest decline; drinking water treatment and THMs; wastewater treatment; detergents, builders, and eutrophication; pesticides; other toxic organic compounds such as PCBs and dioxin; hazardous wates; toxic elements such as Pb, Hg, Sn, Cd, and Se.

CHEM 363. Environmental Chemistry Lab. (1 Credit)
Applicability of modern day chemical instrumentation to the solution of present-day environomental problems. Includes instruction in operation of instrumentation, calculations, and interpretation of results from environmental analyses of a variety of air, water and soil samples.

CHEM 400. Special Topics In Chemistry. (3 Credits)
An advanced course for chemistry majors designed to promote interest and experience in specialized areas of chemistry. Topics in the area of organic, physical, analytical, inorganic and biochemistry are based on the expertise of the faculty and current trends within these disciplines in chemistry. Pre-requisite: Permission of instructor.

CHEM 401. Physical Chemistry I. (3 Credits)
A non-laboratory treatment of physical chemistry with emphasis on chemical thermodynamics, phase equilibria, kinetic theory and chemical kinetics. Pre-requisites: CHEM 152 General Chemistry II or CHEM 162 Chemistry II; MATH 201 Calculus II or consent of instructor.

CHEM 402. Physical Chemistry II. (3 Credits)
A continuation of CHEM 401 with emphasis on the condensed states of matter, atomic and molecular structure, spectroscopy, statistical mechanics and electrochemistry. Pre-requisite: CHEM 401 Physical Chemistry I.

CHEM 404. Experimental Physical Chem. (1 Credit)
An introduction to the advanced techniques of physiochemical measurements and their application to chemistry. Pre-requisite: CHEM 401 Physical Chemistry I.

CHEM 414. Advanced Inorganic Chemistry. (3 Credits)
Advanced study of the representative elements and their compounds, involving both theoretical and descriptive approaches. Review of ligand field and crystal field theories, reaction mechanisms of d-block complexes, electronic spectra of transition metal complexes, characterization methods in inorganic chemistry, organometallic chemistry, catalysis and bioinorganic chemistry are among the topics discussed. Pre-requisite: CHEM 214, 215 Inorganic Chemistry & Laboratory.

CHEM 415. Adv Inorganic Chemistry Lab. (1 Credit)
Laboratory experiments in inorganic synthesis and spectroscopic methods in inorganic chemistry. Co-requisite: CHEM 414 Advanced Inorganic Chemistry.

CHEM 418. Advanced Organic Chemistry. (3 Credits)
A course designed for a more in-depth treatment of reaction mechanisms in organic chemistry and instrumental analytical techniques for structure determination of organic compounds, to include: Infrared spectroscopy; Ultraviolet-Visible spectroscopy; Mass spectrometry; and Nuclear Magnetic Resonance spectroscopy. Pre-requisite: CHEM 306.

CHEM 420. Seminar In Chemistry. (1 Credit)
A presentation and discussion of topics of current interest and an introduction to the preparation of technical presentations and presentation methods. Pre-requisite: 15 semester hours of chemistry courses.

CHEM 422. Biochemistry I. (3 Credits)
An introduction to the chemistry of life processes, the composition of living matter and the changes associated with biological processes Pre-requisites: CHEM 306 Organic Chemistry II; CHEM 308 Organic Chemistry Laboratory II.

CHEM 423. Biochemistry Laboratory I. (1 Credit)
A laboratory course in which the properties of biochemical molecules are explored and common biochemical reactions are examined. Co-requisite: CHEM 422 Biochemistry I.

CHEM 424. Biochemistry II. (3 Credits)
A continuation of the chemistry of life processes, the composition of living matter, and the changes associated with biological processes. Pre-requisite: CHEM 422 Biochemistry I.

CHEM 425. Biochemistry Laboratory II. (1 Credit)
A continuation laboratory course in which the properties of biochemical molecules are explored and common biochemical reactions are examined. Pre-requisite: CHEM 422 Biochemistry I; CHEM 423 Biochemistry Laboratory I Co-requisite: CHEM 424 Biochemistry II.

CHEM 441. Research Laboratory I. (2 Credits)
The first part of a capstone research experience. Students are expected to spend a minimum of 6 hours per week on an independent and original research project designed in consult with their research advisor. Pre-requisites: CHEM 320 Organic Reaction Mechanisms & Modern Instrumental Analysis Techniques; CHEM 318 Analytical Chemistry II, CHEM 319 Analytical Chemistry II Laboratory, CHEM330 Introduction to Chemical Research.

CHEM 442. Research Laboratory II. (2 Credits)
A continuation of CHEM 441 with an emphasis upon the independent development of a research project. A written report of the research and an oral presentation of the results are required. Pre-requisite: CHEM 441 Research Laboratory I.

CHEM 443. Advanced Forensics Lab I. (2 Credits)
This laboratory-based course is designed to give the advanced student crime laboratory experience in examining, analyzing and identifying evidence. In several simulated court presentations, students sharpen their skill in presenting evidence as a scientific expert. The areas covered are: hairs, fibers and polymers, glass, soil, gunshot residue, fire and bomb debris, and drugs. Pre-requisites: CHEM 318 Analytical Chemistry II and CHEM 319 Analytical Chemistry II Laboratory, CHEM 330 Introduction to Chemical Research, CHEM 340 Forensics Chemistry, CHEM 341 Forensics Chemistry Laboratory, and CJUS 380 Criminal Procedures,

CHEM 444. Advanced Forensics Lab II. (2 Credits)
A continuation of CHEM 443. Pre-requisites: CHEM 443 Advanced Forensics Laboratory I.

CHEM 445. Internship in Criminalistics. (3 Credits)
This on/off-campus internship is designed to give the student an opportunity to expand and apply their classroom knowledge through workplace gained experience in forensic chemistry. It is a lecture/laboratory course. The site supervisor and faculty supervisor will develop the internship criteria and then evaluate the student's performance. Pre-requisites: CHEM 444 Advanced Forensics Laboratory II and Permission of Department Chair.

CISY: Computer Information Sys (CISY)

CISY 201. Microcomputer Concepts. (3 Credits)
This course is for non-business majors. This course provides a hands-on computer experience through the use of microcomputers on document creation, spreadsheet modeling, database design and creating rich presentations. An in-depth coverage of various computer productivity tools, such as, but not limited to, word processing, database, spreadsheet, and presentation software will be emphasized.

CISY 300. Computer Internship. (3 Credits)
CISY 300 Computer Internship - 3 semester hours Off campus (approved by the Department). Broad spectrum of "hands-on" work experience as an apprentice programmer/analyst in a computer environment for not less than 120 clock hours. Prerequisite(s): CISY 362, CISY 385 or permission of the Instructor.

CISY 305. Programming Logic. (3 Credits)
This course teaches skills for development of algorithms for problem solving. Students are taught how to use structured and other approaches to analyze problems and express their solutions. Through the introduction of programming concepts, this course enforces good style and outlines logical thinking. Prerequisite: COBU 155 or permission of the instructor.

CISY 312. Operating Systems Administrati. (3 Credits)
This course provides students with basic knowledge and practical skills in cloud computing and operating systems administration mainly in Linux and Windows systems. It deals with users, file systems, process and software administration, setting permissions, device configuration, setting up disks, operating system installation and controlling the booting process, managing backup and recovery, security problems, and configuring some network services. The course introduces Cloud Essentials for students to understand the fundamentals of cloud computing and virtualization from technical and business perspectives and the benefits of Windows, Linux, or other operating systems technology for enabling cloud computing. The labs are designed to give students hands-on experience with Linus, Windows, and Cloud computing platforms. Students will learn techniques to develop shell scripts to perform complex tasks such as automating user account management, backups, and routine system.

CISY 330. Computer Programming I. (3 Credits)
This course provides a foundational understanding of the Python programming language. Students will learn Python syntax, data types, control structures, functions, data structures, file and exceptional handling, as well as Object-Oriented Programming. Emphasis will be placed on students hands-on coding projects to reinforce them understanding of Python programming concepts, problem-solving techniques, and how to develop practical applications.

CISY 331. Python Programming. (3 Credits)
This course provides a foundational understanding of the Python programming language. Students will learn Python syntax, data types, control structures, functions, data structures, file and exceptional handling, as well as Object-Oriented Programming. Emphasis will be places on students hands-on coding projects to reinforce their understanding of Python programming concepts, problem-solving, techniques, and how to develop practical applications.

CISY 362. Systems Analysis And Design. (3 Credits)
This course will introduce students to the basic concepts and procedures required in the analysis, design, and the development of Computer-Based Information Systems (CBISs). Issues to be emphasized and that would form the themes for the course are: a). that systems development is firmly rooted in an organizational context- therefore, a broad understanding of organizations, organizational culture, and operations are desired. b). that systems development is a practical field- hence, current industry practices as well as accepted concepts are central to the course. c). that systems development has significantly, changed with the explosive growth in databases and data-driven architectures for systems- enabling the course and database management to be taught in a highly coordinated fashion such that one naturally leads to the other. d). success in systems analysis and design requires not only skills in methodologies and techniques but also in the management of projects: time, resources, and risks. e). systems development is increasingly becoming both automated and more strategic - the emphasis being on Computer-Aided Software Engineering (CASE) tools.

CISY 367. Computer Networks I. (3 Credits)
This computer networks course provides a comprehensive exploration of the principles and practices underpinning modern computer networks. The course covers core concepts of network architecture, protocols, and topologies, such as OSI and TCP/IP models, LAN and WAN technologies, routing and switching, critical services such as DNS, DHCP, NAT, network security, and emerging network trends. The course also explores the intricacies of wireless networking, wireless security, and troubleshooting common issues. The course also delves into network administration, support strategies, virtualization, and cloud computing. Through hands-on labs, real-world scenarios, and practice exams, students will be prepared to take the CompTIA Network+ exam and to enter the world network administration and support.

CISY 368. Infor Security & Assurance I. (3 Credits)
This course aims to introduce students to the rapidly evolving and critical areas of information security. It provides students with foundational security knowledge and skills, including threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The course covers new topics in information security, including psychological approaches to social engineering attacks and the use of malware, web application attacks, penetration testing, data loss prevention, and application programming development security. The course has labs providing a virtual environment for students to explore and learn Tactics, Techniques, and Procedures (TTPs) threat actors use to develop and execute cyber-attacks. The course and lab will help students learn information security principles and methods; and teach them how to work with infrastructure security, network security, security devices and management, and access control monitoring systems.

CISY 385. Web Develop & Application I. (3 Credits)
This course provides students with basic knowledge and practical skills in designing and developing World Wide Web pages using HTML (HyperText Markup Language) and CSS (Cascading Style Sheets). The course will cover HTML tags for text, images, links, lists, simple layouts, complex layouts, tables, frames, style, internal style sheets, and external style sheets. Basic design issues in using graphics on the Web will also be covered. Students will also create a functioning website which will incorporate all of the above as well as add Media and Social networking sites into their webpages.

CISY 406. Business Analytics II. (3 Credits)
This course would build upon the foundational knowledge acquired in Introduction to Business Analytics to solve complex business problems using sophisticated data analytics tools and methodologies. It will delve deeper into data analytics, by using advanced techniques and skills necessary to tackle complex real-world data challenges. Through hands-on projects, case studies, and in-depth exploration of statistical and machine learning methods, students will gain proficiency in data analysis, predictive modeling, and data-driven decision-making.

CISY 431. Computer Programming II. (3 Credits)
This is a second course on Object-oriented programming. Students will learn how to develop medium sized applications and applets. Special topics include key issues related to software engineering, object oriented design, Application Programming Interface (API), graphical user interface components, event handling, exceptions, input/output, and inheritance, data structures, and multithreading and animation.

CISY 432. Advanced Python Programming. (3 Credits)
This is a second course on Python programming for students who have a foundation in python and are seeking to deepen their understanding knowledge and skills. It provides students with advanced Python concepts and practical applications in many domains including data analysis, business analytics, data visualization, AI big data, and more. Students will gain a deeper understanding of Python, enhance their problem-solving abilities, and acquire practical skills that can be applied in various fields.

CISY 450. Cloud Operations and Visuals. (3 Credits)
This course offers in-depth knowledge of cloud computing operations and visualization, blending theoretical knowledge and practical skills essential for managing cloud-based infrastructures. It covers key concepts, tools, and techniques related to cloud computing operations, specifically focusing on visualization for effective management and decision-making. Particular emphasis is placed on leading cloud platforms such as Amazon AWS, Microsoft Azure, and Google Cloud. Through theoretical study and virtual labs, students gain practical insights to leverage cloud technologies effectively across diverse industries.

CISY 468. Advanced Infor Security & Assu. (3 Credits)
This is an advanced-level information security course. The student will learn contemporary security issues; cybersecurity resilience; cloud and virtualization security; infrastructure security management processes, architecture, and model; risk management and data privacy; security management models, policies, procedures, standards, and best practices; incidence handling and response, and planning for continencies. The course has labs providing a virtual environment for students to explore and learn in a safe environment. This advanced-level information security course and labs are tailored for students to gain practical knowledge, skills, and ability to perform core security tasks required for troubleshooting, configuring and managing systems and application security, networks and security infrastructure; using information security policies and procedures to ensure data confidentiality, integrity, and availability; apply techniques to trace a vulnerability to its root cause; using cyber defense tools, methods, and components.

CISY 478. Managing Org'l IT Sec Risks. (3 Credits)
This course takes a multi-disciplinary perspective of risk assessment, modeling, and management. The purpose of the course is to provide the student with an overview of the field of information security and assurance. Topics discussed include concepts of management of information security, legal, ethical and professional issues in information security policy, risk management and implementing information, physical security, security and personnel, and information security maintenance. The course and labs give students insights into cybersecurity and IT risk management background, foundation, and core components to enhance and organization's cybersecurity and IT practices successfully.

CISY 480. Database Design & Applications. (3 Credits)
This course covers topics related to designing, creating, and manipulating relational databases, with an emphasis on developing skills in crafting SQL queries for data, retrieval, insertion, modification, and deletion. It addresses key SQL syntax, including design, normalization, indexing, transactions, and database security fundamentals. Practical exercises and real-world examples would provide hands-on experience, enabling students to apply their SQL skills to solve complex data management problems and design database applications while ensuring data integrity and confidentiality. It will further explore NoSQL and emerging database technologies to meet to the evolving data management needs of today.

CISY 485. Adv WEB Develop & Applications. (3 Credits)
CISY 485 Advanced WEB Development and Applications - 3 semester hours This course provides students with the understanding and practical experience in web-enabled database and e-commerce business application development. Topics include scripting business rules and application logic on a web server, client and server side technologies, and techniques to develop fully functional business applications. Application design uses current application software. E-commerce business issues and security implementations are also covered. Prerequisite(s): CISY 385 or permission of the Instructor.

CISY 487. ERP Systems Configuration. (3 Credits)
The goal of the course is to customize ERP for a typical modern organization. Students will learn about business processes, managing changes to those processes, and configuring an Enterprise Resource Planning system to implement business process changes. Students will setup Financial Accounting (FI), Controlling (CO), Material Management (MM), and Sales Distribution (SD), Production Planning (PP) modules to configure the company structure, business processes and master data. Students will learn to implement ERP from the ground up and test the configured system with transactions for the various modules.

CISY 488. Infor Tech Security & Forensic. (3 Credits)
This course will introduce students to how forensic science, computer information systems, and information security blend into digital forensics. The students will learn the fundamentals of the forensic process; rules, laws, policies, and procedures that affect digital forensics; evidence handling, acquisition and analysis, and quality assurance as they apply to digital forensics. The lab is cloud-based, device-enabled, and integrated with the school Learning Management System (LMS). The course and labs cover technical and investigative skills; modern devices, networks, and the internet addresses online lab digital forensics tools, investigations, documentation, admissibility, and more.

CISY 491. Special Topics in IT. (1 Credit)
In-depth treatment within a seminar format of timely topics in information Systems and Technology. Prerequisite(s): Permission of the instructor. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

CISY 492. Special Topics in IT. (2 Credits)
In-depth treatment within a seminar format of timely topics in Information Systems and Technology. Prerequisite(s): Permission of the instructor. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

CISY 493. Special Topics in IT. (3 Credits)
In-depth treatment within a seminar format of timely topics in Information Systems and Technology. Prerequisites(s): Permission of the instructor. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

CISY 495. Special Topics. (3 Credits)
CISY 495 Special Topics - 3 semester hours In-depth treatment within a seminar format of a timely topic in Information Systems and Decision Sciences. Prerequisite(s): Permission of the Instructor.

CISY 499. Professiona Certification Path. (3 Credits)
This is the capstone course for students pursing a major in Computer Information Systems. The department enrolls each student in an entry-level professional certification preparation course from the current list approved by the department's Curriculum Committee and the Chair. Prerequisite(s): Permission of the instructor.

CJUS: Criminal Justice (CJUS)

CJUS 116. Intro To Criminal Justice. (3 Credits)
Provides an overview of the criminal justice system. This overview includes the history of the system and the major processes that are carried out by the different agencies of the criminal justice system. It describes the process of arrest, adjudication, corrections and release.

CJUS 120. Introd Leadership Dev Multi Cu. (3 Credits)
This course is an exploration of traditional and contemporary theories of leadership in organizations. Topics include models of leadership styles and techniques, organizational change, motivating personnel, decision-making and problem solving, ethics, interpersonal relationships, conflict resolution in work place, and power. Given the enormous cultural diversity within organizations, it is essential that leaders take more deliberate approach to sourcing and developing talent across socioeconomic class, religion, academic field, and other backgrounds. In addition, this course will prepare the students on how to become better critical thinkers and utilize emotional intelliegence in orchestrating leadership pattern.

CJUS 210. Intro Stats Criminal Justice. (3 Credits)
Introduces basic statistics needed to understand contemporary criminal justice research and to conduct descriptive and inferential statistical analysis. Also students will learn measures of associations. A prerequisite for CJUS 317 Research Methods for Criminal Justice. Prerequisites: CJUS 116; GEMA 112, 113 Co-requisite: CJUS 211.

CJUS 211. SPSS For Criminal Justice/Lab. (1 Credit)
Introduces basic principles of SPSS used in social science research. Must be taken in conjunction with CJUS 210 Introductory Statistics for Criminal Justice. Co-requisite: CJUS 210.

CJUS 212. American Law Enforcement. (3 Credits)
Introduces the local, national, and federal major law enforcement agencies of the country. It includes history, overview of the functioning, and an assessment of law enforcement agencies. It covers the process of recruitment, training, promotion, and other pertinent issues related to community control and police brutality.

CJUS 215. Introd Forensic Investigation. (3 Credits)
Introduces forensic investigation to the students. It includes a review of the application of different forensic techniques to the resolution of criminal issues. It reviews the different aspects of forensic science, including fingerprinting, casting, document examination, and photography. The laboratory complements the lecture portion of the course.

CJUS 217. Juvenile Justice. (3 Credits)
Surveys the development, structure and functioning of the juvenile justice system. Emphasis is on the procedures employed in the apprehension, detention and handling of juveniles by the police, the courts, and other agencies in the juvenile justice system. Review of recent developments in juvenile rehabilitation is included.

CJUS 221. Authentic Leadership. (3 Credits)
This course will prepare students to become leaders of organizations as they embark on parts of personal leadership development. Authentic Leadership requires personal curiosity and reflection from students, enabling them to think critically and develop personal opennes through sharing in class discussions, leadership development groups and one-on-one sessions with class instructor. Leaderhoip development concepts created and used in the course will be continuously applicable for students and useful for the rest of their lives as they strive to be authentic leaders.

CJUS 228. Juvenile Justice Process. (3 Credits)
CJUS 228 Juvenile Justice Process - 3 semester hours This course presents an examination of procedural and substantive viewpoints as it relates to the juvenile justice. It incorporates a comprehensive study of decision-making centered on the police, the juvenile courts, probation and juvenile aftercare are also examined.

CJUS 230. Criminal Investigation. (3 Credits)
Offers an introductory overview of major investigative procedures generally followed by the local, national, and federal agencies of the country. Students will know more about police detective work and FBI investigations.

CJUS 233. Principles of Ethics for CJUS. (3 Credits)
Covers major philosophical schools of ethics and reviews major components of the criminal justice system and their related ethical concerns. Furthermore, seeks to outline the relevance of studying ethics while examining its sources within the criminal justice system.

CJUS 235. Community Based Corrections. (3 Credits)
CJUS 235 Community Based Corrections - 3 semester hours An in-depth analysis of community based correctional programs and practices, related to the rehabilitation of juvenile offenders is examined. A thorough working knowledge of community resources available to juvenile offenders is provided.

CJUS 250. Court System And Practices. (3 Credits)
Reviews the federal and state court systems including the history of the court systems. The procedures for the appointment of justices and judges, and the actual operations and practices of the courts will be examined. Other pertinent court related issues such as plea bargaining sentence disparities and the future of the courts will be examined.

CJUS 255. Introduction to Corrections. (3 Credits)
The course examines the origin and historical underpinnings of the modern correctional system. Students will explore the philosophies of retribution, incapacitation, deterrence, and rehabilitation. The course will also focus on issues facing correctional facilities today including issues of race, gender, gangs, aging inmates, and AIDS. Prerequisites: CJUS 116.

CJUS 260. Drugs Crime & Crim Justc Sys. (3 Credits)
Examines effects of illicit drug abuse in the country and examines its relationship to violence, crime, and the criminal justice system. It provides an overview of drug abuse in an historical and social context primarily in the United States.

CJUS 295. Special Topics in CJUS I. (3 Credits)
Variable content. Selected special topics in criminal justice, which may include controversial issues, gangs, ethics, or female offenders. The topics will reflect current trends in the field of criminal justice and the expertise of the faculty. This course may be repeated for credit with different topics with the consent of the department.

CJUS 301. Leadership Emot'l Intell Membe. (3 Credits)
This course will enable students to understand and develop the skills needed to foster emotionally intelligent leadership. Students will broadan their horizons in leadership by leadership by learning their strengths and limitations. Students will explore strategies to build emotional intelligence into strength to improve leadership performance in organizations.

CJUS 305. Org'l Politics & Influence. (3 Credits)
This course will examine the tools and techniques for identifying and effectively interacting with organizational and political changes. Topics will include negotiations in politically-charged environments, organizational politics, and influencing processes. Pre-requisite: SOCI/CJUS 120.

CJUS 310. Criminal Justice Data Mgmt. (3 Credits)
Emphasizes real world data sets and management including data analysis techniques. Prerequisite: Senior Standing.

CJUS 315. Terrorism. (3 Credits)
Offers the background students need to understand major issues in terrorism and offers in-depth coverage of domestic and international terrorism. It also reviews the controversial aspects of counter-terrorist policies and actions.

CJUS 317. Research Meths Crim Justic. (3 Credits)
Emphasis is on social research techniques and procedures, the relationship between theory and research, and the use of quantitative data analysis techniques. The structure and use of qualitative research techniques are also examined. Prerequisites: SOCI 101; CJUS 116: CJUS 210.

CJUS 320. Private Security Syst Prac. (3 Credits)
Introduces the ever-growing field of private and industrial security systems emerging in the country. It includes recruitment, training, operational and administrative' practices used by different security systems. It will examine physical security arrangements, and the pros and cons of in-house and contract security systems.

CJUS 330. Crime Scene Investigation. (3 Credits)
CJUS 330 Crime Scene Investigation - 3 semester hours Introduces students to the importance of physical evidence in solving crimes, elements of fingerprinting, techniques of gunshot residue tests, evidence collection, and processing methods, and the use of forensic light source technology. Emphasis will be placed on the importance of documentation with notes, sketches, and photography, effective communication of results, and interpersonal skills.

CJUS 335. Contemp Problems In Policing. (3 Credits)
Examines the social and political dynamics under which police personnel perform their duties. Discretionary decision-making and the legal, social and institutional contexts in which they work are also considered. Application of interpersonal theories and concepts to police problems and practices will be included.

CJUS 336. Juvenile Corrections. (3 Credits)
CJUS 336 Juvenile Corrections - 3 semester hours Examines key issues and trends in juvenile corrections. Students will become familiar with the main goals of juvenile corrections, namely including treatment, corrections, and rehabilitation. Confinement. Restructuring of the juvenile justice system as well as challenges facing corrections within the juvenile corrections will further be outline.

CJUS 339. Black Women & Resistance CJUS. (3 Credits)
This course will examine the ways in which Black women in particular have been victims and offenders in the criminal justice system. An overview of historical and contemporary constructions of resistance by Black girls and women in response to interpersonal and structural forms of violence will be investigated. Prerequisites: CJUS 116, 360.

CJUS 340. Minorities & Criminal Just Sys. (3 Credits)
Provides an in-depth look at the theory and practice of criminal justice on crime, race, ethnicity, and justice. It offers insight into minority criminality and criminal victimization while addressing the less than objective criminal justice system processing of minority defendants and felony crime arrestees. It will elucidate what is fact and myth in the system controversies that surround minority criminality, criminal victimization, criminal profiling, and the criminal justice system.

CJUS 345. Criminal Law And Evidence. (3 Credits)
Provides an introduction to the nature and dynamics of the criminal law of the country and also provides an understanding of the importance of evidence in a criminal case. Virginia substantive law will be discussed, including classification and analysis of selected offenses. Prerequisites: CJUS 116 and CJUS 250.

CJUS 350. Gangs & Adolescent Subcultures. (3 Credits)
CJUS 350 Gangs and Adolescent Subcultures - 3 semester hours Evaluating essential issues relevant to the investigation of why and how some juveniles join gangs. Possible strategies for gang prevention and intervention are investigated.

CJUS 360. Crimnlogy & Theor Of Crime. (3 Credits)
Examines theories of crime, criminal behavior and the social, cultural and psychological factors in crime causation, control and treatment; includes an analysis of criminal behavior. Prerequisites: CJUS 116; CJUS 212, and CJUS 217.

CJUS 361. Victimology. (3 Credits)
Explores the scope of victim issues in American society. Reviews the programs and services provided for victims of crime. The expanding roles of the courts, police, battered women shelters, victim/witness assistance programs, crisis intervention units and legislation are highlighted.

CJUS 364. Sociology Of Corrections. (3 Credits)
Evaluates the effectiveness of correctional institutions, their development, functioning and change. Theories that influenced the development of corrections programs and agencies are included with emphasis on current direction in law, policy, research and practice.

CJUS 365. Police Organization & Mgmt. (3 Credits)
Examines major concepts of organization and management as these relate to law enforcement. Formulation of policies and procedures in the optimum utilization of personnel and financial resources is considered. It shows how to apply police research and contemporary management principles to today's complex police organization. Prerequisite: CJUS 116 Introduction to Criminal Justice.

CJUS 366. Women and the Prison System. (3 Credits)
This course will serve as an in-depth overview of race, gender, and class, with an analysis of women in the prison system. The main foci is an advanced understanding of structural inequalities and disproportionate minority confienement. Historical and contemporary forms of punishment will be explored.

CJUS 370. Forensic Science & The Law. (3 Credits)
CJUS 370 Forensic Science and the Law - 3 semester hours Students will understand the relationship between forensic science and the courts. Examination of this relationship focuses on the influence of scientific proofs based on group data and courtroom testimonies in the application of forensic evidence in courts and the exonerations of persons wrongfully convicted of crimes. Other areas include the philosophy of science, the scientific method, the rules of evidence, and the conduct of trials. Prerequisite(s): CJUS 215.

CJUS 380. Criminal Procedures. (3 Credits)
Examines the court procedures generally followed in the country. It includes a survey of the exclusionary rule and probable cause; arrests, search and seizures; identification and interrogation; constitutional rights and rules during trial; and legal liabilities of law enforcement officers.

CJUS 385. Ethics in Criminal Justice. (3 Credits)
CJUS 385 Ethics in Criminal Justice - 3 semester hours An analysis of contemporary ethical issues in crime and justice is presented. Ethical dilemmas in policing, racism, corrections, professionalism, the use of force, and decision-making are analyzed.

CJUS 401. Effec Leadership Conflic Resol. (3 Credits)
This course will analyze the sources of interpersonal conflict between leaders in organizations. Topics include models of organizatiional conflict, strategies for identifying and resolving conflict, theories of organizational change, implementation of change, and patterns of communication between individuals and groups in the workplace.

CJUS 402. Leadership Dev Practicum. (3 Credits)
This course provides an opportunity for students to integrate academic coursework with practical leadership experience. Students will be expected to engage in some type of leadership activity, which may be in a formal office in a student organization or more formal/informal types of community leadership.

CJUS 410. Criminal Justice Data Mgmt. (3 Credits)
Emphasizes real world data sets and management including data analysis techniques. Prerequisite: CJ Senior standing.

CJUS 415. Forensic Investigation. (1-4 Credits)
Introduces forensic investigation to the students. It includes a review of the application of different forensic techniques to the resolution of criminal issues. It reviews the different aspects of forensic science, including fingerprinting, casting, document examination, and photography. The laboratory complements the lecture portion of the course. Prerequisite: CJ Senior standing Co-requisite: CJUS 415 Lab.

CJUS 416. Advanced Forensic Investigatio. (3 Credits)
CJUS 416 Advanced Forensic Investigation - 3 semester hours Builds upon knowledge acquired from the introduction to forensic investigations class. It is designed to prepare students for advanced studies or careers in forensic investigation. students will pursue proficiency in documenting, processing, and the preservation of evidence. They will learn techniques of managing and coordinating crime scenes. Prerequisite(s): CJUS 215.

CJUS 417. Ethical Issues Juvenile Justic. (3 Credits)
CJUS 417 Ethical Issues in Juvenile Justice - 3 semester hours Focuses on how minors should be treated within the justice system. Challenges facing various participants within the juvenile justice system will be highlighted. They will include courtroom workgroup participants, experts of juvenile rehabilitation including psychologists and correction officers.

CJUS 420. Sr Seminar Criminal Justice. (3 Credits)
Provides an opportunity to integrate and synthesize the knowledge and skills gained through successful completion of the criminal justice program of study. Readings, discussions, and written papers incorporating both quantitative and qualitative research methods on selected problems and issues in criminal justice required. Students will be required to write a final paper and make a formal presentation. The paper will be reviewed and accepted by the departmental Senior Seminar Paper Review Committee. Prerequisite: CJ Senior standing.

CJUS 425. Compara Crimnal Justice Sys. (3 Credits)
Provides a worldview of cultural and legal traditions that are related to crime. This course will also discuss philosophies, practices and institutions of selected countries.

CJUS 430. Criminal Justice Pre-Internshp. (2 Credits)
Provides students with career preparation and prepares students for field internships. Different agency representatives will visit the class and will give lectures about their respective agency activities, their expectations, and future career possibilities. During this semester students must finalize their CJUS 432 Internship placement. Students will make applications and will complete background checks, if any, so that the following semester they can start their internship without any delay. Students will learn more about criminal justice careers and learn how to present themselves professionally to prospective employers. Prerequisite: CJ Junior standing.

CJUS 431. Violence & Violent Offender. (3 Credits)
Examines issues relating to violence in today's society as they impact the violent offender. Reviews myths about violence, victim-offender characteristics and relationships, and theories of violence. It also examines contemporary schools of thought on violence.

CJUS 432. Criminal Justice Internship. (4 Credits)
Course requirements are two fold-class and agency participation. Supervised placement with one or more federal, state or local criminal justice organizations or facilities involved in the arrest, adjudication, correction or release of either juvenile or adult offenders. Enables students to gain meaningful field experience related to their future careers. Students will complete 200 hours of internship at the agency. Prerequisite: CJ Senior standing.

CJUS 433. High-Tech Crime. (3 Credits)
Reviews the criminal issues related to the violation of Internet and web technology crimes where innocent users become victims.

CJUS 434. Organized Crime. (3 Credits)
Reviews the past and present of organized crime. It includes topics such as the business of organized crime, hierarchy in organized crime, organized crime in labor and global connections. Also reviews political and law enforcement responses towards organized crime.

CJUS 436. White-Collar Crime. (3 Credits)
Examines white-collar crimes, such as commercial fraud and embezzlement, as well as computer fraud and corporate piracy. Reviews applicable laws with special emphasis on practical aspects of investigation and prosecution of white collar crime.

CJUS 440. Minorities & Crim Justice Sy. (3 Credits)
Provides an in-depth look at the theory and practice of criminal justice on crime, race, ethnicity, and justice. It offers insight into minority criminality and criminal victimization while addressing the less than objective criminal justice system processing of minority defendants and felony crime arrestees. It will elucidate what is fact and myth in the system controversies that surround minority criminality, criminal victimization, criminal profiling, and the criminal justice system.

CJUS 449. Independent Studies. (3-6 Credits)
Requires completion of independent studies and research under faculty direction and supervision. Registration upon approval of the departmental chair.

CJUS 495. Special Topics in CJUS II. (3 Credits)
Variable content. Selected special topics in criminal justice, which may include controversial issues, gangs, ethics, or female offenders. The topics will reflect current trends in the field of criminal justice and the expertise of the faculty. This course may be repeated for credit with different topics with the consent of the department.

COBU: Core Business (COBU)

COBU 101. Introduction to Business. (3 Credits)
For Business Majors only. This course introduces the student to the fundamental principles of business, organizations, finance, banking, credit management, salesmanship, advertising, ecology and consumers. The student will be able to relate/work with real world examples in higher-level courses with an emphasis on use of the library (information literacy), research skills, writing skills, critical thinking, and the synthesis and analysis of information.

COBU 110. Personal Money Management. (2 Credits)
For Business Majors only. Principles and methods of managing personal income, wealth and credit are examined in this course. Included are source and uses of funds, budgeting, estate planning and retirement planning.

COBU 111. Professional Enhance/Career De. (1 Credit)
For Business Majors only. This course is designed to aid students in becoming competitive in today's dynamic environment by providing students with the necessary skills and resources to be successful as they enter the corporate arena and develop their career. Prerequisite(s): COBU 101.

COBU 155. Information Systems & Tech I. (3 Credits)
This course is designed to introduce students to the use of spreadsheet and database application software. It will provide a hands-on experience on two specific computer productivity tools; Microsoft Excel and Microsoft Access.

COBU 170. Legal, Ethical & Digital Envir. (3 Credits)
For Business Majors only. This course is an introduction to the background, role, structure, and importance of the legal system of the United States of America. Civil procedure, tort law, administrative law, bankruptcy and criminal law will be surveyed. Other areas of the law to be treated in more depth include contracts, personal property and bailments, intellectual property and piracy, real property, agency, as well as the ethics of managers and the social responsibility of business. Prerequisite: COBU 101.

COBU 200. Business Communications. (3 Credits)
For Business Majors only. Designed to improve practical communication, both written and oral. Students learn business style and formats (the letter, memo, resume, and report), as well as strategies for presenting neutral, negative, and persuasive messages. Students will speak on business or professional topics. Prerequisites: ENGL 111 or equivalent.

COBU 201. Introductory Accounting I. (3 Credits)
For Business Majors and Minors only. This course is a study of fundamental principles of financial accounting as applied to the contemporary business environment by analyzing, measuring, and reporting financial statement data including income, assets, liabilities, and equity.

COBU 202. Introductory Accounting II. (3 Credits)
For Business Majors and Minors only. This course is a study of introductory management accounting principles as applied to the competitive business environment including cost accumulation, allocation and production cost methods. Emphasis is on data analysis from an organization's management information system to formulate and implement business strategy.

COBU 210. Financial Economics. (3 Credits)
For Business Majors only. This course provides the fundamental of macroeconomics such as national income, inflation, and unemployment. Additionally, the course covers topics such as international trade, economic growth, business cycles, financial markets, as well as fiscal and monetary policies.

COBU 211. Career Launch. (1 Credit)
For Second Semester Junior and Senior Business Majors Only. This course is designed to make students competitive in today's dynamic job market. It will cover all professional career areas including job search, interviewing, etiquette, resume and business writing, and behavior and attitudes, and provide students the necessary skills and resources to be successful in finding and keeping a professional position. This course cannot be used to satisfy a business elective. Prerequisite(s): COBU 111 - Professional Enhancement/Career Development.

COBU 220. Financial Managerial Economics. (3 Credits)
For Business Majors only. This course provides a foundational understanding of microeconomics as they relate to business decision-making at the micro level. It introduces students to the framework for understanding consumer behavior and analyzing their decisions, along with how firms make optimal business decisions.

COBU 260. Business Statistics. (3 Credits)
For Business Majors only. Introduction to the use of statistical methods as a scientific tool in the analysis of problems in business and economics. Coverage will include probability, probability distributions, measures of central tendency and dispersions, sampling distributions, and estimation. Methods include hypothesis testing, regression and correlation, ANOVA and Chi square tests. Prerequisites: COBU 155 and MATH 122 or its equivalent.

COBU 300. Principles of Finance. (3 Credits)
For Business Majors only. Students are exposed to the field of finance including financial concepts, financial analysis, decisions involving long-term assets, sources and forms of long-term financing, international financial markets and issues, as well as selected ethical and social issues related to finance. Prerequisites: COBU 202 and Completion of the Pre-Business Phase requirements or equivalent. Co-requisite: Must take as cohort with COBU 301 Principles of Marketing and COBU 302 Organization and Management.

COBU 301. Principles of Marketing. (3 Credits)
For Business Majors only. This course is designed to cover the basic concepts of marketing management in consumer and industrial markets, and the formulation of marketing strategies relating to products, channels of distribution, promotion, and price. The course seeks to promote a managerial approach to solving marketing problems and reviews the fundamental marketing institutions, with an awareness of ethical considerations and the global environment. Prerequisites: Completion of the Pre-Business Phase requirements or equivalent. Co-requisite: Must take as cohort with COBU 300 Principles of Finance and COBU 302 Organization and Management.

COBU 302. Organization & Management. (3 Credits)
For Business Majors only. This course provides an overview of the many aspects of managing organizations. Emphasis will be placed on management processes, human behavior in organizations and applications of classroom knowledge to actual challenges facing managers. The application of management concepts will be practiced using such activities as case studies, team projects, decision making exercises, presentations, and active in-class discussion of current management issues. Prerequisite(s): Completion of the Pre-Business Phase requirements. Co-requisites: Must be taken as a cohort with COBU 300 Principles of Finance and COBU 301 Principles of Marketing. *All three courses must be taken simultaneously and registered together as one block, see advisor for more information.

COBU 303. Business Information Systems. (3 Credits)
This course will examine common operational-level organizational processes to provide an understanding of the nature of such processes and the role of data and information systems in facilitating and integrating organizational processes. It focuses on Enterprise Resource Planning (ERP) Systems and the role they play in modern organizations. Students will gain an understanding of ERP Systems from both functional (business process) and ERP software based implementation perspectives. The following business process software modules will be covered: Software Navigation; Sales and distribution (SD)-Order to Cash, Procure to Pay; Financial Accounting (F); Financial Control (CO); Human Capital Management (HCM). Prerequisites: COBU 201 and COBU 202: Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

COBU 304. Corporate Sustainability. (3 Credits)
For Business Majors only. This course will consider the global trends and the implications of decisions by corporations on both a local and global scale. Ecological and scientific theories and technological innovations in the field of sustainability will be explored. Students will formulate business cases for recommendations and decisions regarding sustainability. Prerequisite: Completion of the Pre-Business Phase requirements.

COBU 305. Operations Management. (3 Credits)
This course provides a general introduction to operations management. Operations management is the design and control of business processes, that is, the recurring activities of a firm. The aim of the course is to provide students with an understanding of: (1) major operational problems and issues that confront modern-day managers, (2) operations management language, concepts, insights and tools to deal with these issues in order to gain competitive advantage through efficient and effective operations, and (3) introduction to Enterprise Resource Planning (ERP) and management practices that include: review of Production Planning (PP), Financial Accounting (FI), Cost Center Accounting (CC), and other relevant modules.

COBU 306. Business Analytics I. (3 Credits)
Introduction to Business Analytics would provide students with fundamental knowledge and skills require for the field of data analytics. In an era where data-driven decision-making is essential for businesses and organizations across various industries, this course will equip students with the tools and techniques to collect, clean, analyze, and interpret data effectively. Through hands-on exercises, real-world case studies, and practical applications, students will gain proficiency in data manipulation, visualization, and statistical analysis using industry-standard software and tools.

COBU 342. Product & Process Planning. (3 Credits)
For Business Majors only. An overview of the marketing, engineering, financial, and production decisions involved in developing new products and determining the product mix; examination of the theory, tools, and approaches that can be used to assist managers in making effective new product and process decisions; specific topics include consumer behavior, marketing research, optimization techniques, capital budgeting, and product and process design using Total Quality Management; a comprehensive integrative case is used to illustrate these ideas. Prerequisite: COBU 260 and Completion of the Pre-Business Phase requirements.

COBU 343. Planning & Decision Making Org. (3 Credits)
For Business Majors only. An overview of the managerial planning process with a focus on business decision making through the collection and analysis of data; decision-making models and approaches, sources of information, value of information, pro-form a financial analysis, and forecasting; a comprehensive integrative case is used to illustrate these ideas. Prerequisite: COBU 260 and Completion of the Pre-Business Phase requirements.

COBU 400. Organization Policy & Strategy. (3 Credits)
For Business Majors only. This is the capstone business course. This course is designed to probe the interrelationships of the functional areas within an organization. Students will apply management skills and processes to integrate these areas, make decisions and formulate policies to accomplish organizational goals. A project is an important part of the course that allows students to apply and demonstrate these skills. Prerequisites: May only be taken in the final semester of the senior year or with permission of the Management & Marketing Department Chair.

COBU 406. Business Analytics II. (3 Credits)
This course would build upon the foundational knowledge acquired in Introduction to Business Analytics to solve complex business problems using sophisticated data analytics tools and methodologies. It will delve deeper into data analytics, by using advanced techniques and skills necessary to tackle complex real-world data challenges. Through hands-on projects, case studies, and in-depth exploration of statistical and machine learning methods, students will gain proficiency in data analysis, predictive modeling, and data-driven decision-making.

COBU 410. Global Business Perspectives. (3 Credits)
This course provides an analysis of major global challenges that affect businesses. The course focus will be on cultural, economic and political environment of global firms. This course will also explore multiple functional areas of global businesses, specifically the areas of marketing, human resources, finance, information technology and accounting. Prerequisite(s): COBU 302. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

COBU 415. Special Topics Service Learnin. (2 Credits)
This course is designed to (1) inform students about the historical importance of business professionals engagement in community and civic service to minority communities, in particular, and to improve society as a whole, and to (2) engage students in group service learning activities that enable them to utilize their business skills to benefit society. Students will be assigned to one or more organizations that are committed to resolving a pressing social issue, and assist the organization(s) with creating a specific deliverable or solving problem. At the end of the course, students will produce a report summarizing their activity and articulating the importance of service leadership and giving back to society throughout their career(s). Prerequisite(s): COBU 302. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

COMM: Undergraduate Comm (COMM)

COMM 201. Introd to Mass Communications. (3 Credits)
Analysis of the communications professions through an understanding of their structure and functions, their development, their performance, and the controls exercised over them by various groups and institutions. A survey of newspapers, film, broadcasting, advertising, and public relations.

COMM 202. Introd to Media Technology. (3 Credits)
Orientation to computer skills essential for today's digital environment in mass communications. Training in file and folder management, electronic messaging, file transfer via Internet and e-mail, and digital editing software for audio, images and video and other emerging technologies. Prerequisites: ENGL-110, ENGL-111, and COMM-201 with a C- or higher.

COMM 205. Introduction to Journalism. (3 Credits)
Working on deadline, students are exposed to the basics of news writing; emphasis on development of interviewing, news writing, and information gathering skills. Accuracy, fairness, and ethical issues in reporting are stressed. Prerequisites: ENGL-110, ENGL-111, and COMM-201 with C or higher.

COMM 210. Public Presentation. (3 Credits)
Emphasis on oral and written communications for public consumption. This course prepares students for effective oral delivery, multi-media presentations, and business communications. Students will be video recorded for feedback and improvement in quality of delivery. Prerequisites: COBU-101 Introduction to Business or COMM-201 Introduction to Mass Communications.

COMM 231. Critical Listening. (3 Credits)
COMM 231 Critical Listening - 3 semester hours Spring Students to learn, measure, analyze, and discuss sound more accurately. Topics include frequency recognition, anatomy and physiology of the ear, acoustics, audio data compression, and musical form and arrangement. Regular ear training exercises are included to improve listening skills. Prerequisite(s): MUSI 294 Introduction to The Recording Studio Corequisite(s):

COMM 281. Basic Videography Workshop. (1 Credit)
This eight week workshop is oriented for beginners and is designed to introduce the basics of shooting and editing video. This hands-on intensive workshop will take students through the video making process, teaching them basic terminology and production skills. The goal is to help students gain understanding of non-linear editing concepts through practical experience. This course should be taken before COMM-342 Advanced Television Production. Open to all Mass Communications majors. No prerequisites.

COMM 301. Hist African Americans Media. (3 Credits)
An overview of the history and contributions of African Americans in Mass Media. Examines legislation that aids or impacts negatively on the careers of African Americans, and particularly African American women. Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor.

COMM 302. Hist & Appreciation of Film. (3 Credits)
Introduction to film history and criticism. Examination of motion picture genres as handled by major directors and analysis of cinema as a narrative art from beginnings to the present day. Weekly screening and discussions of important motion pictures not only as art but as they reflect and affect our times. Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor.

COMM 303. Hist Print & Online Technology. (3 Credits)
A historical review of the development of early print media into newspaper journalism and an analysis of the impact that on-line technology has had on the practice of journalism. Open to non-majors. Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor.

COMM 304. History of Broadcasting. (3 Credits)
A detailed exploration of the historical development of radio, television, and film as mass media, with emphasis on their structure, economics, and programming. Open to non-majors.

COMM 310. Media Writing Laboratory. (3 Credits)
Students practice advanced news writing for newspapers, magazines and on-line publication. They further refine the skills learned in COMM-205. Prerequisites: ENGL-110, ENGL-111, COMM-201, COMM-202 and COMM-205.

COMM 311. Writing for Broadcast. (3 Credits)
An introductory broadcast writing course designed to familiarize students with script formats and various types of broadcast writing. While students will learn proper techniques of copy-writing employed in both television and radio production which includes documentary and continuity writing, emphasis is placed on broadcast news writing. Students will be required to write broadcast news stories as well as various type of radio and television copy. Prerequisite: COMM-202, COMM-205.

COMM 312. Media Research. (3 Credits)
Students will be introduced to research skills and techniques as they apply to the mass media industry. Students will perform basic field research, learning survey construction and data analysis techniques used in the industry. Prerequisite: ENGL-110, ENGL-111 and COMM-201, COMM-202 with C or higher.

COMM 314. Photojournalism. (3 Credits)
Emphasizes the basic elements of photography for the mass media, including print and on-line journalism, advertising, public relations, and television. The emphasis is on the photojournalistic value of truth-telling rather than creating a fantasy or illusion. Student learns how to compose, shoot, and edit using digital still cameras and associated computer software. This course includes foundation skills for shooting video. Open to non-majors. Prerequisites: COMM 201, COMM-202; open to non-majors with permission of the instructor.

COMM 321. Public Relations I. (3 Credits)
An overview of the principles, policies and research methods, as well as the historical and contemporary practices of public relations in business, government, associations, and other organizations; analysis of public relations programs, ethics of public relations practice, and options of career opportunities. Prerequisite: COMM-201, MCOM-205.

COMM 322. Public Relations II. (3 Credits)
Practice in media relations; the development of professional writing skills with emphasis on social media campaigns, external and internal communications: press releases, public service announcements, publication design, employee communications, speech writing, audio visual presentations, and news conferences. Prerequisite: COMM-321.

COMM 324. Public Relations Practicum. (3 Credits)
Workshops, guest speakers, and in-class exercises equip students to research, design, implement and complete public relations projects for community-based organizations. PR professionals from corporations and non-profits serve as guest lecturers, establishing a foundation from which students develop a Social Responsibility Report (hands on) and PR Case Study research paper. Prerequisite: COMM 322.

COMM 326. Organizational Communications. (3 Credits)
This course covers issues and processes used by public information officers and public relations officials in connecting a corporation or public figure with the public served. Prerequisites: COMM-205, and either COMM-311 or COMM-351.

COMM 331. Audio Production. (3 Credits)
The study and practice of basic concepts, skills, and techniques involved in audio for broadcast and recording studios. Emphasis is on equipment skills, especially digital audio editing and audio console controls. The class also covers announcing techniques and writing for broadcast. This course lays the foundation for the audio component of video production and digital editing techniques. Prerequisites: COMM-201, COMM-202, and COMM-205; open to non-majors, with permission of the instructor.

COMM 332. Introduction to Live Sound. (3 Credits)
COMM 332 Introduction to Live Sound - 3 semester hours Spring This course introduces the concepts and practices of live sound engineering, including analog console functionality, system preparation, system management and operation. Additional focus on microphone techniques, monitoring and mixing for live sound. Prerequisite(s): MUSI 294 Introduction to The Recording Studio or COMM 331 Audio Production I Corequisite(s):

COMM 333. Pro Tools I User. (3 Credits)
This course provides the foundations skills necessary for basic recording, mixing and editing within the Pro Tools environment. Students learn file structure, edit functions, time scale and rule views, session configuration, recording and managing audio, importing audio, and much more. Prerequisite(s): MUSI 294 or COMM 331 or Permission from the instructor.

COMM 334. Pro Tools II Music. (3 Credits)
This course builds intermediate Pro Tools skills that are necessary in music production. Students learn the components of an HDx system, advanced mixing and editing options, the use of alternate production tools, time operations, alignment techniques, writing and editing automation, and more. Prerequisites(s): Comm 333 Pro Tools I.

COMM 335. Pro Tools 101. (3 Credits)
This course takes a comprehensive approach to learning the fundamentals of Pro Tools HD, Pro Tools LE, or Pro Tools M-Powered systems. The student will learn to build sessions that include multi-track recordings of live instruments, MIDI sequences, software synthesizers and samplers, and audio looping with REX or ACID files. Through hands-on tutorials, the student will develop essential techniques for recording, editing, and mixing. Prerequisites: COMM-202 or basic computer knowledge including the ability to use a keyboard, mouse and an Apple or Windows based operating system.

COMM 336. ProTools 110. (3 Credits)
This course is a Digidesign Certified course that covers the key concepts and skills needed to operate a Pro Tools system in a home studio environment. In addition to recording and editing, the student will learn the essentials of automation and will work with both audio and MIDI. Hands on experience will be gained through a series of class exercise project files. Prerequisites: COMM-335.

COMM 337. Pro Tools II Post. (3 Credits)
COMM 337 Pro Tools II Post - 3 semester hours Fall This course builds intermediate Pro Tools skills in audio post production. Students learn advanced mixing and editing options, time operation, alignment techniques, writing and editing automation, recording and comping multiple takes, elastic audio, virtual instruments, MIDI, and beat detective. Prerequisite(s): COMM 336 Pro Tools 110, COMM 333 Pro Tools I User and MUSI 378 Fundamentals of.

COMM 338. Fundamentals of Post. (1 Credit)
COMM 338 Fundamentals of Post - 1 semester hour Spring This lab offers foundation level training in audio post-production for TV, film, and other media. Processes such as dialogue editing, ADR, sound effects editing and design, Foley recording, music editing and mixing (re-recording) are investigated in lecture and practiced through personal lab projects. Through a series of project-based lab activities, students will learn how to place Foley effects, edit and replace dialog (ADR), spot and edit sound effects and music, prepare temp mixes, and create a final mix for delivery, complete hands-on-projects involving editing and mixing audio for video in the Pro Tools environment. Prerequisite(s): COMM 333, COMM 357 or by permission from Instructor Corequisite(s): COMM 338L.

COMM 338L. Fundamentals of Post Lab. (2 Credits)
COMM 338L Fundamentals of Post Laboratory - 2 semester hours Spring This lab offers foundation level training in audio post-production for TV, film, and other media. Processes such as dialogue editing, ADR, sound effects editing and design, Foley recording, music editing and mixing (re-recording) are investigated in lecture and practiced through personal lab projects. Prerequisite(s): COMM 333, COMM 357 Corequisite(s): COMM 338 Fundamentals of Post.

COMM 341. Television Production. (3 Credits)
A production course designed to familiarize students with the basic fundamentals of operating audio and video equipment in a TV studio environment and to provide a basic understanding of television system operation, production techniques, television terminology, crew responsibilities, and visual aesthetics. Prerequisites: COMM-371.

COMM 342. Advanced Television Production. (3 Credits)
A continuation of COMM 341. This course is designed to expose students to the fundamentals of electronic field production (EFP) and electronic news gathering (ENG). Emphasis is placed on treatment and script development, visual aesthetics, analog and digital technology, pictorial continuity, and non-linear video editing techniques. Students will develop treatments, scripts, and storyboards in addition to producing and editing several short video projects such as public-service announcements, video promotions, and news packages. The course includes study and practical experience in television production, including television programming. Planning and videotaping of students' projects. Prerequisite: COMM-341.

COMM 351. Print & Online Media Journalis. (3 Credits)
Students practice writing for on-line publications and assess the practicality of photos and graphics. Prerequisites: COMM-201, COMM-202, and COMM-205.

COMM 352. Print & Online Media Productio. (3 Credits)
This course is a continuation of COMM-351. Students learn to build web pages typical of those used by on-line publications and media professionals, using both text and graphics. Prerequisite: COMM-351.

COMM 354. Copy Editing. (3 Credits)
Emphasis on journalistic desk work; editing stories, headline writing, typography, layout functions and relationships. Prerequisites: COMM-201, COMM-205, and COMM-351.

COMM 360. Writing for Filmmaking. (3 Credits)
A screen writing course designed to familiarize students with the basic structure and dynamics of short-film and feature-film screenplays. The course will focus on the aesthetics of cinematic storytelling, presenting visual grammar in combination with dialogue and narrative. The course will also examine the structure of the feature-length screenplay, beginning with a treatment and culminating with generating the "first act" of a film script. Prerequisite: Open to non-majors, with permission of the instructor.

COMM 361. Film Genres. (3 Credits)
The study of a variety of film styles/genres such as westerns, musicals, melodramas, action, mystery, comedy, and horror. Focuses on themes, conventions, and narrative trends associated with particular genres, placing a strong emphasis on analyzing their influence on other film genres and on other forms of creative expression. Since the specific genres to be explored will vary, the course may be repeated for up to six credit hours as allowed by the department. Cross-listed as ENGL- 361 Film Genres. Prerequisite: COMM-302 or permission of instructor.

COMM 371. Media Technology Workshop. (1-3 Credits)
This is an opportunity for students to learn more about the equipment and technology in mass communications. Students may be assigned to studio construction or maintenance tasks, or working on specific special events, for which they will receive training and academic credit. May be repeated for up to three semester hours. Prerequisite: COMM-202; open to non-majors, with permission of the instructor.

COMM 374. Communication Graphics. (3 Credits)
This course uses photo editing tools and typography to effectively design layouts for print media and advertising, It covers the basic knowledge of computer graphics software Adobe Photoshop and Adobe InDesign as well as various printing processes . Prerequisites: COMM-201, COMM-202.

COMM 375. Creative Process in Advetising. (3 Credits)
An in-depth approach to developing creative advertising for various media, with an emphasis on print. Focus is on the importance of creativity in advertising. This practice is applied to the development of original, strategically-sound, advertising campaigns. Prerequisites: COMM-201, COMM-202, and COMM-374 Communications Graphics.

COMM 376. 3-Dimenson'l Design Mass Media. (3 Credits)
The course will introduce the student to the basic elements of three-dimensional design as they apply to video and other recorded media. These will be placed in context with such factors as emotional appeal, scale, unity and balance. Student will do projects involving the basic elements of form, exploring how these elements can be utilized to design and create objects that are both esthetically appealing and structurally sound, while meeting prescribed criteria. The course will consist of slide lectures, discussions, and studio projects. Prerequisites: COMM-201.

COMM 377. Impact and Media. (3 Credits)
This course involves the study of cross-platform on-camera and information gathering techniques and procedures used to craft news, entertainment, and sporting programs and stories and how their emotional impact upon TV and radio audiences. Additionally, students will learn to apply lighting techniques, color and shot angels to communicate emotions of what is being shown. Joy, Pain, Fear and empathy are but a few emotions that will be explored and produced for this course. Students will do projects involving emotional elements to understand their impact and utilize them successfully as a communication tool. The course will consist of slide lectures, discussions, and studio projects. Prerequisite: COMM 331, 341.

COMM 381. Media Creative Project. (1 Credit)
Students enrolled in this course must prepare a proposal for a significant creative work, and they must secure permission from a faculty sponsor. Typical projects might include an audio or video documentary, a book writing project, a series of magazine articles, a substantial Web page design, a sizable photo portfolio, etc. The student should seek a faculty sponsor for this course, such that a good match exists between the student's area of interest, the job site, and the faculty sponsor. Prerequisites: Junior or senior standing, and prior approval of faculty sponsor.

COMM 383. Service Learning Project. (1 Credit)
Students enrolled in this course will participate in an on-campus or community-centered activity, relating some aspect of mass communications with community needs. A typical project might be to help school children develop multi-media presentations; serve as a resource person for school media projects, etc. The student should seek a faculty sponsor for this course, such that a good match exists between the students are of interest, the job site, and the faculty sponsor's areas of expertise. Prerequisites: Permission of faculty sponsor, and prior approval of job site supervisor.

COMM 389. Special Topics in Mas Media. (3 Credits)
Working under direction of a professor, a student explores a specific area or field relating mass communications. Prerequisites: COMM-201, COMM-202, COMM-205, Junior standing, and prior approval of the instructor.

COMM 391. Graduate School Preparation I. (3 Credits)
Students who anticipate attending graduate school will receive orientation to the academic rigor expected for post-college studies. Students will investigate graduate programs appropriate to their interests and training, becoming familiar with entrance requirements and courses likely to be encountered. The course will culminate in preparing and defending a graduate-level research paper, including following the requisite writing style guide, such as MLA or APA. Prerequisites: COMM-201, COMM-202, COMM, 205, either COMM-311 or COMM-351, completion of a college-level research and statistics course such as SOCI-317, Junior or senior standing, and approval of the student's academic advisor.

COMM 411. Field Observation Mass Media. (1 Credit)
This course gives students the opportunity to observe media practitioners in the workplace. Students will keep journals of their observations. Students are expected to document at least 30 hours of on-site observation using journal entries, photography, audio or video recordings, as appropriate to their assignment, using these materials to prepare a comprehensive report of the experience. If circumstances permit, the student is allowed to perform work on the job site. The student should seek a faculty sponsor for this course, such that a good match exists between the student's area of interest, the job site, and the faculty sponsor's expertise. Prerequisites: Junior standing, permission of faculty sponsor, prior approval of job site supervisor.

COMM 413. Media Argumentation & Debate. (1 Credit)
Students will learn the art and technique of argumentation and debate and participate in debates on controversial issues affecting media professionals. Prerequisites: Junior or senior standing. Open to non-majors, with permission of instructor.

COMM 415. Media Management. (3 Credits)
Students will be prepared for future management positions in the broadcast media, through the study of concepts and principles of media management. Students will examine how media companies function today, and how students can prepare themselves as future managers, producers or talent agents. Prerequisites: COMM-201, COMM-202, COMM-205, and Senior standing.

COMM 417. Mass Media Laboratory. (1 Credit)
Mass Media labs will supplement the content of mass communications lectures. The laboratory is designed to help students develop their specific communication skills and apply theories through various exposure and/or experiences. It will help mass communications students become more informed and be discerning media consumers. Laboratories are break-out sessions that will be hosted by different faculty members or guests who will provide an additional syllabus and a 1 credit grade. The sessions are based on the content of the associated class lecture (journalism lab, advertising lab, discovery lab, leadership development lab). The instructor will have a schedule of assignments, readings, field trips and discussions planned for students. Prerequisites: For Mass Communications majors only.

COMM 418. Performance in Popular Culture. (3 Credits)
This course will study the development of popular music and its African American roots and heritage. The study begins with the remnants of African musical traits that survived slavery and traces them through blues, ragtime, jazz, blues and rhythm and blues, and on into rap and hi-hop and other movements. The discussion will focus on the musical traits of each, the relationship to African American popular music, and the societal effects on the music as well as the music's effect on society. Open to non-majors.

COMM 419. Popular Culture. (3 Credits)
This course surveys the history of popular culture, media effects on society, theories surrounding media criticism, and current topics and trends. Students will be expected to study and critically analyze mass media artifacts and texts. Prerequisites: COMM-205 and Junior standing. Open to non-majors with permission of the instructor.

COMM 431. Advanced Audio Production. (3 Credits)
A continuation of COMM-331 Audio Production; further study and practical experience in advanced audio production techniques, including radio station programming, television studio audio control, recording studio and venue sound reinforcement requirements. Student projects will focus on various types of productions done at both commercial and noncommercial stations. Open to non-majors with permission of instructor. Prerequisite: COMM-331 Audio Production or permission of instructor.

COMM 432. Applied Studio Techniques. (1 Credit)
COMM 432 Applied Studio Techniques - 1 semester hour Fall Investigates audio fundamentals, microphone techniques, signal flow, common recording technologies, and studio operation procedures. Prerequisite(s): COMM 332 Introduction to Live Sound or Permission from Instructor Corequisite(s): COMM 432L.

COMM 432L. Applied Studio Techniques Lab. (2 Credits)
COMM 432L Applied Studio Techniques Laboratory - 2 semester hours Fall Students learn microphone, console, and session management techniques by recording live performers. In personal labs, students hone mixing and recording skills. Prerequisite(s): COMM 332 Introduction to Live Sound Corequisite(s): COMM 432 Applied Studio Techniques.

COMM 433. Advanced Audio Post. (3 Credits)
COMM 433 Advanced Audio Post - 3 semester hours Fall Students gain further experience in the production of audio for visual medias. Students complete extensive projects and receive significant studio time to record, edit, and mix sound effects, Foley, dialogue, and music. Prerequisite(s): COMM 378 Fundamentals of Post, COMM 378L Lab Corequisite(s):

COMM 445. News Production. (3 Credits)
This is an advanced-level broadcast production course designed to provide students with practical experience in developing, producing, and directing a broadcast-quality 15-minute television newscast. Based upon previous experience, students will be assigned to perform a number of different functions such as researching topics, writing broadcast scripts, formatting and timing show segments, shooting and editing video, serving as talent, and producing video packages. Each student is required to write and produce segments of the newscast on a weekly basis and well as performing other assigned tasks such as operating production equipment. This course requires a large amount of work outside of class. Prerequisites: COMM-311, COMM-331, COMM-341, COMM-342, or permission of the instructor.

COMM 465. Cinematography. (3 Credits)
This is a hands-on course designed to expose students to the fundamentals of single-camera production for film and television and to develop a basic understanding of filmmaking and videography. Emphasis is placed on drama script and storyboard development, shot selection, pictorial continuity, and basic video editing techniques and aesthetics. Students will develop treatments, scripts, and storyboards and produce a short dramatic film project. Prerequisites: COMM-314, COMM-371, COMM 373, and Junior or Senior standing.

COMM 473. Multi-Media Technologies. (3 Credits)
A practical application of new technology, including computer and digital technology, interactive media, telecommunications, and virtual reality. The course gives students familiarity with current media technologies used to produce, store and share sound, image and video files, and in the production of Web design and Web-based publishing. Open to non-majors with permission of the instructor. Prerequisites: COMM-201, COMM-202, and Junior or Senior standing and permission of instructor.

COMM 475. Broadcast Engr Certification. (3 Credits)
This course is designed for both Mass Communications and Electrical Engineering students who are focused on the technical aspects of broadcast technology. Students will survey broadcast technology and the particular demands placed on combining audio and RF environments. Students are to work toward formal certification, such as an FCC General Radiotelephone Operator's License, the certification by the Society of Broadcast Engineers, or the Technician Class Amateur Radio License. Prerequisite: Permission of instructor.

COMM 490. Media Law and Ethics Survey. (3 Credits)
A study of legal issues and constitutional freedoms affecting the mass media, with emphasis on libel, copyright labels, FCC rules and regulations, the principles of professional ethics, and the social responsibility of mass communications. Prerequisites: COMM-201, and Senior standing.

COMM 491. Graduate School Preparation II. (3 Credits)
Students who anticipate attending graduate school will receive orientation to the academic rigor expected for post-college studies. Students will apply to one or more graduate programs appropriate to their interests and training, and they will prepare for and may take the relevant entrance exam, such as the GRE. As a continuation of COMM-391, this course will include further training in preparing and defending a graduate-level research paper, including following the requisite writing style guide, such as MLA or APA. Prerequisites: COMM-391, Senior standing.

COMM 496. Internship in Mass Media. (3 Credits)
Supervised work experience in mass media with emphasis on practical application of classroom concepts. Minimum of 120 hours of assigned work, typically spread across four weeks or more, to receive (3) units of academic credit under the direction of the Internship Supervisor on- site. Regular mandatory meetings with the Mass Communications Internship Coordinator; weekly written reports, site evaluations, mid-term report and a final report. Mandatory class schedule with Mass Communications Internship Coordinator as specified in the course syllabus. A second internship with a significantly different assignment may be conducted for an additional three semester hours, with approval of the internship coordinator and faculty advisor. Prerequisites: Senior standing and prior approval and permission of the Mass Communications Internship Coordinator.

COMM 497. 2nd Internship in Mass Media. (3 Credits)
Supervised work experience in mass media with emphasis on practical application of classroom concepts. Minimum of 120 hours of assigned work, typically spread across four weeks or more, to receive (3) units of academic credit under the direction of the Internship Supervisor on- site. Regular mandatory meetings with the Mass Communications Internship Coordinator; weekly written reports, site evaluations, mid-term report and a final report. Mandatory class schedule with Mass Communications Internship Coordinator as specified in the course syllabus. A second internship with a significantly different assignment may be conducted for an additional three semester hours, with approval of the internship coordinator and faculty advisor. Prerequisites: Senior standing and prior approval and permission of the Mass Communications Internship Coordinator.

COMM 499. Senior Seminar in MCOM. (3 Credits)
A capstone course for Mass Communications majors focused on reading and researching selected topics in mass communications; designed to integrate knowledge in the various areas of mass communications and to prepare students to take exit examination, produce a portfolio, and gain experience in research and oral presentation. Prerequisite: To be taken in the last semester of a student's Mass Communications curriculum.

CPEG: Computer Engineering (CPEG)

CPEG 207. Introduction To Digital System. (3 Credits)
Boolean algebra and logic design of combinational and sequential circuits. Gate and flip-flop characteristics for TTL technology adders, multipliers, register transfer language, general-purpose processor design, basic computer organization, machine level programming, relationships between software and hardware. Prerequisite: ENGR 102 Introduction to Engineering II. Co-requisite: CPEG 227 Digital Systems Laboratory.

CPEG 208. Microprocessors. (3 Credits)
CPEG 208 Microprocessors - 3 semester hours Sp Principles of operation of modern microprocessors, including, internal architecture, timing analysis, and interfacing techniques. Special emphasis will be placed on hardware-software interactions using assembly language programming and utilization of programmable peripheral devices. Corequisite(s): CPEG 228 Microprocessors Laboratory.

CPEG 227. Digital Systems Laboratory. (1 Credit)
Design and implement digital systems. Build combinational and sequential logic circuits. Measure/ troubleshoot the logic circuits using general electronic test equipment. Reinforce the concepts learned in CPEG 207 Introduction to Digital Systems. Co-requisite: CPEG 207 Digital Systems.

CPEG 228. Microprocessors Laboratory. (1 Credit)
CPEG 228 Microprocessors Laboratory - 1 semester hour Sp Microprocessor-based laboratory utilizing computer programming language. Emphasis is on writing and running programs on modern microprocessor systems. Lab includes both software and hardware. Corequisite(s): CPEG 208 Microprocessors Laboratory.

CPEG 303. Introduction To Electronics. (3 Credits)
Basic semiconductor physics, theory of p-n junctions; diodes, field effect transistors, and bipolar transistors; modeling of diode and transistor devices; analysis and design of diode switching and rectifier circuits; basic transistor switching circuits and single stage amplifiers; multistage transistor amplifier biasing; op amps, and output stages; electronic simulation using PSPICE. Prerequisite: ENGR 201 Circuit Analysis and PHYS 113 General Physics II Co-requisite: CPEG 323 Introduction to Electronics Laboratory. Co-requisite: CHEM 151 General Chemistry I.

CPEG 305. Operating Systems. (3 Credits)
Functions and components of an operating system, including process synchronization, job scheduling, memory management, file systems protection, and deadlocks. Related system software, such as loaders, linkers, assemblers, and windowing systems. Prerequisite: ENGR 203 Introduction to Programming.

CPEG 306. Computer Architecture I. (3 Credits)
Hardware and software structures found in modern digital computers. Instruction set architecture, hardwired design of the processor, microprogramming, I/Q and memory units, analysis of instruction usage, and hardware complexity. Prerequisite: CPEG 208 Microprocessors.

CPEG 307. Linear System Analysis. (3 Credits)
Transient response of linear time-invariant, continuous-time and discrete-time dynamic systems by various methods including Laplace transform, and z-transform; properties of sampling; input-output characteristics; frequency response analysis. Prerequisites: ENGR 201 Circuit Analysis Co-requisite: MATH 350 Differential Equations.

CPEG 308. Analog Comm Amplitude Freq Mod. (3 Credits)
Filter design, noise, signal-to-noise ratio, amplitude modulation, frequency modulation. Prerequisites: CPEG 303 Introduction to Electronics and PHYS 113 General Physics II.

CPEG 309. Advanced Digital Systems Desig. (3 Credits)
Design of digital systems using programmable logic devices and high-level design techniques. Emphasizes the application of state-of-the-art hardware devices as well as design and simulation tools. Prerequisite: CPEG 207 Introduction to Digital Systems Co-requisite: CPEG 329 Advanced Digital System Design Laboratory.

CPEG 320. Integrated Circuit Device Desi. (3 Credits)
Introduction to VLSIC semiconductor device physics, operation, design and physical layout techniques for semiconductor devices. Prerequisites: CPEG 303 Introduction to Electronics (or Consent of Instructor)

CPEG 323. Introd Electronic Laboratory. (1 Credit)
Prototype bread-board electronic circuits using diodes, bipolar junction transistors, MOSFETS with DC biasing configurations and with superimposition of AC signals. Operational and differential amplifier and active filter circuits. Co-requisite: CPEG 303 Introduction to Electronics.

CPEG 329. Adv Digital System Design Lab. (1 Credit)
System design using programmable logic devices and high-level design techniques. Application of state- of-the-art hardware devices as well as design and simulation tools. Co-requisite: CPEG 309 Advanced Digital System Design.

CPEG 403. Engineering Computations. (3 Credits)
Linear algebra, complex analysis and phasor calculus; algorithms for roots of equations. Programming in C and use of the application language, such as, MATLAB. Prerequisite: Senior standing.

CPEG 404. Real-Time Data Acquis Contr Sy. (3 Credits)
CPEG 404 Real-Time Data Acquisition and Control System - 3 semester hours Advanced course in design of data acquisition systems with real time control applications. Emphasis is placed on sensors in control systems; signal conditioning; actuators; controllers; and data acquisition using A/D conversion. Corequisite(s): None.

CPEG 406. Computer Architecture II. (3 Credits)
Pipelined control and ALU designs, parallel processor organizations including SIMD and shared memory MIMD, message passing MIMD, data-flow processing, cache memory design, and processor-memory interconnections. Prerequisite: CPEG 306 Computer Architecture I.

CPEG 407. Linear Control System Design. (3 Credits)
Classical and modern techniques for design and compensation of linear feedback control systems. Includes Bode design, root locus design, state variable pole placement design. Prerequisites: CPEG 307 Linear System Analysis and PHYS 112 General Physics I.

CPEG 410. Digital Communication. (3 Credits)
Discrete Fourier Transforms. Binary and M-ary Signaling, Digital Communication in the Presence of Noise, Matched Filtering and Equalization, Introduction to Information Theory. Prerequisite: CPEG 307 Linear System Analysis and CPEG 308 Analog Communication.

CPEG 411. Communication System Design. (3 Credits)
Application of communication theory to system design. Development of communication system specifications. System simulation utilizing a graphical programming language. Hardware and software design and simulation. Design of a complete analog or digital transmitter and receiver or significant subsystems. Prerequisite: CPEG 410 Digital Communication.

CPEG 412. Org & Design Digital Syst Comp. (3 Credits)
Considerations for hardware organization of computer and digital systems; includes ALU and CPU structures, control unit organization, storage systems, and the I/O channels. Microprogramming the control unit and different interrupt structures. Prerequisite: CPEG 208 Microprocessors.

CPEG 413. Digital Signal Process Filter. (3 Credits)
Discrete-time signals and systems, sampling, discrete Fourier transforms, analog filter characteristics, non- recursive and recursive filter design, and CAD tools for filter design. Prerequisite: CPEG 307 Linear System Analysis Co-requisite: CPEG 423 Digital Signal Processing and Filter Design Laboratory.

CPEG 414. Introduction Pattern Recogniti. (3 Credits)
Design of learning and adaptive machines. Elementary decision theory, perception algorithm, Bayes Classification rule, learning algorithms, elements of syntactic pattern recognition, adaptive classifiers. Prerequisite: Senior standing in CPEG. Non majors require consent of instructor.

CPEG 415. Introd Digital Image Processin. (3 Credits)
Basic methods for digitizing, storing, processing, and displaying images. Computational procedures for image enhancement, restoration, coding, and segmentation. Prerequisite: Senior standing in CPEG. Non majors require consent of instructor.

CPEG 416. Embedded Controllers. (3 Credits)
CPEG 416 Embedded Controllers - 3 semester hours F Project oriented course in design of a special purpose computing system with hardware/software trade-offs which encapsulates all the devices such as processor, memory, interface and control in single package. Corequisite(s): CPEG 426 Embedded Controllers Laboratory.

CPEG 420. Nanotechnology Fabrication Pri. (3 Credits)
Introduction to semiconductor fabrication principles and technology, including crystal growth, oxidation, diffusion, ion implantation, photolithography, chemical vapor deposition, physical vapor deposition, plasma reactive ion etching, chemical mechanical polishing and other nanotechnology manufacturing techniques.

CPEG 422. Adv Integrated Circuit Design. (3 Credits)
Advanced designed topics will be addressed, including digital design circuits, propagation delay, noise margins, power dissipation, various design styles and architectures as well as the issues that designers must face, such as the influence of technology scaling on circuit performance and the impact of interconnect parasitic for optimizing the speed, area or power. CAD Tools for layout, extraction and simulation will be used for assignments.

CPEG 423. Digital Signal Proc/Filter Lab. (1 Credit)
Implement digital signal processing algorithms including: sampling, digital filtering, and simulation. Develop and test Finite Impulse Response (FIR) filters, Infinite Impulse Response (IIR) filters, and Digital Signal Processor (DSP) applications on DSP microprocessors. Reinforce the concepts learned in CPEG 413 Digital Signal Processing and Filter Design. Co-requisite: CPEG 413 Digital Signal Processing and Filter Design.

CPEG 426. Embedded Controllers Lab. (1 Credit)
CPEG 426 Embedded Controllers Laboratory - 1 semester hour F Project oriented laboratory course in the areas of embedded controllers and systems. Prerequisite: Co-requisite(s): CPEG 416 Embedded Controllers.

CPEG 461. Senior Design I. (2 Credits)
Capstone design projects that focus on the early stages of project development: design methodology, literature review, specifications development, design alternatives, project plan, and project management. Written and oral communications. Team building. Ethics and professionalism. Prerequisite: Senior standing.

CPEG 462. Senior Design II. (2 Credits)
Hardware and Software implementation of the capstone design projects proposed in CPEG 461 SENIOR DESIGN I. Design prototyping, testing, evaluation, project reports and project presentation. Prerequisite: CPEG 461.

CPEG 499. Special Topics. (3 Credits)
Topics relating to basic design and current practice. Maximum three hours. Prerequisite: Completion of all junior CPEG courses or consent of instructor.

CSCI: Computer Science (CSCI)

CSCI 100. Introduction To Computers. (3 Credits)
Brief history of computers. Computer architecture: Processing, Input/Output and Communication Devices. Software: operating systems and applications. The Internet, networking and mobile computing. Introduction to basic application programs.

CSCI 101. Intro the Cmptr Sci Profession. (2 Credits)
CSCI 101 Introduction to the Computer Science Profession - 2 semester hours F, Sp This course introduces students to the range of professions and research fields within computer science, addresses misconceptions about the field, and describes the distinction between computer science and other computing fields such as information systems and computer engineering. In addition, this course familiarizes students with the requirements and expectations for computing career paths including the importance of obtaining relevant research or career experiences, preparing personal statements, obtaining letters of reference, preparing successful applications, and following a professional code of ethics. Students will be introduced to the curriculum by completing introductory projects, aligned with each of the core computer science courses. when completing the course projects, students will be guided to develop essential skills that a computer science professional will need in order to keep pace with rapid changes in this evolving field. Such skills as improving organization, prioritizing and scheduling work tasks, working effectively in teams, applying effective methodologies for learning and reading, and using resources effectively will be discussed in the context of continued professional development and self-growth. Prerequisites(s): Major/Minor in Computer Science Co-requisite(s): CSCI 150 Programming I; CSCI 151 Programming I Lab.

CSCI 120. Introduction to Programming. (3 Credits)
An introduction to basic programming concepts using visual, graphical programming environments, and simple game design approach.

CSCI 150. Programming I. (3 Credits)
Introduces fundamental concepts of programming from an object-oriented perspective. Emphasizes problem solving, basic software design principles, and programming skills in a programming language that supports the object-oriented paradigm. Coverage includes simple data types, control structures, array and string data structures, basic testing and debugging. Students must be co-enrolled in CSCI 151. Co-requisites: CSCI 101 Introduction to Computer Science Profession and CSCI 151 Programming I Labs.

CSCI 151. Programming 1 Lab. (1 Credit)
Hands-on programming exercises on topics covered in CSCI 150. Students must be co-enrolled in CSCI 150. Co-requisites: CSCI 101 Computer Science Profession and CSCI 150 Programming I.

CSCI 250. Programming II. (3 Credits)
Continuation of CSCI 150. Builds on knowledge of fundamentals of programming to include more advanced object-oriented concepts, file I/O, basic sorting and searching, exception handling, and classic data structures such as arrays and lists. A programming-intensive course to develop software design and implementation skills. Students must be co-enrolled in CSCI 251. Co-requisite: CSCI 251 Programming II Lab Prerequisite: CSCI 150 Programming I; CSCI 151 Programming I Labs.

CSCI 251. Programming II Lab. (1 Credit)
Hands-on programming exercises on topics covered in CSCI 250. Students must be co-enrolled in CSCI 250. Co-requisite: CSCI 250 Programming II Prerequisites: CSCI 150 Programming I; CSCI 151 Programming I Labs.

CSCI 281. Discrete Structures. (3 Credits)
Recursion and Solutions of recurrence relations, Introduction to Graph Theory, Trees, Language and Grammars, Finite State Machines. Prerequisite: MATH 280 Discrete Mathematics for Computer Science.

CSCI 287. Data Structures. (3 Credits)
This course emphasizes the implementation of programs that make use of lists, stacks, queues, trees, and hash tables in a variety of application settings. Several common algorithmic paradigms (such as recursion, searching, sorting, dynamic programming, divide and conquer) and their applications are also discussed. Prerequisites: CSCI 250 Programming I and CSCI 251 Programming I Lab.

CSCI 296. Web Programming. (3 Credits)
CSCI 296 Web Programming - 3 semester hours F, Sp A programming intensive course that introduces the essential knowledge for website development. The course begins with web server installation and the fundamental web technologies (HTML, CSS, XML). It focuses on front-end and back-end web development which exposes students to the techniques used in dynamic, interactive website building. Prerequisites(s): CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 298. Internship Computer Science I. (1 Credit)
CSCI 298 Internship in Computer Science - 1 semester hour F, Sp
The internship allows students to obtain practical work experience related to computer science under the Computer Science faculty's supervision. Students must complete a Memorandum of Agreement prior to commencing the Internship. Course may be taken more than once for credit but no more than 3 times. Prerequisite(s): Permission of Department Chair.

CSCI 303. Computer Org & Architecture. (3 Credits)
A treatment of computer organizations and architectures. Digital logic, data representation at logical and machine level, assembly level organization, memory systems, interfacing and communications as well as performance enhancements architecture elements. Discussion of different computer architecture and organizations. Programming in the assembly language. Prerequisites: CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 312. Introduction to Robotics. (3 Credits)
A basic treatment of robotics systems in practice and research. It surveys selected topics in vision, kinematics and inverse kinematics, motion planning, trajectory generation, localization, sensors, programming and design, and artificial intelligence. Laboratory and projects are integral components of the course. Prerequisite: CSCI 250 Programming II or equivalent. Co-requisite: MATH 325 Linear Algebra or permission of instructor.

CSCI 356. Database Systems. (3 Credits)
Database Design, Entity-Relationship and Relational Model, Relational Algebra, Query Language SQL, Storage and File Structures, Query Processing, System Architectures. Prerequisites: CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 358. Introd Information Assurance. (3 Credits)
Introduction to the confidentiality, availability and integrity goals of information systems. Topics covered include introduction to principles of information security from the perspective of the World Wide Web, identification/authentication, computer/network security, dependability, access control, security evaluation and other issues. Prerequisites: CSCI 250: Programming II.

CSCI 361. Embedded Syst: Design/Applic. (3 Credits)
The fundamentals of embedded system hardware and software design will be explored. Issues such as embedded programming, firmware design, development tools, and host communication will be discussed. Microcontrollers will be studied through a series of projects using a microprocessor evaluation board. These projects will expose students to programming tasks to work with physical sensors (such as GPS, medical sensor, etc.) and write applications for smart phones, robots, unmanned vehicles and spacecraft. Prerequisites: CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 389. Human-Computer Interaction. (3 Credits)
Facts, theories, and issues about human sensation, perception, and interaction for developing information processing systems interacted with humans. Other related human factors such as workplace, environmental, ethical and legal issues will be discussed. Software applications with rich human interface are to be designed, implemented and tested by teams of students. Prerequisites: CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 392. Algorithms & Adv Data Structur. (3 Credits)
Design, analysis and implementation of advanced data structures and related algorithms including trees, graphs, B-trees, advanced sorting algorithms, hashing. It is also a treatment of object-oriented concepts and objected-oriented design. Basic software engineering skills and teaming. Prerequisites: CSCI 287 Data Structures and CSCI 281 Discrete Structures.

CSCI 396. Advanced Web Programming. (3 Credits)
CSCI 396 Advanced WEB Programming - 3 semester hours F, Sp A continuation of Web Programming (CSCI 296). This course aims to provide the necessary foundations for building a complete web application, focusing on utilizing front-end and back-end frameworks. Front-end development will encompass familiarity with JavaScript frameworks such as AngularJS, creating single page applications using various features such as services, components and directives, deploying responsive applications, and using observables. Back-end development will cover server platforms such as NodeJS, transfer protocols, server-side concepts such as REST and CRUD, building and configuring web server and Databases. Moreover, the course presents issues relating to security and the importance of authentication. Prerequisite(s): CSCI 296, Web Programming.

CSCI 398. Internship Computer Science II. (3 Credits)
CSCI 398 Internship in Computer Science II - 3 semester hours F. Sp The internship allows students to obtain practical work experience related to computer science under the Computer Science faculty supervision. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than 2 times. Prerequisite(s): Permission of Department Chair.

CSCI 400. Computer Science Seminar. (2 Credits)
CSCI 400 Computer Science Seminary - 2 semester hours F, Sp The focus of this course is to discuss practical skills required for research, broadly defined. The practical skills include but are not limited to skills on research process, skills on experimental methods, reading, writing, graphing, and presentation skills that are pertinent to computer scientists or software engineers. The course includes discussions of current research and developments in computer science that are facilitated by students, faculty members, or industry representatives. the current research and developments are used as examples for the discussion of the practical skills. Students are strongly encouraged to complete this course in advance of beginning CSCI 493 Senior Project I. Prerequisite(s): ENGL 342 Technical Communication or GEEN 310 Advanced Communication Skills, and Junior status or permission of Instructor. Co-requisite(s): None.

CSCI 402. Introd Artificial Intelligence. (3 Credits)
Basic problem-solving strategies, heuristic search, problem reduction AND/OR graphs, knowledge representation, expert systems, generating explanations, uncertainty reasoning, game playing, planning, machine learning, computer vision, and programming systems such as Lisp or Prolog. Prerequisite: CSCI 287 Data Structures.

CSCI 445. Computer Communication Network. (3 Credits)
ISO model for communications. Protocols for physical, data link and network communications. Sockets. TCP/IP. Applications. Protocol correctness and efficiency. Error detection and recovery. Local-area and Wide-area networks. Prerequisites: CSCI 250 Programming II and CSCI 251 Programming II Lab.

CSCI 450. Computer Forensics. (3 Credits)
Introduction to principles of computer forensics methodology and emerging investigation techniques related to the identification, collection and preservation of digital crime scene evidence. Popular hardware and software tools recognized in the computer forensics field will be introduced. Prerequisites: CSCI 358 Introduction to Information Assurance.

CSCI 451. Computer Security. (3 Credits)
This course focuses on communication security in computer systems and networks. It is intended to provide students with a comprehensive introduction to the field of network security. The course covers critical network security services such as authentication and access control, integrity and confidentiality of data, routing, firewalls, virtual private networks, and web security. Where appropriate, we examine threats and vulnerabilities to specific architectures and protocols. Prerequisites: CSCI 358 Introduction to Information Assurance.

CSCI 452. Introd to Cryptography. (3 Credits)
This course introduces cryptography and encryption concepts and how they are applied in real-world situations in order to implement strong and reliable security safeguards. This course will survey the various cryptography and encryption methods used in today's information technology andcommunications environments as well as to review the considerations for selecting commercial products that support encryption technology. Prerequisites: CSCI 358 Introduction to Information Assurance and CSCI 287 Data Structures.

CSCI 453. Digital Image Processing. (3 Credits)
Introduction to the fundamentals of digital image processing. It emphasizes general principles of image processing, rather than specific applications. It covers topics such as image acquisition and display, properties of the human visual system, color representations, sampling and quantization, point operations, linear image filtering and correlation, transforms and nonlinear filtering, contrast and color enhancement, digital image file formats etc. Prerequisites: CSCI 287 Data Structures.

CSCI 456. Advanced Database Applications. (3 Credits)
Applications of advanced database systems. Students will work on a series of projects using industry standard software. Prerequisite: CSCI 356 Database Systems.

CSCI 457. Introduction to Data Mining. (3 Credits)

CSCI 460. Computability & Formal Lang Th. (3 Credits)
Formal models of computation such as finite state automata, pushdown automata and Turing machines. Formal definitions of languages, problems, and language classes including recursive, recursively enumerable, regular, and context free languages. Halting problems, undecidable problems, recursive functions, Chomsky hierarchy, Church's thesis and the limits of computability. Proofs of program properties including correctness. Prerequisite: CSCI 281 Discrete Structures 3 semester hours.

CSCI 462. Compiler Construction. (3 Credits)
Exploration of the design of programming language translators. Includes parsing, run-time storage management, error recovery, and code generation and optimization. Prerequisites: CSCI 485 Programming Languages and CSCI 460 Computability and Formal Language Theory.

CSCI 471. Parallel & Distributed Program. (3 Credits)
CSCI 471 Parallel and Distributed Programming - 3 semester hours (Core) F, Sp The course covers the practical aspects of designing and developing software that runs on parallel and distributed systems. The topics covered in this course include client-server programming, multi-threaded programming, message passing, shared memory, load-balancing, synchronization, and parallel GPU programming. Prerequisite(s): CSCI 445 Computer Communications Network.

CSCI 480. Computer Graphics. (3 Credits)
Techniques of modeling objects for the purpose of computer rendering: boundary representations, constructive solids geometry, hierarchical scene descriptions: mathematical techniques for curve and surface representation. Basic elements of computer graphics rendering pipeline; architecture of modern graphics display devices; Geometrical transformations such as rotation, scaling, translation, and their matrix representations. Homogenous coordinates, projective and perspective transformations: Algorithms for clipping, hidden surface removal, rasterization, and anti-aliasing. Scan-line based and ray rendering algorithms. Lighting models for reflection, refraction, transparency. Prerequisites: CSCI 287 Data Structures, MATH 360 Calculus III and MATH 325 Linear Algebra.

CSCI 482. Matrix Computations. (3 Credits)
This course is fundamental for students who will pursue graduate studies of applications of computers to science and engineering. Vector and matrix Norms. Numerical Linear Algebra, condition number, singular values. Householder and Givens transformations. Orthogonalization and least Squares methods. The eigenvalue problem. Basic iterative methods: Jacobi Gauss-Seidel and SOR. Prerequisites: CSCI 250 Programming II, CSCI 251 Programming II Labs and MATH 325 Linear Algebra.

CSCI 485. Programming Languages. (3 Credits)
Concepts for structuring data, computation, and whole programs. Object-oriented languages, functional languages, logic- and rule-based languages. Data Types, type checking, exception handling, concurrent processes, synchronization, modularity, encapsulation, interfaces, separate compilation, inheritance, polymorphism, dynamic binding, sub typing, overloading, beta-reduction, unification. Prerequisite: CSCI 287 Data Structures.

CSCI 487. Software Design And Developmen. (3 Credits)
A formal approach to current techniques in software design and development. Students work in teams in the organization, management, and development of a large software project. Prerequisite: CSCI 287 Data Structures.

CSCI 488. Advanced Systems Architecture. (3 Credits)
Fundamentals of uniprocessors and multiprocessors, scheduling, speculation, and multithreading. Prerequisite: CSCI 489 or its equivalent.

CSCI 489. Operating Systems. (3 Credits)
This course introduces basic concepts in operating systems. This course will be focused on process management, implementation of mutual exclusion and synchronization, deadlock and starvation, memory management, scheduling, I/O, and file management. Students will also understand how operating systems have developed historically and future trends, as well as shell command line usage in modern operating systems. Prerequisite: CSCI 287 Data Structures, CSCI 303 Computer Organization and Architecture.

CSCI 492. Algorithms And Complexity. (3 Credits)
Recommended for students pursuing a graduate degree in Computer Science, definitions of algorithm and its complexity, proof of correctness of an algorithm, notion of time and space complexity, the complexity hierarchy, average and worst case complexity, complexity of search and sorting algorithms, recurrence relations arising from basic algorithms, linear and non-linear recurrences, divide-and-conquer algorithms, dynamic programming. Prerequisite: CSCI 287 Data Structures.

CSCI 493. Senior Project I. (3 Credits)
This class is the first in the two-course senior project sequence. In this course, students will begin a substantial research- oriented individual project. The student will perform project identification and planning, software design, implementation, and testing using an agile development approach. At the completion of this course students must complete a working prototype of the project. Projects from this course must be completed during the following semester in CSCI 494. Prerequisites: Senior status or permission of instructor.

CSCI 494. Senior Project II. (3 Credits)
This is the second course in the two-course senior project sequence. The students will complete a well-tested implementation of the project that they began in CSCI 493. Additional related work research, presentations, and reporting of the project will be performed. The class culminates in a demo day, where students present their projects to faculty, students, and external visitors. Prerequisites: CSCI 493 Senior Project.

CSCI 495. Topics In Computer Science. (3 Credits)
Topics vary depending upon needs of students and current interest of the instructor. Students interested in the specific content of this course as offered in a particular term should consult the instructor. Prerequisite: Consent of instructor.

CSCI 496. Web Design & Cyber Security. (3 Credits)
An introduction to Web design and site management. Topics include JavaScript, PHP, database, and web security such as identifying and avoiding web vulnerabilities, detecting and preventing phishing, hacking and etc. Prerequisites: CSCI 358 Introduction to Information Assurance and CSCI 287 Data Structures.

DANC: Dance (DANC)

DANC 100. Foundations of Dance. (3 Credits)
An introduction to career options focusing on dance as education, performance, recreation and therapy- including the development of a dance portfolio. This course is offered online through Distance Education during the summer session. The course is offered as a hybrid course during the Fall and Spring.

DANC 101. Ballet I. (3 Credits)
Introduction to the basic concepts, movement and theory of ballet techniques.

DANC 102. Ballet II. (3 Credits)
Further studies in the concepts, movement and theory of ballet techniques. Prerequisites: DANC 100; DANC 101 or consent of instructor.

DANC 112. Yoga And Meditation. (2 Credits)
This class will explore the basic concepts, asanas/postures, and language of yoga and meditation. Class participants will be introduced to various yoga and meditation formats with an emphasis on alignment, anatomy, and physiology of the body. Each class will include a discussion, a 45-minute yoga practice and short meditation/relaxation practice.

DANC 201. Modern Dance I. (3 Credits)
An introduction to the concepts and disciplines of Modern Dance. The utilization of basic concepts in modern dance techniques and terminology will be the central focus of classroom instruction.

DANC 202. Modern Dance II. (3 Credits)
An intermediate introduction to the concepts and disciplines of Modern Dance technique and terminology.

DANC 203. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 204. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 205. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 206. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 207. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 208. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 209. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 210. Repertory. (3 Credits)
A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 238. Dance Kinesiology. (3 Credits)
This course is an introduction to how the principles of anatomy and kinesiology affect movement in dance. Emphasis will be placed on the structure and function of the muscular and skeletal systems. Movement analysis, conditioning principles and injury prevention will also be covered.

DANC 250. Dance Conditioning. (3 Credits)
Introduction to the basic concepts, movement, and vocabulary of dance in combination with conditioning and toning exercises specifically for the dancer as an athlete in training. Aerobic dance activity, weightlifting, and toning of the muscles are included in the course activities. Dancer conditioning techniques such as Yoga, Pilates, Dunham, Horton, Martha Graham, et al. will be visited and revisited in various muscle conditioning and educational contexts.

DANC 251. Hist Dance & Black Experience. (3 Credits)
The focus of this course is on the development of evaluation and measurement skills used by teachers and administrators of physical education and dance throughout the nation. Major emphasis is placed on interpreting descriptive statistics and developing test construction techniques. Students are given many opportunities to administer physical performance tests and to acquire knowledge of different grading techniques.

DANC 301. Jazz Dance I. (3 Credits)
A basic introduction to build strength, flexibility, and endurance for execution of basic Jazz Dance concepts through floor exercises and combinations. Musicality in dance will be explored, and an understanding of proper body alignment and posture will be emphasized. There will also be an introduction to notable performers and some historical and cultural aspects of jazz through discussion and video observation.

DANC 302. Jazz Dance II. (3 Credits)
This course is designed to build strength, flexibility, and endurance for execution of intermediate-level Jazz Dance concepts through floor exercises and combinations. Musicality in dance will be explored, and an understanding of proper body alignment and posture will be emphasized. There will also be an introduction to notable performers and some historical and cultural aspects of jazz through discussion and video observation.

DANC 355. Directed Research. (3 Credits)
Structured research in dance presented as an undergraduate research publication or conference presentation.

DANC 378. Hist Of Danc & Black Experienc. (3 Credits)
An online survey course about dance history in America and the contributions of African Americans to historical and current trends in dance.

DANC 401. African/Caribbean Dance Forms. (3 Credits)
Online course covering the historical and socio-cultural implications that influence dance movements found in Africa, the Caribbean, and the Americas.

DANC 402. African/Caribbean Dance Forms. (3 Credits)
Intermediate to advanced movement sequences as well as socio-cultural implications that accompany traditional dances found in Africa and the Caribbean.

DANC 404. Somatic Movement And Theater. (3 Credits)
Interwoven interdisciplinary movement techniques exploring the interface of dance and drama. Includes dancing through mental imagery, interpreting stories, scripts, poetry, and techniques of improvisation and composition.

DANC 471. Internship Seminar. (1 Credit)
This course involves observation and practice of leadership in a supervised Dance organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth.

DANC 472. Internship. (3 Credits)
prospective professional in Dance. Emphasis is on various individual and group opportunities in dance performances, involving theories, techniques, managerial tasks, administrative procedures, dance production, and working with individuals, in the surrounding community including, public schools, community centers, recreation centers, dance studios, and government facilities. Internship is designed to secure enriching experiences in all aspects of the dance profession that will enable students to grow personally and professionally in the field of dance.

DIET: Dietetics (DIET)

DIET 101. Nutrition:Contemp Health Issue. (3 Credits)
This course presents basic principles for chronic disease prevention, provides scientific answers to questions found daily in the media regarding nutrition. Topics emphasized are basic functions of nutrients, biological nutrient requirements, and impact of gender, culture, ethnicity, social environment, and lifestyle on nutrition status and health.

DIET 210. Introduction Human Nutrition. (3 Credits)
An introductory course providing the basic principles of human nutrition, covering topics of macro/micro-nutrient interactions, metabolism and energy balance, nutrient requirements through the life cycle. This course requires a technology based nutrient analysis project. Prerequisite: BIOL 120 w/lab or equivalent.

DIET 221. Principles of Analysis of Food. (3 Credits)
The course studies the fundamental processes underlying food selection, preparation, and preservation with practical selection application through laboratory experiences. Emphasis is on the composition and properties of food, food handling to retain nutrients, standards for acceptable products and food costs.

DIET 275. Seminar In Practice. (1 Credit)
Coursework present includes the study of the history, structure, and function of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and current issues facing the profession. Students explore career options and laws, regulations and standards affecting dietetic practice.

DIET 310. Human Nutrition. (3 Credits)
The examination of present knowledge in nutrition will be presented in course. Emphasis is on selection of foods as a source of nutrients, which fulfill desirable nutritional standards. Computer experiences required. Prerequisite: One semester of chemistry or biology.

DIET 311. Nutrition in the Life Cycle. (3 Credits)
A study of the nutritional requirements at different stages of the life span and the factors, which influence eating patterns, is presented in this course. Emphasis is placed on life cycle nutritional assessment and nutritional planning. Learning experiences in nutrition programs are required. Prerequisite: DIET 310 Human Nutrition.

DIET 322. Meal Management. (3 Credits)
Menu development, styles of meal service, table appointments, food presentation and meal planning. Emphasis is given to the economics, efficiency, aesthetics and nutrition of meal service. Computerized nutritional and cost analysis of menus required. Prerequisite: DIET 221 Principles of Analysis of Food, DIET 310 Human Nutrition.

DIET 385. Nutritional Biochemistry. (3 Credits)
The course is a study of energy metabolism and the role of nutritional factors. Students will discuss the composition of living matter and the chemical charges associated with nutritional status. Prerequisite: CHEM 305 Organic Chemistry I, CHEM 307 Organic Chemistry I Lab, DIET 310 Human Nutrition.

DIET 410. Nutrition Counseling Practicum. (2 Credits)
Counseling skills applied to dietetic practice. Students will learn skills which Emphasizes interviewing and listening skills, surfacing underlying issues, motivation, behavior modification, supporting group processes, and documentation. Student counseling experiences required. Prerequisite: PYSC 101Introduction to Psychology, DIET 311 Nutrition in the Life Cycle.

DIET 422. Nutrition And the Community. (3 Credits)
This course explores resources existing in governmental and voluntary organizations for working with nutrition problems. Include this course is the study of legislative process and historic and current nutrition legislation. Proposal writing and subsequent steps in establishing and managing community nutrition programs are discussed. Prerequisites DIET 311 Nutrition in the Life Cycle, DIET 322 Meal Management, STAT 210 Elementary Statistics.

DIET 424. Advanced Human Nutrition. (3 Credits)
The course discusses the recent research with its application to human nutrition. It also discusses the metabolic consequences of nutritional manipulation. Prerequisites: DIET 385 Nutritional Biochemistry.

DIET 431. Medical Nutrition Therapy I. (3 Credits)
The study of nutrition services in the health care system and the nutritional care of the individuals during illness. It includes understanding of medical terminology, physiological changes in the disease states, nutrition assessment, developing plan of care, documentation, application of nutrition therapy in medical conditions, and total quality management of clinical nutrition. This is Part 1 of a two-part course. Prerequisites: DIET 311 Nutrition in the Lifecycle, DIET 385 Nutritional Biochemistry.

DIET 433. Quantity Foods. (3 Credits)
Study and practice in planning, purchasing, preparing, and servicing food in quantities, and calculation the cost of portions and meals for large groups. Prerequisites: DIET 221 Principles of Analysis of Food, DIET 310 Human Nutrition, and DIET 322 Meal Management.

DIET 435. Org & Management of Food Serv. (3 Credits)
This course provides students with the tools necessary to succeed in the dynamic and ever changing global hospitality industry. Includes focus on the principles of management and leadership, TQM, empowerment and team development processes, emphasis on leadership styles and models in the hospitality industry. Quantitative aspects of management and internal controls will be addressed with an overview of managerial financial concepts for decision-making and purchasing. Prerequisites: DIET 322 Meal Management.

DIET 437. Medical Nutrition Therapy II. (3 Credits)
The study of nutrition services in the health care system and the nutritional care of the individuals during illness. It includes understanding of medical terminology, physiological changes in the disease states, nutrition assessment, developing plan of care, documentation, application of nutrition therapy in medical conditions, and total quality management of clinical nutrition. Part 2 of a two-part course. Prerequisites: DIET 275 Seminar in Practice, DIET 431 Medical Nutrition Therapy I, DIET 422 Nutrition and the Community; Co-requisites: DIET 410 Nutrition Counseling Practicum.

DIET 489. Practicum In Dietetics. (3 Credits)
The course studies the practical application of previously learned theories in Medical Nutrition Therapy, Food Service Management Systems, and other dietetics practice areas. Prerequisites DIET 431 Medical Nutrition Therapy I; Co-requisites: DIET 437 Medical Nutrition Therapy II.

DRAM: Drama (DRAM)

DRAM 113. Acting. (3 Credits)
Basic instruction in the fundamentals of acting, emphasizing vocal and body techniques employed in creating and presenting characterizations. Includes studies of historical and modern acting styles, techniques, theories, and dramatic relationships. Laboratory experience.

DRAM 199. Drama Appreciation. (3 Credits)
An introduction to the study and understanding of the dramatic arts. The various methods through which humans are able to access, interpret, and interact with drama will be discussed. Topics include an overview of historical development of drama and theatre and a general survey of the roles of the collaborative artists responsible for a theatre production. Emphasis is placed on the areas of textual analysis and history of dramatic performances, but other areas (design, acting, directing, playwriting, dramaturgy) are discussed. Some evaluation of outside performances is required and involvement in one of the college theatre productions may also be required.

DRAM 215. Stagecraft I. (3 Credits)
Lecture-laboratory approach to the study of elementary principles and problems regarding crews, scripts, and stage design concepts, design procedures, construction, and color and paint.

DRAM 217. Activities In Drama. (3 Credits)
Practice in optional phases of presenting dramatic productions.

DRAM 301. Drama Production. (1 Credit)
Students work on the creation, technical production, and management of performances given by the Little Theatre and the VSU Performers.

DRAM 313. Acting II. (3 Credits)
Advanced study of acting fundamentals, emphasizing the tools of voice and body awareness for creating and presenting characterizations. Includes study of techniques for textual analysis and character development. Course includes rehearsal and performance of both monologues and partnered scenes.

DRAM 316. Stagecraft II. (3 Credits)
Lecture-laboratory approach to the study of elementary principles and problems regarding properties, lighting, special sound and visual effects, make-up, and costumes.

DRAM 414. Directing And Producing. (3 Credits)
Lecture-laboratory approach to the principles and techniques of directing and producing.

ECON: Economics and Finance (ECON)

ECON 100. Basic Economics. (3 Credits)
It is designed to cover basic microeconomics and macroeconomics for those not planning further course work in the field. Basic microeconomic and macroeconomic theories are used to explain the economic system, the institutions that make up the system and their functions.

ECON 210. Principles Of Microeconomics. (3 Credits)
It analyzes the price system and its functions in a market economy of distributing goods and services and allocating resources. Concepts include the examination of markets as they range from highly competitive to monopolistic.

ECON 211. Principles Of Macroeconomics. (3 Credits)
It analyzes national and international economic problems, such as inflation, unemployment, productivity, economic growth, and the balance of trade. Particular attention is given to the role of government policy as it seeks to improve economic performance in these areas. Prerequisite: ECON 210 Principles of Microeconomics or Permission of the instructor.

ECON 310. Microeconomics. (3 Credits)
It provides a foundation for understanding the basic organization and operation of the economy. The subject is developed from three aspects: demand analysis, theory of the firm, and market interaction. Prerequisite: ECON 210 Principles of Microeconomics.

ECON 313. Managerial Economics. (3 Credits)
It focuses on the application of economic method to planning and decision making within the firm with respect to profit maximization, market structure, and forecasting. Prerequisite: ECON 210 Principles of Microeconomics.

ECON 320. Macroeconomics. (3 Credits)
It examines the determinants of aggregate income and output, interest rates, prices, employment and the balance of payments, and the use of monetary and fiscal policies. Prerequisite: ECON 211 Principles of Macroeconomic.

ECON 321. Financial Markets & Institutio. (3 Credits)
It presents an analysis of financial instruments, markets, and institutions. Topics include the commercial banking system and the money expansion process, the Federal Reserve System, monetary theory and policy; and international finance. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 330. Econometrics. (3 Credits)
Microeconomics and macroeconomics theories are presented in an analytical and researchable format. Econometric theories and procedures are introduced with an emphasis on application through explaining and predicting various economic phenomena using econometric software. Prerequisite: ISDS 260 Business Statistics or equivalent.

ECON 340. Labor Economics. (3 Credits)
Presents theories of the demand for labor, the supply of labor, unemployment, and wage determination. Related topics include investment in human capital, labor mobility, and unions and collective bargaining as they affect employment and earnings. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 350. Economic Development. (3 Credits)
Examines and analysis alternative theories of economic development in less developed countries. Special emphasis is placed on factors such as capital formation, population growth, institutions, policies and planning for development. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 366. Economics & Minority Groups. (3 Credits)
It examines and analyzes the economic problems and conditions of minority groups, including problems of the effects of numerous programs influencing that development; and strategies for economic and social changes. Prerequisite: One semester of Economics or permission of the instructor.

ECON 411. Industrial Organ & Regulation. (3 Credits)
It examines and analysis industrial organization and structure in terms of market strategies, pricing, and the determinants of the most efficient firm size. Analysis and investigation of the rationale for government regulation of firms and the resulting economic impact is also covered. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 423. Public Finance. (3 Credits)
Analyzes the economic effects of public expenditures, revenues, and indebtedness with reference to select tax and budgetary problems. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 438. Financial Economic Analysis. (3 Credits)
ECON 438 Financial Economic Analysis - 3 semester hours F This course introduces the theory and application of modern financial economic analysis and its application. Time-value of money, types of financial assets and markets, interest rates, risk and return, equity valuations, investment decisions, and portfolio theory are discussed. Prerequisite(s): ECON 321.

ECON 445. Analytical Economics. (3 Credits)
ECON 445 Analytical Economics - 3 semester hours SP Concepts and tools in economic analytics with focus on exploring and visualization of micro and macroeconomics data as well as descriptive and predictive analytics. Prerequisite(s): ECON 330.

ECON 451. International Economics. (3 Credits)
Deals with the study of the theories of causes of trade, directions of trade, and the gains from trade, balance of payments, foreign exchange, and current trade policies and problems including international financial reforms. Prerequisite: ECON 310 Microeconomics, or the approval of the instructor.

ECON 455. Comparative Economic Systems. (3 Credits)
Examines the economic life under alternative systems in the world today. Emphasis is placed on capitalism, socialism, communism and democratic socialism. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 465. Urban Economics. (3 Credits)
Focuses on the economic functions of cities, metropolitan decentralization, urban growth and development, transportation, housing markets, urban renewal, local government finance, and poverty. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 470. History Of Economic Thought. (3 Credits)
Surveys the development of economic thought and the advancement of economic analysis, including the physiocrats, classicists, marginalists, socialists, neoclassicists, institutionalists, and contemporary schools. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 490. Reading In Economics. (3 Credits)
Provides an opportunity for students to select topics not otherwise included in Economics course work. It requires intensive reading supervised by the instructor and reported on by the students. Prerequisite: ECON 211 Principles of Macroeconomics and approval of instructor.

ECON 498. Economics Internship. (3 Credits)
Provides an opportunity for students to observe and be exposed to the application of economic theories and methods to practical work experience in a closely supervised environment. Prerequisite: Junior standing and department approval.

ECON 499. Seminary In Economics. (3 Credits)
This is a capstone course which a student must demonstrate the ability to choose a well-defined research topic or a case review under faculty advising then proceed to search for essential information and correct procedures for analysis, write-up, and presentation. Prerequisite: Senior standing.

EDUC: Education (EDUC)

EDUC 200. Technology in the Classroom. (3 Credits)
A variety of instructional media; such as DVD Disc, Digital imagery, Computer Assisted Instruction and personal productivity tools are presented in this course. The emphasis will be on systematically enhancing the teaching-learning process with multi-media instruction and effective computer usage. The course will focus on the basic operation of the computer and the utilization of computers to aid instruction and productivity in the classroom. Candidates will be given the opportunity to reflect upon the most effective and efficient uses of various technologies for individual students, groups of students, and for their own personal use in the classroom. They will be expected to create certain types of software, presentations and materials to achieve instructional goals and objectives. The course is intended for juniors in the School of Education.

EDUC 201. Seminar in Education. (3 Credits)
Seminar in Education is a key foundational education course that provides students with the knowledge and skills they will need throughout their education career with emphasis in literacy, writing skills, leadership, critical thinking, and test preparation, synthesis and analysis of information. This course will help to develop students" intellectual curiosity, capacity for life-long learning, and personal responsibility to education. Student will also become familiar with the College of Education's mission, standards, history, traditions, policiies and procedures.

EDUC 202. Foundations of Education. (3 Credits)
This course is designed to provide a snapshot of teaching as a profession. The course will extend the focus on historical and contemporary topics relevant to an understanding of the knowledge, skills and dispositions required of classroom teachers. Pre-candidates will have the opportunity to research and reflect on professional practices in preK-12 classroom settings and in alternative educational program sites. This course will also provide the opportunity for pre-candidates to continue the development of a working portfolio. Pre-candidates will be required to complete a field experience requirement of 15 hours as part of this course.

EDUC 315. Data Driven Instructional Desi. (3 Credits)
This course is designed to address the skills that contribute to an understanding of the relationship among assessment, instruction and monitoring student progress. Assessments include student performance measures in grading practices and the ability to construct and interpret valid assessments using a variety of formats. In order to measure student attainment of essential skills in a standards-based environment, assessment data will be used to make decisions about how to improve instruction and student performance. Pre-candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

EDUC 401. Student Teaching Seminar. (3 Credits)
This course is aligned with EDUC 402 Student Teaching. Candidates reflect on the knowledge, skills, and dispositions implemented in the classroom experience. In this course, candidates prepare for the final performance assessment of competencies acquired in the Professional Education Program. Prerequisites: All coursework and required State assessments for the major.

EDUC 402. Student Teaching FE. (9 Credits)
This course is the capstone experience for prospective teachers and emphasizes learning through application, analyses, synthesis, evaluation, and reflection. It provides the opportunity for student teachers to demonstrate acquired knowledge of the Standards of Learning, skills, and dispositions, in supervised classrooms. Emphasis will be placed on planning, implementing, and assessing instruction which meets the needs of students in these classrooms. Additional participation in appropriate school activities is required. Prerequisites: All coursework and required State assessments for the major.

EDUC 424. Culturally Responsive Pedagogy. (2 Credits)
This course will cover critical issues in educational reform that include applying multicultural curricula (such as, race ethnicity, gender, socioeconomic status, exceptionalities, language, and geographical locations of all students) and integrating school staff in acknowledging the importance of families and family language, as it relates to current educational issues. Candidates will be required to complete a Field experience requirement of 15 hours as a part of this course. Prerequisites: Admission to the Teacher Education Program or Admission to Community Based Education Program for CBED minors.

EDUC 427. Reading In The Subject Area. (3 Credits)
This course provides pre-service teachers with the competencies necessary to teach reading in the subject areas. Emphasis is placed on the commonalities of reading skills as related to specific content. The application of knowledge gained, skills developed, techniques acquired, and materials used for teaching the content and specific disciplines are considered. Special attention is given to techniques and materials for student assessment and for meeting instructional needs. Prerequisites: Admission to the Teacher Education Program.

ELED: Elementary Education (ELED)

ELED 328. Curr & Instr Elem & Middle Gra. (3 Credits)
This course is designed to address the skills that contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; selection and use of materials, including media computers; and evaluation of pupil performance. It will also address teaching methods appropriate for exceptional students, including second language learners, gifted and talented and those with disabling conditions. Teaching methods shall be tailored to promote student academic progress and effective preparation for the Standards of Learning assessments. Methods of improving communication between schools and families and ways of increasing family involvement in student learning shall be included. Demonstrated proficiency in the use of educational technology for instruction also shall be included. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course. Prerequisites: Admission to the Teacher Education Program; EDUC 315 Data Driven Instructional Design.

ELED 401. Independent Study. (3 Credits)
This course is designed to support pre-service and early-career educators in successfully preparing for teacher licensure examinations in the state of Virginia. Through targeted instruction, diagnostic assessments, and individualized study plans, students will strengthen their content knowledge in core subject areas, refine test-taking strategies, and build confidence in navigating the Praxis exams. Emphasis is placed on understanding licensure requirements, interpreting test frameworks, applying pedagogical theory to practice, and stress management. This course is repeatable, and students must receive a grade of C or higher to pass.

ELED 429. Language Acquisition & Reading. (3 Credits)
This course provides preparation for beginning reading instruction, including the body of research on emergent literacy, language acquisition, schema theory, and phonemic awareness. Emphasis will be placed on the nature of reading and the development of decoding and comprehension skills and strategies. Decoding skills and strategies will include language development, phonemic awareness, explicit phonics instruction, and other word recognition skills. Literature-based instruction and formal and informal diagnostic and assessment procedures will be included. Reading instruction for all children, including children with learning disabilities will be provided. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course. Prerequisite: Admission to the Teacher Education Program.

ELED 430. Lang Acquisition & Reading II. (3 Credits)
This course is designed to be a continuation of Language Acquisition and Reading I. This course enhances beginning reading skills and emphasizes comprehension skills in content. Special attention is given to the assessment of reading skills and how assessment results drive instruction. Implementation of literature- based instruction is further explored to enhance reading comprehension skills for students. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course. Prerequisites: Admission to the Teacher Education Program.

ELED 437. Teaching Social Studies K-5. (2 Credits)
This course is designed to enable the prospective elementary school teacher to become cognizant of current affairs, problems, and controversial issues to promote competency using teaching methods and techniques in the social studies at the elementary school level. We will investigate issues that help us understand, promote, and facilitate instruction that help elementary school students construct an accurate and positive view of citizenship, promote civic ideals and practices, and participate in a democratic process. We will reflect on issues of social justice, equity, and global perspectives.

ELET: Electronics Engineering (ELET)

ELET 101. Circuit Analysis I. (3 Credits)
A beginning course in electric circuit analysis with emphasis on direct-current applications. Topics include: SI units and scientific notation, electrical quantities, measuring electrical quantities, power and energy, resistive circuits, methods of analysis, network theorems and capacitance. Prerequisite: ENGT 100 Introduction to Engineering Technology Co-equivalent: ELET 103 Circuit Analysis I Lab.

ELET 102. Circuit Analysis II. (3 Credits)
A beginning course in electric circuit analysis with emphasis on alternating-current applications. Topics include: magnetic circuits, inductors, sinusoidal waveforms, basic elements and phasors, series and parallel ac circuits, series-parallel networks, ac power, resonance, and three-phase systems. Prerequisites: ELET 101 Circuit Analysis I; MATH 150 Precalculus or equivalent Corequisite: ELET 104 Circuit Analysis II Lab.

ELET 103. Circuit Analysis I Lab. (1 Credit)
Laboratory experiments in DC theory with emphasis on breadboarding electric circuits, using meters, and using electronic simulation software to complement ELET 101 Circuit Analysis I. Corequisites: ENGT 100 Introduction to Engineering Technology; Math 150 Precalculus or equivalent; ELET 101 Circuit Analysis I.

ELET 104. Circuit Analysis II Lab. (1 Credit)
Laboratory experiments in AC theory with emphasis on breadboarding electric circuits, using meters and other test equipment to measure and troubleshoot AC circuits and devices. Develops skills in measuring AC circuit parameters. Prerequisites: ELET 101 Circuit Analysis I; MATH 150 Precalculus or equivalent Corequisite: ELET 102 Circuit Analysis II.

ELET 203. Intro to Electronics. (3 Credits)
An introductory course in solid-state electronic devices and their applications. Topics include the following: diodes and their applications, Zener diodes, the junction transistor, CE, CB, and CC configurations of junction transistors, the SCR and other thyristors, and field-effect transistors. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 205 Introduction to Electronics Lab.

ELET 204. Electronic Circuits. (3 Credits)
An introductory course in solid-state electronic circuits and their applications. Topics include the following: amplifier frequency response, power amplifiers, oscillators, differential and operational amplifiers, operational amplifier applications, power supplies, and voltage regulators. Prerequisite: ELET 203 Introduction to Electronics Corequisite: ELET 206 Electronics Circuits Lab.

ELET 205. Introd to Electronics Lab. (1 Credit)
Laboratory experiments with semiconductor junction devices, with emphasis on diodes, bipolar junction transistors and field-effect transistors including DC biasing and stability to complement ELET 203 Introduction to Electronics. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 203 Introduction to Electronics.

ELET 206. Electronics Circuits Lab. (1 Credit)
Laboratory experiments on power amplifiers, operational amplifiers, oscillators, voltage regulators, and other semiconductor devices, and frequency response analysis to complement ELET 204 Electronic Circuits. Prerequisite: ELET 203 Introduction to Electronics Corequisite: ELET 204 Electronic Circuits.

ELET 207. Digital Circuits. (3 Credits)
An introductory course in digital-circuit concepts, applications, and design. Topics include the following: number systems and codes, logic gates, Boolean algebra, Karnaugh mapping, combinational logic design, sequential logic circuits, sequential logic design, and IC logic families. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 209 Digital Circuits Lab.

ELET 208. Microprocessors. (3 Credits)
Introduction to 16-bit microprocessors with emphasis on programming. Topics include the following: data control, memories, data transmission, addressing modes, subroutines, and introduction to hardware. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 211 Microprocessors Lab.

ELET 209. Digital Circuits Lab. (1 Credit)
Laboratory experiments in combinational logic circuits designed to complement ELET 207 Digital Circuits; analyze, measure and troubleshoot logic circuits and devices using general test equipment. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 207 Digital Circuits.

ELET 211. Microprocessors Lab. (1 Credit)
Microprocessor-based laboratory utilizing computer programming language. Emphasis is on writing and running programs on 8086/8088 based microprocessor systems. Laboratory experience includes both software and hardware. This is the laboratory that accompanies ELET 208 Microprocessors. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 208 Microproces.

ELET 304. Advanced Circuit Analysis. (1-4 Credits)
An advanced course in electric circuit analysis. Topics include the following: review of analysis methods for dc and ac networks, waveforms, differential equations, Laplace transforms and applications, and transfer functions. Prerequisites: ELET 102 Electronic Circuits; MATH 260 Calculus I.

ELET 306. Advanced Electronics. (3 Credits)
An advanced course in the design and applications of linear integrated circuit devices. Topics include the following: power supply regulators, op-amp characteristics, single-supply operation, signal generator circuits, and active filters. Prerequisites: ELET 204 Electronic Circuits; MATH 260 Calculus I Corequisite: ELET 307 Advanced Electronics Lab.

ELET 307. Advanced Electronics Lab. (1 Credit)
Hands-on experience with the design and applications of more advanced electronic circuits including linear integrated electronic circuit devices. This laboratory course is designed to complement ELET 306 Advanced Electronics. Prerequisites: ELET 204 Electronic Circuits; MATH 260 Calculus I Corequisite: ELET 306 Advanced Electronics.

ELET 309. Advanced Digital Circuit. (3 Credits)
A design course for digital computer circuits using integrated circuit devices. Topics include the following: shift registers, counters, encoders, multiplexers, arithmetic circuits, D/A and A/D converters, and memory circuits. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 311 Advanced Digital Circuits Lab.

ELET 311. Adv Digital Circuits Lab. (1 Credit)
This laboratory course complements ELET 309 Advanced Digital Circuits. Students design, construct and troubleshoot digital circuits that include shift registers, memory ICs, PLDs, DACs/ADCs.Design and simulation tools are utilized. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 309 Advanced Digital Circuits.

ELET 399. Special Topics. (3 Credits)
A course which can be designated by the department to cover some aspect of Engineering Technology as needed by a class or group of students in lieu of another technical elective or as independent study to upgrade their skills and knowledge in a particular area. Prerequisite: Permission of the instructor.

ELET 401. Electric Machinery. (3 Credits)
A course in electric machines designed for students majoring in electronics engineering technology. Topics include the following: fundamentals of electromagnetics, dynamo construction, dc generators and motors, ac dynamos, synchronous machines, ideal and practical transformers, polyphase and single-phase induction motors, and other single-phase motors. Prerequisites: ELET 102 Circuit Analysis II; MATH 260 Calculus I; PHYS 106 Introduction to Physics II or equivalent.

ELET 403. Control Systems. (3 Credits)
A course in control theory and applications. Topics include the following: feedback control, servo components, mathematical techniques, transfer functions, block diagrams, analysis of second-order servo systems, stability and frequency response analysis, and compensation. Prerequisites: ELET 304 Advanced Circuit Analysis; MATH 261 Calculus II; PHYS 105 Introduction to Physics I or equivalent.

ELET 406. Communication Systems. (3 Credits)
Introduction to the theory and practice of communication systems. Covers communication system theory, analog and digital communication techniques. Topics include the following: amplitude, phase, analog, pulse and digital modulation, design and analysis of modulation systems. Prerequisites: ELET 208, ELET 306, ELET 309 and PHYS 106 (or equivalent)

ELET 408. Advanced Microprocessors I. (3 Credits)
An advanced course in microprocessors with emphasis on the hardware of a 16-bit processor. Topics include the following: introduction to the 8086/8088 microprocessor, arithmetic and logic instructions, program control instructions, 8086/8088 hardware specifications, memory interfacing, input/output interfacing, and interrupt circuits. Prerequisite: ELET 208 MICROPROCESSORS Corequisite: ELET 411 Advanced Microprocessors I Lab.

ELET 409. Advance Microprocessors II. (3 Credits)
An advanced course in microprocessors with emphasis on the hardware interfacing of the 8086/8088 to compatible chips. Topics include the following: basic I/O interfacing (using the 8255A PPI), interrupts (using the 8259A PIC), direct memory access, the 8089 I/O coprocessor, the 8087 arithmetic coprocessor, and other 8086/8088 family members. Prerequisite: ELET 408 Advanced Microprocessors I Corequisite: ELET 412 Advanced Microprocessors II Lab.

ELET 412. Advan Microprocessors II Lab. (1 Credit)
Project oriented laboratory course in the areas of microprocessor based systems. Prerequisite: ELET 408 Advanced Microprocessors I Corequisite: ELET 409 Advanced Microprocessors II.

ELET 415. Power System Fundamentals. (3 Credits)
This course offers an overview of power system fundamentals with an emphasis on industry-relevant material. Topics include: an introduction to electrical power systems, circuit solving, components of a power system, and power system analysis. Prerequisite (s): ELET 102 Circuit Analysis II or ENGT 290 Introduction to Electricity and Electronics or equivalent.

ELET 499. Special Topics. (3 Credits)
A course which can be designated by the department to cover some aspect of Engineering Technology as needed by a class or group of students in lieu of another technical elective or as independent study to upgrade their skills and knowledge in a particular subject area. Prerequisite: Permission of instructor.

ENED: English Education (ENED)

ENED 371. Teaching Engl Secondary School. (3 Credits)
Examination of traditional and current theories and practices in the teaching of English, with opportunities supervised lab and first-hand experiences in practice teaching.

ENED 372. Engl Lang Arts Professional. (3 Credits)

ENED 402. Student Teaching In English. (3 Credits)
This course is designed to provide supervision on the content area for pre-service secondary English candidates. Prerequisite: Department approval Co-requisites: EDUC 401 Student Teaching Seminar, EDUC 402 Student Teaching.

ENED 431. Teaching Composition. (3 Credits)
A course dealing with developing a philosophy of composition, emphasizing particularly the relationship between the process of composing and the process of exploring a subject. Also presents ways of organizing and conducting the composition class as well as techniques of evaluation.

ENED 432. Reading & Literature. (3 Credits)
A course based on the premise that one is likely to read well by reading often in a favorable, positive atmosphere. Emphasis on environments teachers create and materials and procedures they use which can lead to students developing the desire to read and the habit of reading extensively. Practicum in planning lessons in literature for students with various abilities and interests, with emphasis on adolescent literature.

ENGL: English (ENGL)

ENGL 110. Composition I. (3 Credits)
Introduces students to critical thinking and the fundamentals of academic writing. Frequent and intensive writing in varied expository modes, with emphasis on analysis and discussion of the composing process.

ENGL 111. Composition II. (3 Credits)
Continues to develop students' critical thinking skills, documentation expertise, and academic writing proficiency. Greater focus on persuasive writing and the research process. Close examination and discussion of a range of texts about the human experience leading to frequent and intensive writing. Prerequisite: ENGL 110.

ENGL 112. Honors Composition I. (3 Credits)
Honors Composition I introduces students with substantila background and ability to work at an enhanced level to critical thinking, academics writing, discussion, independent research and study, a treatment of subject matter in both depth and breadth, and some creative writing. Opportunities to write in various expository modes with emphasis on reading, analyzing, and discussing nonfiction and short fiction pieces, collaborative activities, presentation skills, and research strategies. Prerequisite: Enrollment is limited to students who are in the University Honors program. Additional enrollment can result from limited recommendations from English faculty, if approved by Languages and Literature department chairman, and if space is available.

ENGL 113. Honors Composition II. (3 Credits)
Honors Composition II offers students who are working at an accelerated level, enhanced opportunities to continue reading and writing, analyzing, and evaluating short fiction and nonfiction sources to develop further their critical thinking, academic writing, field research techniques, presentation skills; practice creative writing and occasional independent study. Prerequisites: ENGL 112 Enrollment is limited to students who are in the University Honors program. Additional enrollment can result from limited recommendations from English faculty, if approved by Languages and Literature departmemt chairman, and if space is available.

ENGL 114. Intro to Digital Humanities. (3 Credits)
Introduces theories and concepts in digital technologies and applications in literary studies from remediating classic literary texts online, generating born digital texts, analyzing texts computationally digitally, to creating digital literary projects. This course addresses the emergence of digital technologies and their cultural influences in relation to literary study.

ENGL 200. Research Writing. (3 Credits)
Develops and enhances students' research skills and approaches to conducting research and composing documented essays. The course includes library and original student research, literature reviews, in-text citations, citation styles, and notation conventions. Prerequisites (s): ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113.

ENGL 201. Introduction To Literature. (3 Credits)
A course in reading, thinking critically about, and discussing literature from a variety of genres and cultures, through the study of significant texts and authors. Writing intensive. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition II.

ENGL 202. Intro African American Lit. (3 Credits)
A course in reading, thinking critically about, and discussing literature from a variety of genres, through the of significant texts by African American authors. Writing intensive. Prerequisites: ENGL 110 and ENGL 111.

ENGL 203. Introd Literary Analysis/Crit. (3 Credits)

ENGL 204. Digital Humanities & Lit Studi. (3 Credits)
Explores literary creation, publication, and analysis through digital technologies and applications. The course focuses specifically on literary study through and in relation to the digital humanities such as by analyzing digital literary projects and approaches. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 114.

ENGL 210. English Literature I. (3 Credits)
Study of English literature and its background from Anglo-Saxon times through the age of Samuel Johnson.

ENGL 211. English Literature II. (3 Credits)
Study of English literature and its background from the Romantic age to the twentieth century.

ENGL 212. American Literature I. (3 Credits)
Survey of various topics, literary form, and writer representative of achievements and trends from Colonial times to the Civil War.

ENGL 213. American Literature Ii. (3 Credits)
Survey of various types of creative works and critical opinions, designed to show the variety and strengths of literary achievement from the Civil War to the present.

ENGL 214. World Literature I. (3 Credits)
Survey in English of world literature from the Ancient World through the Renaissance, with attention to main ideas and genres.

ENGL 215. World Literature II. (3 Credits)
Survey in English of world literature from the seventeenth century to the present, with attention to main ideas and genres.

ENGL 217. Digital Literature. (3 Credits)
Introduces students to born-digital, or electronic, literature. The course offers a survey in electronic literature from its beginnings in the 1980s to the present and covers various genres especially those specific to electronic literature such as first- and second-generation hypertext fiction, interactive fiction and drama, locative narratives, generative text, and flash and cyber poems. Prerequisites: ENGL 110/112, ENGL 111/113, and for English majors, ENGL 203.

ENGL 240. Introduction Creative Writing. (3 Credits)
A workshop course for sudents who have completed ENGL 110 and ENGL 111. Focuses on writing both short fiction and poetry. No previous experence with creative writing is required.

ENGL 260. Introd to Film Studies. (3 Credits)
An introduction to film studies as an important aspect of literary discourse. Students will explore film history, language, and structure, while using a variety of critical analysis strategies to analyze films. A series of selected screenings throughout the course will help students to identify and examine connections between popular culture, language and literature studies, and film. Prerequisites: ENGL 110 Composition I and ENGL 111 Composition II.

ENGL 270. The Soles of Blk Folk:Sneak Cl. (3 Credits)
From the nineteenth century to present, the contemporary athletic shoe has experienced a major evolution. What began as necessity matriculated to style, and then morphed into unique multicultural identities. The course addresses hip hop culture, societal ills, life, and identity within the sneaker subculture, and explores the overall impact and phenomenon of sneakers on a global level via the culture's literature. Prerequisite(s): ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113.

ENGL 301. English Literature Middle Ages. (3 Credits)
Study of the chief works of medieval English literature from Beowulf to the fifteenth century against a background of prevailing social, political, and religious ideas.

ENGL 302. Engl Literature Of Renaissance. (3 Credits)
Study of the principal writers of the Renaissance and the Interregnum, from Skelton to Milton. Prevailing social, political, and religious thought of the Renaissance and early seventeenth century as background.

ENGL 303. Engl Lit Retoration & 18th Cen. (3 Credits)
Study of the principle writers of the Restoration and eighteenth century. Prevailing social, cultural, and political thoughts of the Restoration /18th century as background.

ENGL 304. Engl Literature Of 19th Centur. (3 Credits)
Study of the principal poets and prose writers of the Romantic movement and the Victorian period. Prevailing social, cultural, and political thought of the late 18th century and 19th century as background.

ENGL 306. Engl Literature Of 20th Centur. (3 Credits)
Study of the principal writers of literary and critical movements in the 20th century. Prevailing social, cultural, and political thought of the 20th and early 21st century as background.

ENGL 307. Ameri Literature Before 1800. (3 Credits)
Study of the major issues, movements, forms, and/or themes in American literature and culture before 1800. Topics may include narratives of exploration and encounter, Puritan and/or Enlightenment writings, captivity and slave narratives, post-colonial approaches to colonial rhetoric and poetry, and/or in-depth studies of selected writers.

ENGL 308. American Literature 19th Centu. (3 Credits)
Study of the major issues, movements, forms and/or themes in 19th century American literature and culture. Topics may include the American Renaissance, literature and abolition, African American novels and poetry, romance and romanticism, the rise of the short story, realism, naturalism, the frontier, representations of region, American capitalism, and/or in-depth studies of selected writers.

ENGL 309. American Literature 20th Centu. (3 Credits)
Study of the major issues, movements, forms, and/or themes in 20th century American literature and culture. Topics may include Modernism, Post-Modernism, the Harlem Renaissance, Depression-era literature, consumer society, the Beats, Civil Rights literature of American imperialism, and/or in-depth studies of selected writers.

ENGL 310. Advanced Communications Skills. (3 Credits)
Study and practice of advanced communication skills through print and nonprint media through listening and reading (receptive language skills) as lifelong skills in both informal and academic writing and speaking (expressive language skills). Prerequisite: C grade or better in ENGL 110 and ENGL 111 or ENGL112 and ENGL 113.

ENGL 311. African-American Literature. (3 Credits)
Survey of the African American literary tradition from its earliest expressions to the present. Topics may include African American folklore, slave narratives, essays, poetry, drama, fiction, non-fiction, criticism, and the shaping of a Black aesthetic.

ENGL 312. African-American Non-Fiction. (3 Credits)
ENGL 312 - African American Nonfiction - 3 semester hours This course examines non-fiction prose by key African American writers and the influences and legacies of these texts on the African American literary tradition. Prose genres will include, but not be limited to, the essay, autobiography, memoir, slave narratives, travel writing, and related subgenres of non-friction prose. Attention will be given to rhetorical and aesthetic achievements as well as elements of style, form, and critical significance. Prerequisite(s): ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 313. Classics Of Western Literature. (3 Credits)
Study of Greek and Latin literature in translation, with consideration of major classical works and their influence on English and American literature. Will include works by such writers as Homer, Aeschylus, Sophocles, Euripides, Plato, Aristotle, Virgil, Horace, Catullus, Juvenal, and Ovid.

ENGL 314. Readings Multi-Culture Literat. (3 Credits)
Variable content. Study of selected works from the literature of Native American, Jewish, Asian, Chicano/Latino, or other traditions. May be repeated once for credit with different topic, with consent of department.

ENGL 315. African Literature. (3 Credits)
Study of the literature(s) of Africa from pre-colonial to contemporary times. Includes investigation of the relationship between oral and written forms, and how "Orature" has influenced and continues to influences written African literature. Will include representative works from such writers as Achebe, Soyinka, WaThiongo, Head, Emecheta, Ba, Osundare, U'Tamsi, and Aidoo.

ENGL 316. Black British Literature. (3 Credits)
Studies the literature of the African diaspora in England, Britain, and the British colonies and the African diasporic presence in British literature. The course may focus on a specific time, genre, region, or provide a survey of Black British literature.

ENGL 317. Black Virginia Writers. (3 Credits)
ENGL 317 Black Virginia Writers - 3 semester hours Study of Black Virginian's writings from 1805 to 1955 with literary genres as the focus of textual, regional, and cultural analyses. Readings include slave narratives, letters, poetry, essays, and novel excerpts. State laws, local newspaper reports, videos, and cartoons will augment literary discussions. Prerequisite(s): ENGL 110-112, ENGL 111-113. English majors ENGL 203.

ENGL 320. Harlem Renaissance. (3 Credits)
Study of the flourishing of the literary, visual, and performing arts by African Americans during the period known as the Harlem Renaissance (1920-1940). Emphasis includes the articulation of black aesthetics and the impact on artistic productivity.

ENGL 321. Readings in Multi-Cultural Lit. (3 Credits)
ENGL 321 Readings in Multi-Cultural Literature - 3 semester hours Variable content. Study of selected works from the literature of Native American, Jewish, Asian, Chicano/Latino, or other traditions. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL 110, ENGL 111, and for English majors, ENGL 203.

ENGL 322. Post-Colonial Literature. (3 Credits)
Survey of the development of literatures in English in former European colonies. Topics include the spread of European literary forms in Asia, Africa, the Caribbean, and the far new world (Australia and New Zealand) and the ways writers from colonies integrate influences from their cultures and influences from European literary traditions in their work.

ENGL 323. Classics of Western Literature. (3 Credits)
ENGL 323 Classics of Western Literature - 3 semester hours Study of Greek and Latin literature in translation, with consideration of major classical works and their influence on British and American literature. Will include works by such writers as Homer, Aeschylus, Sophocles, Euripides, Plato, Aristotle, Virgil, Horace, Catullus, Juvenal, and Ovid. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 324. Anglo-Irish Literature. (3 Credits)
Study of Irish literature in translation from medieval sagas and myths to the Irish Literary Revival (1880- 1940). Special emphasis on Yeats, Synge, Lady Gregory, Joyce, and the Abbey dramatists.

ENGL 325. Bible As Literature. (3 Credits)
Study of selections from the Old and New Testaments as literary texts. May include consideration of the of Biblical texts on other literary works and traditions.

ENGL 326. Mythology. (3 Credits)
An introductory survey of the traditional mythological narratives of ancient civilizations, considering the origins of myths, their nature, and their functions in shaping and expressing a culture's understanding of the divine, the natural world, human nature, and the institutions of human community.

ENGL 327. Philosophy In Literature. (3 Credits)
Study of basic philosophical problems in major works of literature. Prerequisite: GEPI 140 or other philosophy course, or permission of instructor(s).

ENGL 331. History Of Drama. (3 Credits)
Study of major developments of drama up to the 20th century. Close reading and discussion of representative from major playwrights and literary periods in terms of their historical and social contexts.

ENGL 332. Modern Drama. (3 Credits)
Critical study of the development of modern drama from the late 19th century to the present. Close reading and discussion of representative plays from major playwrights and literary movements in terms of their historical and social contexts.

ENGL 333. Readings In Popular Culture. (3 Credits)
Variable content. Study of selected popular culture texts. May include genres such as mysteries, science fiction, romances, frontier literature, etc., as well as media such as television, advertising, and film. May be repeated once for credit with different topic, with consent of department.

ENGL 336. Environmental Literature. (3 Credits)
ENGL 336 Environmental Literature - 3 semester hours Study of the relationship between literature and environmental values, and how literary interpretations of the land reflect and influence attitudes toward nonhuman nature and our orientations to our environment. Issues may include the environment as a hostile wilderness, divine nature, the frontier, as well as contemporary nature writers' concern with imperiled ecosystems. Some consideration of Ecocriticism. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 337. Indigenous American Literature. (3 Credits)
Studies the literature of the Indigenous peoples in the Americas, including their diaspora in addition to the American Indigenous presence. The course may focus on a specific group, time, genre, region, or provide a survey of Indigenous American literature.

ENGL 341. Expository Writing. (3 Credits)
Focuses on oral and written discourse which is used to describe, explain, inform, and persuade. Emphasizes showing rather than telling to communicate to an audience or reader in clear and objective language. Required readings serve as prompts for the study of rhetorical patterns, style and organization. Involves research and appropriate technology. Prerequisite: "C" or better in ENGL 110 and in ENGL 111.

ENGL 342. Technical Communication. (3 Credits)
Emphasizes clear, effective communication skills essential to technical and professional writing for students from a variety of majors. Builds on a writing process, basic rhetorical principles, audience awareness, and the writer's role in legal, ethical, and electronic communications. Emphasizes reports, memos, résumés, problem-solving, research, and proposals. Prerequisites: "C" or better in ENGL 110 and in ENGL 111.

ENGL 343. Writing Poetry. (3 Credits)
Development of skills in writing and evaluating poetry, with emphasis on traditional forms and patterns as well as contemporary trends; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 344. Writing Short Fiction. (3 Credits)
Development of skills in writing and evaluating short fiction, with emphasis on traditional uses of plot, characterization, etc.as well as contemporary trends; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 345. Writing Creative Non-Fiction. (3 Credits)
Development of skills in writing and evaluating creative non-fiction prose, with emphasis on forms such as memoir, autobiography, nature and science writing, history, and interviewing writing; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 346. Practicum In Writing. (3 Credits)
Allows students the opportunity to do hands-on work in the field of professional writing through internships or work opportunities both on-campus and within the community. The number of credit hours earned will be determined by the instructor and based on the number of hours worked. Approval by the department required.

ENGL 347. Theory/Prac Professional Editi. (3 Credits)
ENGL 347 - Theory and Practice of Professional Editing - 3 semester hours Instruction in editing technical and professional documents; emphasizes methods of achieving clarity, accuracy, consistency, and completeness in written documents; practice in editing documents for grammar, syntax, organization, professional style, audience awareness, content accuracy; review of grammar, punctuation, and usage. Prerequisite(s): ENGL 110/112 and ENGL 111/113.

ENGL 348. Special Topics Creative Writin. (3 Credits)
ENGL 348 - Special Topics in Creative Writing - 3 semester hours Variable content. Development of skills in writing and evaluating creative works of a certain style, genre, or form; critical analysis of student works in a workshop setting. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 240. Corequisite(s):

ENGL 349. Literary Editing and Publishin. (3 Credits)
Study of current practices and trends of literary publishing, including literary journals, magazines, small presses, and commercial publishers. Students will complete hands-on editorial work in literary publishing by participating in the production of VSU's literary journal(s). Prerequisite (s): ENGL 110/112 and ENGL 111/113.

ENGL 351. Introduction To Language Study. (3 Credits)
Study of the fundamental characteristics of language and its functions; an overview of phonology, morphology, syntax, and semantics; an introduction to language change and varieties; and an examination of language acquisition and language processing.

ENGL 352. English Structure. (3 Credits)
Systematic analysis of language, overview of traditional and modern grammarians' conceptions of English structure, and study of English from the perspectives of structural and generative grammars.

ENGL 353. Forensic Linguistics. (3 Credits)
An exploration of the interface of Language and the law. Aims at using the scientific analysis of language to advance the cause of justice in the application of the law. Exposes students to the process of applying linguistic theory to the analysis of language data in legal settings. Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II, or their equivalents.

ENGL 361. Film Genres. (3 Credits)
The study of a variety of film styles/genres such as westerns, musicals, melodramas, action, mystery, comedy, and horror. Focuses on themes, conventions, and narrative trends associated with particular genres, placing a strong emphasis on analyzing their influence on other film genres and on other forms of creative expression. Since the specific genres to be explored will vary, the course may be repeated for up to six credit hours as allowed by the department. Prerequisite: ENGL 260.

ENGL 362. Literature and Film. (3 Credits)
The study of film adaptations of significant literary works. Students will read selected literary works and analyze the social, historical, and cultural implications of both the literary works and their film interpretations. A series of screenings throughout the course will help students to evaluated, analyzed, and appreciate pieces of literature and their related film adaptations as independent yet equally important creative texts. Prerequisite: ENGL 260.

ENGL 363. Identity in Film. (3 Credits)
The study of identity, race, gender, differences, and representation in film. This course focuses on how people of a variety of races, cultures, genders, and ethnicities are represented in Hollywood films and selected other types of films, with a focus on exploring and analyzing the sociopolitical and cultural factors that influence audiences, directors, and narrative trends. Prerequisite: ENGL 260.

ENGL 364. Blacks and Film. (3 Credits)
The study of blacks in film from the silent era to the present. Weekly screenings of selected films, with a focus on examining and critically analyzing specific characterizations and narrative functions that have been associated with blacks throughout film history, as well as the impact of black film genres, performers, directors, and producers on the American film industry. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 260.

ENGL 365. Special Topics in Film. (3 Credits)
The study of special topics in film. Topics will vary, but may include an intensive study of the films of a specific director, a specific movement or trend in film, film as history, gender in film, alternative film forms such as documentaries, independent and foreign films, film and society, politics in film, or other pertinent film topics as established by the instructor. As the topics change, the course may be repeated for up to six credit hours as approved by the department. Prerequisite: ENGL 260.

ENGL 370. Theories & Appl Digi Humanitie. (3 Credits)
Studies theoretical approaches and technical applications in computing and digital technologies in the humanities as related to literary study. This course may offer practical experience with these approaches and applications to literary study. Pre-requisites: ENGL 110/112, ENGL 111/113, ENGL 114, and for English majors ENGL 204.

ENGL 371. History of Digital Humanities. (3 Credits)
Surveys origins and developments in digital technologies and applications in literary studies. While a survey, this course may focus more specifically on aspects of digital technologies and applications in literary studies, including more recent developments such as generative artificial intelligence, and their histories. ENGL 110/112, ENGL 111/113, ENGL 114, and for English majors ENGL 204.

ENGL 380. Writing ID and Social Issues. (3 Credits)
Variable content. Develops skills in writing and analyzing representative literary works from the perspective of contemporary societal issues (including hip hop culture) and identities. Includes various literary genres, as well as pop culture: social media, television, advertising, and film. May be repeated once for credit with different topic, with department approval. Prerequisites: ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113, and for English majors, ENGL 203.

ENGL 401. Chaucer. (3 Credits)
Study of the Canterbury Tales, Troilus and Criseyde, and/or selected minor poems.

ENGL 402. Milton. (3 Credits)
Study of the chief poems and prose works of Milton. Some emphasis on Milton's religious and political ideas.

ENGL 403. Shakespeare. (3 Credits)
Survey of Shakespeare's range of work including his early and later work in relation to Elizabethan and Jacobean social, critical, and theatrical ideas but may address other contexts. Readings may include comedies, histories, tragedies, romances, and sonnets. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 404. Shakespeare II. (3 Credits)
Survey of Shakespeare's later work, with reading of selected plays and their study against the background of Jacobean social, critical, and theatrical ideas. Emphasis on tragedies and romances.

ENGL 405. The English Novel. (3 Credits)
Study of the English novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists.

ENGL 406. The American Novel. (3 Credits)
Study of the American novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists.

ENGL 407. Literary Movements. (3 Credits)
Study of the ideas, literary methods, and influence of writers who furthered the development of the dominant mode of modern fiction.

ENGL 408. Place & Space in Literature. (3 Credits)
Survey of main trends from Colonial times to the present, treated under such topics as patrician tradition, the Civil War, folklore, regionalism, the New South.

ENGL 409. Special Topics in Literature. (3 Credits)
Variable content. Intensive study in an aspect of literature that may engage various authors, genres, traditions, time periods, and other relevant literary topics. The course may address specific issues in or related to literature and literary study as well as literary theory and its applications. May be repeated once for credit with different topic, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 410. Readings In African American L. (3 Credits)
Variable content. Intensive study of a major issue, movement, from, theme, or writer in African American literature and culture. May be repeated once for credit with different topic, with consent of department.

ENGL 411. Readings African Lit & Culture. (3 Credits)
Variable content. Intensive study of a major issue, movement, form, theme, or writer in African literatures and cultures. May be repeated once for credit with different topic, with consent of department.

ENGL 412. Caribbean Literature. (3 Credits)
Survey of Caribbean literature, which explores fictional and non-fictional prose, poetry, and drama in order to gain an appreciation of the literature and the cultures from which it springs.

ENGL 413. Special Topics in Africana Lit. (3 Credits)
ENGL 413 - Special Topics in Africana Literature - 3 semester hours Examines issues critical to the African Diaspora and requires quality written research via the investigation of Africana literature, history, philosophy, and culture. Prerequisite(s): ENGL 110/112, ENGL 111/113, ENGL 203 and for non English majors, consent of the department.

ENGL 414. Major Authors Af Am African Li. (3 Credits)
ENGL 414 - Major authors in African-American/Africana Literature - 3 semester hours Variable content. Intensive study of the fiction, non-fiction, and/or poetry of one or more authors from various ethnic groups and cultural backgrounds within the African Diaspora. Emphasis on the author's critical reception as a major writer, the relevant historical, social, and political context in which the author writes, and the influences on and the development and criticism of the author's works. May be repeated once for credit with different topics, with consent of department. Prerequisite(s): ENGL 110/112, ENGL 111/113, ENGL 201/202/203/, and for non-English majors, consent of department.

ENGL 420. Survey Literary Theory/Critici. (3 Credits)
Examination of representative writings in literary criticism from ancient times to the present. Emphasis upon the effective application of critical principles to the analysis and evaluation of various literary forms.

ENGL 421. Rhetorical Traditions. (3 Credits)
Introduces major traditions of rhetorical inquiry, with a particular emphasis on their relevance to composition studies. Study of the works of various rhetoricians from the Classical period to Modern times. Prerequisites: "C" or better in ENGL 110 and ENGL 111, or permission of the instructor.

ENGL 422. History Of The English Languag. (3 Credits)
Survey of the historical development of modern English from its earliest Indo-European origins; a study of the sound, vocabulary, word-formation, and sentence structure of Old English, Middle English, and Modern English—including a brief discussion of American dialects.

ENGL 441. Special Topic: Profess Writing. (3 Credits)
Variable content. Study of selected topics in professional writing such as writing for social media, rhetorical theory, writing for social change, or writing in a specific discipline. May be repeated once for credit with different topic, with consent of department. Prerequisites: A grade of C or better in ENGL 110/112 and in ENGL 111/113.

ENGL 442. Special Topics in Creative Wrt. (3 Credits)
Variable content. Development of skills of writing and evaluating creative works of a certain style, genre, or form; critical analysis of student works in a workshop setting. May be repeated once for course credit with different topic, with consent of the department. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 240.

ENGL 447. Advanced Creative Writing. (3 Credits)
A creative writing workshop in which students will complete an ambitious project: a group of short stories or poems, a play, or a novella. Editing, revising and critiquing with attention to the problems of longer literary forms. Prerequisite: ENGL 343, 344, or 345 or permission of the instructor.

ENGL 450. Special Topics in Film. (3 Credits)
Variable content. Intensive study of the films of a specific director; a specific movement or trend in film; film as history; gender in film; alternative film forms such as documentaries, independent and foreign films; film and society; politics in film; or other pertinent film topics as established by the instructor. May be repeated once for credit with different topic, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 260.

ENGL 451. Special Topics in Linquistics. (3 Credits)
ENGL 451 Special Topics in Linguistics - 3 semester hours
Variable content. Study of special topics (such as sociolinguistics, psycholinguistics, language acquisition) or specialized issues (theoretical or practical) in linguistics. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 461. Digital Humanities Project. (3 Credits)
Guides students through individual and collaborative research projects in digital technologies in the humanities with emphasis on literary studies. Pre-requisites: ENGL 110/112, ENGL 111/113, ENGL 114, ENGL 370, and for English majors ENGL 204.

ENGL 471. Studies in Poetry. (3 Credits)
Variable content. An examination of poetry as a genre. May be repeated once for credit with different structures, readings, dictations and oral practice. Prerequisite: ARAB 110 or its equivalent.

ENGL 476. Instensive Study of an Author. (3 Credits)
Variable content. An intensive and extensive study of a writer. Consideration of style, dominant ideas, influence, development, and criticism of the writer. May be repeated once for credit with different writer, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 495. Senior Seminar in English. (3 Credits)
A capstone experience for the English major with two components: Intensive study of a selected topic, theme, or author; career preparation. Focus of intensive study with vary according to instructor. Reading and writing intensive study. Prerequisite: Senior standing.

ENGR: Engineering (ENGR)

ENGR 101. Introduction to Engineering I. (2 Credits)
Introduction to the engineering profession, Introduction to problem solving using analytical, graphical, and computer tools including scientific word processors, spreadsheets and database packages, mathematical computation software. Introduction to logic. Engineering ethics and professional responsibilities. This course includes lab sessions.

ENGR 102. Introduction to Engineering II. (2 Credits)
Introduction to problem solving using analytical, graphical, and computer tools including scientific word processors, spreadsheets and database packages, mathematical computation software. Introduction to engineering analyses. Engineering ethics and professional responsibilities. This course includes lab sessions. Prerequisite: ENGR 101 Introduction to Engineering I.

ENGR 200. Engineering Graphics. (3 Credits)
Fundamentals laws of circuit analysis. Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, circuits containing independent and dependent voltage and current sources, resistance, conductance, capacitance and inductance analyzed using mesh and nodal analysis, superposition and source transformations, and Norton's and Thevenin's Theorems. Steady state analysis of DC and AC circuits. Complete solution for transient analysis for circuits with one and two storage elements. Prerequisite: MATH 260 Calculus I. Co-requisite: ENGR 221 Analog Circuits Laboratory.

ENGR 201. Circuit Analysis. (3 Credits)
Fundamentals laws of circuit analysis. Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, circuits containing independent and dependent voltage and current sources, resistance, conductance, capacitance and inductance analyzed using mesh and nodal analysis, superposition and source transformations, and Norton's and Thevenin's Theorems. Steady state analysis of DC and AC circuits. Complete solution for transient analysis for circuits with one and two storage elements. Prerequisite: MATH 260 Calculus I. Co-requisite: ENGR 221 Analog Circuits Laboratory.

ENGR 203. Introduction to Programming. (3 Credits)
An introduction to the computer, the algorithmic process, and computer programming using standard control structures.

ENGR 204. Intro to Object Oriented Progr. (3 Credits)
Advanced program design and implementation in a programming language. Object-oriented programming with concepts including class structure and behavior, objects, inheritance and reuse, virtual functions and polymorphism, exception handling, and templates.

ENGR 210. Statics & Strength Materials. (3 Credits)
The first part of this course covers the application of the principles of engineering mechanics to problems involving equilibrium of particles and solids. Topics include resultants, equilibrium, friction, trusses, center of gravity and moments of inertia. The second part of this course introduces the principles of mechanics necessary for the solution of engineering problems relating to strength, stiffness and material selection. Topics covered include stress, strain, torsion, beams, columns and combined stresses at a point. Prerequisite: ENGR 101 Introduction to Engineering I. Co-requisite: MATH 261 Calculus II.

ENGR 221. Analog Circuits Laboratory. (1 Credit)
Measurement techniques and experiments on fundamental laws. Circuit analysis techniques including: Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, Norton's and Thevenin's Theorems, mesh and nodal analysis, superposition, and source transformations. Reinforce the concepts learned in ENGR 201 Circuit Analysis. Co-requisite: ENGR 201 Circuit Analysis.

ENGR 301. Engineering Statistics. (3 Credits)
Engineering applications of the concepts of probability, statistical distributions, statistical analysis, regression and correlation analysis, analysis of variance and covariance, design of experiments. Prerequisite: MATH 260 Calculus I.

ENGR 304. Mechatronic System. (3 Credits)
An introduction to designing a mechatronics system that includes the integration of electrical and mechanical engineering principles within a unified framework. Topics include low-level interfacing of software with hardware, use of programming tools to implement real-time computation; digital logic; analog interfacing; measurement and sensing; and controllers.

ENGR 305. Materials Engineering. (3 Credits)
Structure of matter. Physical and mechanical properties of materials including metals, polymers, ceramics, composites, and electronic materials. Equilibrium diagrams. Heat treatments, material selection and testing and corrosion phenomena. Prerequisite: CHEM 151.

ENGR 310. Engineering Economics. (3 Credits)
Analysis of the time value of money as applied to the manufacturing environment. Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation and income taxes. Sensitivity, uncertainty, and risk analysis. Application of basic principles and tool of analysis using case studies. Prerequisite: MATH 260 Calculus I.

ENGR 313. Thermal Engineering. (3 Credits)
Basic concepts and definitions, properties of pure substance, work and heat, first law of thermodynamics, second law of thermodynamics, and introduction to conductive, convective, and radiative heat transfer. Prerequisite: PHYS 112 General Physics I. Co-requisite: MATH 350 Differential Equations.

ENGR 315. Dynamics. (3 Credits)
Kinematics of particles and rigid bodies. Rectilinear motion, Curvilinear motion, Coordinates systems, velocity, acceleration, relative motion. Newton's second law. Kinetics of particles, Angular momentum, Work-energy methods, Impulse and momentum. Vector mathematics where appropriate. Prerequisite: PHYS 112 General Physics I and ENGR 210 Statics/Strength of Materials.

ENGR 430. Quality Engineering. (3 Credits)
An analysis of the basic principles of quality control, including Total Quality Management and design and analysis of process control charts and sampling plans. Prerequisite: ENGR 301 Engineering Statistics.

ENGT: Electronics Technology (ENGT)

ENGT 100. Introduction Engineering Tech. (2 Credits)
Introduction to professional field of engineering technology; professional ethics and responsibilities of technologists; application of hand calculator to engineering problem solving; systems of units and their conversions; engineering problem-solving techniques.

ENGT 105. Engineering Problem Solving. (2 Credits)
Introduction to use of computers for solving engineering problems. Topics include: Computer Systems,Mathematics and Engineering Technology/Engineering Software Packages. Prerequisite: ENGT 100 Introduction to Engineering Technology.

ENGT 261. Fundamentals of ENGR Graphics. (3 Credits)
Introduction to basic 2D technical drawing and 3D modeling, including sketching, lines, points, geometry, orthographic projection, auxiliary views, section views, basic dimensioning, introduction to GD&T, visualization, basic drawing standards, and assembly. Student projects required (sketching, drawing, and CAD software)

ENGT 290. Intro to Elect/Electronics. (3 Credits)
A course in electrical circuits and electrical machines for students NOT majoring in electronics engineering technology. Topics include the following: resistors, dc circuits, magnetism, electromagnetic forces, ac voltage and current, inductance and capacitance, dc generators and motors, ac circuits, single-phase and three-phase circuits, transformers, 3-phase induction motors, synchronous motors and generators, single-phase motors, motor controls, and electrical distribution. Prerequisites: PHYS 106 Introduction to Physics II or equivalent; MATH 150 Precalculus or Equivalent.

ENGT 301. Computer Programming. (3 Credits)
Basic engineering methods of problem solving using C/C++ or other high-level programming 253 languages. Prerequisite: ENGT 105.

ENGT 321. Engineering Economy. (3 Credits)
Analysis of the time value of money as applied to the production environment, Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation and income taxes. Sensitivity, uncertainty, and risk analysis. Application of basic principles and tool of analysis using case studies. Prerequisite: MATH 260 Calculus I.

ENGT 401. Technical Internship. (3 Credits)
This course requires the student to work in a company for a semester. The internship provides practical experience in a closely supervised environment. A written Report is required at the end of the internship program. Nine contact hours per week. Prerequisite: Junior Standing and Consent of Instructor.

ENGT 420. Senior Project I. (3 Credits)
Student will design a project to illustrate basic knowledge and skills in one phase of his/her major field. Proposal development, library research, project management and computer usage are stressed. Prerequisite: Senior Standing and Consent of Instructor.

ENGT 421. Senior Project II. (2 Credits)
This portion of the project includes complete design specifications, computer analysis and/or simulation, library research, oral and written reports. It may also include construction, trouble-shooting and demonstration of a working prototype. Prerequisite: ENGT 420 Senior Project I.

FACS:Family & Consumer Science (FACS)

FACS 141. Intro to Fam & Consr Sci Sem. (1 Credit)
An overview of the profession of family and consumer sciences; introduces students to career expectations and opportunities; planning and strategies for successful careers. FACS MAJORS ONLY.

FACS 161. Principles of Art and Design. (3 Credits)
This course is an introduction of the basic principles of design as they relate to fashion, residential and 100 workspace environments. Special considerations will be given to visual design in a sensory and behavior context. FACS 201 CONSUMER ECONOMICS - 3 semester hour.

FACS 201. Consumer Economics. (3 Credits)
A study of how consumers interact in the global economic arena. The course provides perspectives in terms of consumer interest, the responsibilities of business, government, private voluntary groups as it relates to consumerism. It provides insights into the essence of consumerism in the present, past, and future. Additionally, the course explains government role in monetary policymaking. Finally, the course provides information to aid the consumer with regard to decision-making and financial management for individuals as well as families.

FACS 263. Housing & Interior Planning. (3 Credits)
The course instructs students on the concepts of housing and interior design to include selection criteria, quality standards, operation, and financial analysis for housing and interiors. Additionally, students will examine the development of architectural styles, compare historical architectural, understand the function of housing, consider the trends in architectural and furniture design and explore features of furnishings that are characteristic of various historical periods. Finally, furniture placement with reference to floor plan, design, traffic flow using computer design is emphasized.

FACS 342. Occupuational Family & Consume. (3 Credits)
This course of study focuses on planning, implementing and evaluating Family and Consumer Sciences occupational education programs in chosen areas of occupational endorsement. In addition, this course explores leadership theory and practice in relation to theories and processes of innovation and change. It includes the opportunity to explore leadership techniques relevant to change management, entrepreneurship and innovation. You will be encouraged to use your own experience in leadership roles to inform discussion, inquiry, critical thinking and reflection. Prerequisites : DIET 221 Principles of Analysis of Food, DIET 310 Human Nutrition, FCCS 301 Child Development.

FACS 401. Independent Study. (3 Credits)
This is a course designed for students to work independently with an instructor on a topic interest. Students register for the course and schedule an appointment with advisor for project ideas, then present a written proposal describing a research paper or project.

FACS 402. Teaching Family Consumer Sci. (3 Credits)
This course explores a historical prospective of Family and Consumer Sciences. Pre-candidates will develop an understanding of the specializations and concepts centered around the Family and consumer Sciences subject matter. Students will develop lesson plans, and materials utilized for teaching. Candidates will evaluate and analyze methods of teaching, conduct observations and assessment management practices for teaching various elements of Family and Consumer Sciences as well as the organization and role of public education in America. Emphasis will be given to the student diversity, the legal aspects of teaching, and governance. The course will highlight the significance of FCCLA and FACS student associations. Current trends and issues will be included. Prerequisite: EDUC 201 Introduction to Teaching, EDUC 202 Introduction to Teaching II.

FACS 403. Resource Management. (3 Credits)
This course focuses on the management of resources at various levels to include personal, family, and home financial decisions. Areas of responsibility rotate to give family members experience in all phases of home life. Emphasis is placed on management of selection of consumer goods, time, energy and other resources.

FACS 425. The HBCU Family. (3 Credits)
The course explores factors related to the family experience at historically Black colleges and universities. Students will examine the intersection of family and the HBCU experience. Family culture on HBCU campuses, the impact of HBCUs on Black families and communities, as well as, other topics will be explored.

FACS 440. Contemp Approach To Curriculum. (3 Credits)
This course provides a common core of experiences for all prospective teachers and trainers, which develops an understanding of the historical, philosophical, and sociological foundations underlying the development, organization and role of public and private education in America. Emphasis will be given to culture as a foundation, the legal aspects of teaching, and the governance, relation, organization, and support of public education. Contemporary trends and issues will be included.

FACS 480. Adm Human Develop & Family Sys. (3 Credits)
This course examines principles and concepts related to administering human service programs and organizations in an environment designed to assist individuals with reaching their full potential. Key concepts include administration, organizational structure, supervision, and resource management. Issues related to planning and implementation are addressed. FACS MAJORS ONLY. Prerequisite: FACS 141 Perspectives of Professionalism, FCCS 102 Individual Family & Community Services, FCCS 301 Child Development/Laboratory.

FACS 482. Practicuum Family & Consumer. (3 Credits)
Students will participate in introductory work experiences related to their area of emphasis. The areas will included Early Care and Development, Extension Services, and Community Services. The course will afford students the opportunity to gain skills and competencies as practitioners. One-hundred fifty (150) clock hours are required with supervision by Family and Consumer Sciences faculty and on-site coordinators. FACS MAJORS ONLY. Prerequisite: FACS 141 Perspectives of Professionalism, FCCS 102 Individual Family and Community Services, FACS 480 Administration of Human Development and Family Systems, Permission from Program Coordinator.

FCCS:Family, Child, Comm Servi (FCCS)

FCCS 101. Family and Community Health. (3 Credits)
FCCS 101 FAMILY AND COMMUNITY HEALTH - 2 semester hours A study of personal hygiene, sanitary care of the home, first aid, prevention of disease and home care of the sick. An introductory course that will examine current practices and trends in health related problems and lifestyle behaviors, emphasizing self-help and preventable aspects of health care.

FCCS 102. Multicultural Families & Comm.. (3 Credits)
This course explores various contemporary issues related to individual, family, and community roles, responsibilities, interpersonal interactions, functions and development tasks. Specific emphasis is placed upon cultural diversity among families in the United States.

FCCS 301. Child Development/Laboratory. (1-3 Credits)
This course explores the profession of child development. Special attention is given to the perceptual, social, emotional, cognitive and physical processes from infancy through age eight. The laboratory experience is an element of this course and taught simultaneously with the class. This allows students to work directly with children and to receive hands-on-experiences in the preschool classroom.

FCCS 302. Family Relations. (3 Credits)
Focus is on applying knowledge and theory to the study of how families relate to one another and manage their resources for both survival and fulfillment. Factors related to the development of functional family lifestyles are assessed from multiple perspectives.

FCCS 381. Adoles. & Emerging Adulthood. (3 Credits)
This course examines mental, moral, social, emotional, and physical development within the adolescence and emerging adulthood (Ages 10-25) period of life. The course includes a multicultural approach. It is designed for professionals who plan to work with children and young adults.

FCCS 401. Human Sexuality & Fam Planning. (3 Credits)
The course investigates factors related to the development of lifestyles and families. Consideration is given to current issues relating to marriage and family life and those changes in society, which affect the institution of the family. The course explores concepts related to family planning and the relationship of sexual attitudes and behavior to human development and sexuality. Special emphasis on economic, social, cultural, legal, and political factors, which influence decisions, related to family planning, sexual behavior, and attitudes. Open to non-majors.

FCCS 402. Decision Making Process In Mod. (3 Credits)
A fundamental course in the study of decision making as it takes place. Students explore the theories for understanding and carrying out the decision-making process. In addition, theories on motivation, rational choice, and behavior are explored.

FCCS 404. Nursery School Planning. (3 Credits)
Essential procedures in childcare administration, curriculum development, equipment, floor plans, food service and guidance are addressed. Emphasis is placed on the operation of facility according to minimum standards.

FCCS 405. Parent Education. (3 Credits)
The course studies the assessment of current theories and concepts relative to parent education. Emphasis is placed on parenthood responsibilities and the task of parenting in today's diverse culture.

FCCS 470. Blk Fam:Fr. Slavery to Pr. Day. (3 Credits)
In this course, students will develop knowledge and skill needed to understand the individual, community, and societal factors influencing the past and present functioning of Black American families. Students will engage in learning opportunities examining historical experiences, cultural stereotypes, and the systematic marginalization of Black American families through social policy and initiatives. This class will use a variety of multimedia including.

FINC: Finance (FINC)

FINC 301. Principles of Real Estate. (3 Credits)
Emphasis in this course is on the economic and social aspects of real estate-markets, property rights, contracts, deeds, property ownership, insurance, management and planning for the future.

FINC 305. Personal Finance Management. (3 Credits)
Principles and methods of managing personal income, wealth and credit are examined. Included are sources and uses of funds, budgeting, taxation, insurance, time value of money, estate planning and retirement planning.

FINC 309. Principles of Finance. (3 Credits)
Students are exposed to the field of finance including financial concepts, financial analysis, decision involving long-term assets, sources and forms of long-term financing, international financial markets and issues, as well as selected ethical and social issues related to finance. Prerequisites: ACCT 200 or permission of the instrctor.

FINC 380. Student Managed Invest Fund. (3 Credits)
This course provides students with a comprehensive understanding of portfolio management principles to manage he Student Managed Investment Fund (SMIF). Emphasis is placed on the practical application of investment strategies through the management of an actual investment fund. Students will analyze financial markets, conduct research, and make investment decisions related to equity portfolio in a realworld setting. Topics include fundamental analysis financial modeling, risk assessment and the development of investment strategies. Prerequisites: COBU 300.

FINC 400. Corporate Finance. (3 Credits)
Students learn the concepts critical to the financial manager in a contemporary environment, including risk valuation, capital budgeting, cost of capital, capital structure, long-term financing, derivative securities, as well as topics of special interest like mergers and acquisitions, lease financing, and working capital management. Prerequisite: COBU 300.

FINC 415. International Financial Manage. (3 Credits)
The course deals with an in-depth analysis of risks of financing foreign operations and the management of international assets as viewed by multinational financial managers. It concentrates on the development of risk management policies that are appropriate for the multinational firm. Prerequisite: COBU 300.

FINC 446. Entrepreneurial Finance. (3 Credits)
The course examines small business start-up management with emphasis on financial decision-making for entrepreneurs, and the functions of investment banking institutions as they relate to small business capital acquisition and management. Also included are legal concerns and strategies for minority start- up ventures. The case study method will be used. Prerequisite: COBU 300.

FINC 450. Investments. (3 Credits)
This course examines the various types of securities, valuation models for bonds, stocks, and options, security markets, and theories of portfolio management. Special emphasis is placed on common stock portfolios. Prerequisite: COBU 300 or FINC 309 or permission of the instructor.

FINC 460. Invet Analysis & Portfolio Mgm. (3 Credits)
The course provides an in-depth analysis of fixed-income securities and markets. Financial theories are applied to the construction of fixed-income security portfolios. Topics include duration, convexity, realized compound yield, mortgage-backed securities, interest-rate swaps, bond immunization, and interest-rate futures and options. Prerequisite: FINC 450.

FINC 465. Mgmt Financial Institutions. (3 Credits)
Students are exposed to the analysis of the management of financial institutions, including the management of asset and liability structures, control of financial operations, and the effect of regulations on financial management practices. Prerequisite: COBU 300.

FINC 472. Risk Management & Insurance. (3 Credits)
This is a study of the insurance industry, the different forms of insurance coverage, and an analysis of the concept of risk. The course examines risk management techniques to neutralize the effect of risk inherent in daily life. Prerequisite: COBU 300.

FLST: Study Abroad (FLST)

FLST 400. Study Abroad. (3-17 Credits)
This course provides students with an immersive international learning experience designed to broaden cultural awareness, enhance language proficiency, and deepen understanding of global perspectives. Through guided study, travel, and direct engagement with host communities, students examine the intersections of culture, history, politics, and society in a global context. Coursework may include language instruction, lectures, field excursions, service learning, and research projects tailored to the host country or region. May be repeated for credit with departmental approval when the program is based in a different country or region.

FREN: French (FREN)

FREN 110. Elementary French I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in French: Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students receiving no admission credit in French.

FREN 111. Elementary French II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in French: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisites: FREN 110 Elementary French I or its equivalent.

FREN 212. Intermediate French I. (3 Credits)
Inductive review of grammar, reading of moderately difficult prose, and extensive oral drill in basic structures. Prerequisite: FREN 111 Elementary French II or its equivalent.

FREN 213. Intermediate French II. (3 Credits)
Careful study and reading of representative modern prose with continued practice in pronunciation and conversation and some extensive reading. Prerequisite: FREN 212 Intermediate French I or its equivalent.

FREN 214. Scientific French. (3 Credits)
Intensive reading designed to develop an adequate vocabulary in the basic sciences and mathematics. Prerequisite: FREN 212 Intermediate French I or its equivalent.

FREN 300. Survey Of French Literature I. (3 Credits)
General survey of French literature from the beginning to 1715, with illustrative readings and reports. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 301. Survey Of French Literature II. (3 Credits)
Survey of French literature from 1715 to 1900, with illustrative readings and reports. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 310. French Composition. (3 Credits)
A course including a careful review and application of principles of grammar and considerable practice in writing French; special stress on the acquisition of a stock of idiomatic expressions. Conducted in French as far as possible. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 311. Advanced Compositon. (3 Credits)
Continued practice in writing French with some attention to elements of style, topics for composition work assigned from day to day, and translation into French or English prose. Conducted in French.

FREN 312. Practice Of French Phonetics. (3 Credits)

FREN 313. French Conversation. (3 Credits)
Systematic study of modern spoken French aimed at the acquisition of a vocabulary based on material dealing with everyday life; the stress group, intonation and daily exercises in simple conversation. Prerequisite: FREN 213 Intermediate French II or departmental permission.

FREN 314. Advanced Conversation. (3 Credits)
Continued practice in spoken French and daily drill in formal and informal speech. Prerequisite: FREN 313 French Conversation or departmental permission.

FREN 410. French Literature 17th Century. (3 Credits)
Study of French classicism as reflected in Malherbe, Corneille, Racine, La Rocheffoucauld, Moliere, La Fontaine, La Bruyere, Mme de Sevigne, and others. Prerequisite: FREN 310 French Composition.

FREN 411. French Literature 18th Century. (3 Credits)
Emphasis on nonfictional literature of the period. Prerequisite: FREN 301 Survey of French Literature.

FREN 412. French Literature 19th Century. (3 Credits)
Romanticism as reflected in Chateaubriand, Mme de Stael, Lamartine, Hugo, Vigny, Musset, Gautier, pere, G. Sand and others. Prerequisite: FREN 301 Survey of French Literature.

FREN 416. French Civilization. (3 Credits)
Study and discussion of significant aspects of the social, political, and cultural life of France. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 418. Senior Seminar In French. (4 Credits)
Independent readings in French planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographical material. Prerequisite: Eighteen semester hours of French.

FRST: Freshman Studies (FRST)

FRST 101. Freshman Studies. (0 Credits)
Freshman Studies (FRST 101) is a course designed primarily to (1) facilitate students' transition to college citizenship and (2) to help students gain an understanding of the main aims of higher education. FRST 101 is a key foundational course that provides students with knowledge and skills they will need throughout their college career, synthesis and analysis of information, critical thinking, intellectual curiosity, life-long learning, and personal responsibility. Students will also become thoroughly familiar with VSU's mission, principles, history, traditions, policies, and procedures.

GEOG: Geography (GEOG)

GEOG 210. World Geography. (3 Credits)
An introduction to the geographic principles underlying different types of climate and their influence on society in various physical and political regions.

GEOG 313. Virginia Geography. (3 Credits)
A survey of the geographic regions of Virginia, and the influence of geographic factors on social and economic problems in Virginia, past and present.

GEOG 314. Geography Of North America. (3 Credits)
A study of the physical and cultural environments of North America with emphasis on regional economic activities.

GEOG 316. Human Geography. (3 Credits)
A survey of the content of human geography. Topics include population, migration, urban geography, the distribution of agriculture and industry, and human environmental impact.

GEOG 410. Geography Of Developing Natio. (3 Credits)
A study of the relationships between population and economic development in developing countries, and of possible responses to current problems and their consequences.

GEOG 411. Urban Geography. (3 Credits)
An examination of the economic basis, regional spacing and internal social and economic organization of cities.

GEOG 412. Seminar Land Use & Development. (3 Credits)
Interpretation of the landscape features of the United States with an emphasis on the historical and present patterns of social and economic activities.

GEOG 413. Economic Geography. (3 Credits)
A study of the relation between natural resources and the development and interdependence of national industrial and trade centers.

GERM: German (GERM)

GERM 110. Elementary German I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in German: Pronunciation, understanding of grammatical construction, basic reading, dictations, and daily oral practice; open to students receiving no admission credit in German.

GERM 111. Elementary German II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in German: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisite: GERM 110 Elementary German I or its equivalent.

GERM 212. Intermediate German I. (3 Credits)
Review of grammar; reading of moderately difficult prose and poetry with provision for ample practice in oral and written composition.. Prerequisite: GERM 111 Elementary German II or its equivalent.

GERM 213. Intermediate German Ii. (3 Credits)
Study of selected readings of more difficult nature from standard modern authors. Prerequisite: GERM 212 Intermediate German I or its equivalent.

GERM 214. Scientific German. (3 Credits)
A course designed primarily for science majors and those students preparing to enter medical school. Prerequisite: GERM 212 Intermediate German I or its equivalent.

GERM 300. Survey Of German Literature I. (3 Credits)
Historical study of German literature from the beginning through Goethe. Prerequisite: GERM 213 Intermediate German II.

GERM 301. Survey Of German Literature II. (3 Credits)
Historical study of German literature from Goethe to the present. Prerequisite: GERM 213 Intermediate German II.

GERM 310. German Composition. (3 Credits)
Careful review and study of the fundamentals of grammar, including practice in written composition. Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase; exercises in dictation and memorization. Prerequisite: GERM 213 Intermediate German II.

GERM 312. Practice German Phonetics. (3 Credits)
Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase; exercises in dictation and memorization. Prerequisite: GERM 213 Intermediate German II.

GERM 313. German Conversation. (3 Credits)
Systematic drill in speaking modern German; acquisition of vocabulary based on material dealing with everyday life; daily exercises in simple conversation. Prerequisite: GERM 213 Intermediate German II or permission of the instructor.

GERM 415. German Civilization. (3 Credits)
Comprehensive and systematic study of the life of the German people from early middle ages to modern times and their cultural role in the development of world civilization Conducted in German. Prerequisite: GERM 310 German Composition or GERM 313 German Conversation.

GERM 417. Grammar & Composition Tchrs Ge. (3 Credits)
Review of grammar and composition designed for prospective teachers and in-service teachers of German; emphasis on the more involved phases of syntax. Prerequisite: GERM 310 German Composition or permission of instructor.

GERM 418. Senior Seminar In German. (4 Credits)
Independent readings in German planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographical material.

GLST: Global Studies Abroad (GLST)

GLST 202. Global Studies Abroad: Topic. (1-6 Credits)
Through participation in an immersion experience abroad, students will explore global issues in the context of a particular country or region. This study abroad course may involve language and cultural studies of an area as well as an exploration of theme-based topics such as food and population, health, education, business, sustainable development, women's issues, indigenous peoples, socio-economic issues, science and technology, environmental issues, and other topics. Counts as an elective.

GLST 302. Global Studies Abroad: Topic. (1-6 Credits)
Through participation in an immersion experience abroad, students will explore global issues in the context of a particular country or region. This study abroad course may involve language and cultural studies of an area as well as an exploration of theme-based topics such as food and population, health, education, business, sustainable development, women's issues, indigenous peoples, socio-economic issues, science and technology, environmental issues, and other topics. Counts as an elective.

GLST 402. Global Studies Abroad: Topic. (1-6 Credits)
Through participation in an immersion experience abroad, students will explore global issues in the context of a particular country or region. This study abroad course may involve language and cultural studies of an area as well as an exploration of theme-based topics such as food and population, health, education, business, sustainable development, women's issues, indigenous peoples, socio-economic issues, science and technology, environmental issues, and other topics. Counts as an elective.

HIDG: Interior Design (HIDG)

HIDG 161. Principles Of Art And Designs. (3 Credits)
This course is an introduction of the basic principles of design as they relate to fashion, residential and workspace environments. Special considerations will be given to visual design in a sensory and behavior context.

HIDG 361. Advanced Interior Design. (3 Credits)
This course provides experimentation with advanced problems in designing residential interiors. Emphasis on the relationship of architectural design to exterior landscape will be conducted. The course also incorporates a study of prospective drawing to illustrate interiors. Prerequisites: HIDG 161 Principles of Art and Design; HIDG 263 Household Furnishings and Equipment.

HIDG 362. Contemp Visual Merchandising. (3 Credits)
A study of presentation techniques includes organizing subject matter for advertising display suitable for reproduction. In this course, students will study the exploration of the influence of advertising on the consumer and the importance of the use of promotional strategies of business. Projects emphasize areas of Textiles and Clothing, Interior Design and Foods.

HIDG 461. Housing And Society. (3 Credits)
The course is designed to explore contemporary issues related to family and housing. A study of the relationship of people's basic needs and values in relations to their housing is explored. Modern, rural, and urban living patterns as related to diversified societies and cultural backgrounds are studied. Additionally, housing needs and resources for the aged are also examined as well as a historical aspect of housing is also presented. Attention is given to aspects and to the factors relating to construction, architectural design, regulations and housing codes. The class is open to non-majors. Prerequisites: FACS 263 Household Furnishings and Equipment.

HIST: History (HIST)

HIST 114. World History to 1500. (3 Credits)
A topical introduction to the development of civilization up to the eve of the Modern Period, covering the growth of independent cultural traditions and diffusion of ideas, institutions and people.

HIST 115. World History Since 1500. (3 Credits)
A Topical introduction to the evolution of civilizations through the scientific, industrial, political and economic revolutions of the Modern Period down to the present. Emphasis will be placed on the evolution of global interdependence through the interaction of western and non-western cultures.

HIST 122. U.S. History to 1865. (3 Credits)
Introduces students to the social, political and economic history of the United States from Pre-Columbian America to the end of the Civil War.

HIST 123. U.S. History After 1865. (3 Credits)
Introduces students to the social, political and economic history of the United States from Reconstruction to Contemporary America.

HIST 222. U S Hist Early Beginning To 18. (3 Credits)
This reading and writing intensive survey course provides students with an in-depth analysis of key historical issues of American history from the first habitation to the end of the Civil War.

HIST 223. U S History 1865 To Present. (3 Credits)
This reading and writing intensive survey course students with an in-depth analysis of key historical issues of American history from 1865 to today.

HIST 231. History of Virginia. (3 Credits)
A general course on the development of Virginia and its role in the history of the nation.

HIST 240. African American Hist. to 1865. (3 Credits)
HIST 240 African American History to 1865- 3 Semester hours A reading and writing intensive course which provides students with an analysis of important issues in African American origins to 1865.

HIST 241. Afric. Am. Hist. Fr 1865 to Pr. (3 Credits)
HIST 241 African American History From 1865 to Present- 3 Semester hours A reading and writing intensive course which provides students with an analysis of important issues in African American history from 1865 to the present.

HIST 243. Hip Hop History. (3 Credits)
Hip Hop" is a term that describes a range of artistic, intellectual, cultural, and political themes and practices closely associated with late 20th and early 21st century urban American and African American culture. The course will survey the origins and development of hip hop culture, explore both the aesthetics and aspirations of the movement, and consider major topics of concern to the culture, including identify, oppression, entrepreneurship, social justice, and political power.

HIST 244. Readings in History. (3 Credits)
The course introduces students to the discipline of history and allows flexibility to both student and professor to explore a historical topic or theme in depth, different from a survey format. Mainly intended for history or related majors, the course will emphasize a critical thinking approach to analysis of historical events, thus preparing students for higher courses in historical methodology and the history senior seminar. This course must be successfully completed before enrolling in HIST 344.

HIST 245. HBCU History. (3 Credits)
HIST 245 HBCU History - 3 semester hours Historically Black Colleges and Universities have been a vital instrument in the struggle for liberty, equality, and opportunity for the African American community. This course traces the history of these institutions from their emergence in the nineteenth century, through the challenges they faced during the twentieth century, and their evolving role within African American life and American society generally in the twenty-first century United States.

HIST 246. History of Virginia State Univ. (3 Credits)
This course traces the history of Virginia State University from its founding through the contemporary period. Topics will include how the institution has overcome challenges, both internally and externally, the history of academic, social, and intellectual life on campus, VSU's outreach as a land grant college, and how VSU graduates have helped change the world.

HIST 250. American Sports History. (3 Credits)
A social history of America, using sports and leisure as indicators of how these activities reflect American attitudes from the colonial period to the present day.

HIST 257. History of American Holiday. (3 Credits)
A study of how different American holidays emerged, changed over time, and, in many cases, have disappeared from American life and culture, from colonial times to the present. The course reflects on how holidays can be sources of myth, identity, community, memory, and social protest under the general theme "you are what you celebrate.

HIST 258. Consumption & Clutter in Amer. (3 Credits)
This course examines the place, uses, and understanding of consumer goods and material objects in American llife and culture. Topics include the evolution of American consumerism, the idea of "conspicuous consumption," how individuals assert identity throughj material items, the connections between gender and consumer culture, the dichotomy of abundance and scarcity during industrialization and globalization, and the environmental consequences of consumerism.

HIST 260. U.S. Women's History to 1865. (3 Credits)
This course is a general survey of the history of women in the United States from the pre-colonial era to the mid-nineteenth century. The course will take a mainly narrative approach, but will also introduce students to important concepts, such as the intersection of race, class, and gender in women's lives and its impact on the evolution of sex and gender norms. Major topics may include the importance of women's work and community networks, the gendered underpinnings of American slavery and racist ideologies, changing ideas about women and citizenship, the transformative impacts of colonization, industrialization, and westward expansion.

HIST 261. U.S. Women's History Sin 1865. (3 Credits)
This course is a general survey of the history of women in the United States from the mid-nineteenth century to the present. The course will take a mainly narrative approach, but will also introduce students to important concepts, such as the intersection of race, class, and gender in women's lives and its impact on the evolution of sex and gender norms. Major topics may include women and industrialization, the rise of Jim Crow through women's eyes, the complicated and troubled nature of the women's suffrage movement, evolving understandings of women's sexuality, the politics of reproduction, and women's experiences of and contributions to social justice movements.

HIST 274. History of Africa to 1800. (3 Credits)
A survey of the history of Africa from the earliest times to the end of the 18th century. The course will explore the old myths of Africa as a 'dark continent' and emphasize the internal dynamics of the development of indigenous cultures and civilizations. Africa's contribution to world history, and the significance of external forces as they impacted Africa, especially the slave trade, will be underscored.

HIST 275. History of Africa Since 1800. (3 Credits)
A survey of the history of Africa since the late 18th century as a background for understanding today's events. The course will examine socio-economic and political developments inside Africa, relations with outside forces, and the increasing European interest in Africa, which paved way for the imposition of European colonialism. The colonial impact and African reactions, decolonization, the post-colonial period and the current problems and prospects of Africa will be studied.

HIST 277. History of England. (3 Credits)
HIST 227 History of England - 3 semester hours A survey of the social, economic, and political development of England from 1485 to the Twentieth Century.

HIST 299. Special Topics In History. (3 Credits)
A temporary and/or topic specific course with content appropriate for a sophomore level audience.

HIST 301. Colonial American to 1763. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 304. American Military History. (3 Credits)
A study of American Military History, and the origin and the growth of the United States Army and its accomplishments in war and peace from 1775 to the present.

HIST 305. Amer. Rev. & Early U.S. Republ. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 307. Black Freedom in an Age of Evo. (3 Credits)
This course focuses on how people of African ancestry in the Americas fought for political freedom, social equality, and economic opportunity in the era of the American, French, and Haitian Revolutions. Topics will include the experiences of African Americans in American Revolution, the efforts of the first civil rights leaders in the United States, the movement to end slavery and the slave trade in the early U.S., the Haitian Revolution and its impact on the early U.S., and the emergent discussion of pan-African and African-American identity in the early 19th century.

HIST 309. Antebellum America. (3 Credits)
An overview of the United States from 1815 to the outbreak of the Civil War, with an emphasis on major political, economic and social trends.

HIST 312. History Of Russia & Soviet Uni. (3 Credits)
A historical overview of the development of the Russian state, with emphasis on the time period of Communist control under the Soviet Union and the re-emergence of non-communist Russia.

HIST 313. Civil War and Reconstruction. (3 Credits)
A study of the Civil War and its causes as well as the economic, political, and social changes in the South during Reconstruction.

HIST 315. The New South. (3 Credits)
A study of the effects of the Civil War and Emancipation on southern reconstruction, industrialization, and agriculture.

HIST 317. Progress to Depress 1900-1933. (3 Credits)
An intensive study of the United States in the first three decades of the twentieth century, including a consideration of Progressive Reform, World War I, the Twenties, the Crash, and the Depression.

HIST 321. New Deal to Now, 1933 to Pres.. (3 Credits)
A concentrated study of the recent history of the United States, including a consideration of the Depression and the New Deal, the Second World War, the Cold War, Civil Rights struggle, and other domestic developments.

HIST 325. Contemporary American History. (3 Credits)
An intensive study of contemporary topics and analysis of their background and impact.

HIST 327. History Of The Carribbean. (3 Credits)
A history of the political, economic, and social characteristics of the Caribbean region.

HIST 328. America in Two World Wars. (3 Credits)
A study of America's participation in World War I and World War II, the conflicts that marked American's transition to a global superpower.

HIST 333. Reel History. (3 Credits)
This course will focus on how the past is portrayed in visual media, and is thus a class in public history, or how the past is presented in non-academic settings. Subjects will be drawn from multiple nations and cultures and the course will explore presentations of the past from societies across the planet from antiquity to the contemporary period.

HIST 340. African American History To 18. (3 Credits)
This reading and writing intensive course will provide students with an analysis of important issues in African American origins to 1865.

HIST 341. African Amer Hist Fr 1865 To P. (3 Credits)
This reading and writing intensive course will provide students with an analysis of important issues in African American history from 1865 to the present.

HIST 344. Historical Methods. (3 Credits)
This course introduces students to the methods involved in historical analysis, research and writing. Emphasis will be placed on approaches to the study of history, modes of historical writing, interpretation and argument, data collection, analysis and documentation, and style and writing conventions. Students successfully completing this course will be able to write effectively, reason logically, and argue convincingly. This course must be successfully completed before enrolling in HIST 444: Senior Seminar.

HIST 347. Black Voices in American Hist. (3 Credits)
A reading and discussion intensive course that explores the ways in which African Americans have experienced and responded to life in the social, political, and economic spheres of American society.

HIST 348. Islam in African Amer Experien. (3 Credits)
The course explores the origins and connections between Islam and African American culture from colonial times to the present.

HIST 349. HBCU History. (3 Credits)
HIST 349 HBCU History - 3 semester hours Historically Black Colleges and Universities have been a vital instrument in the struggle for liberty, equality, and opportunity for the African American community. This course traces the history of these institutions from their emergence in the nineteenth century, through the challenges they faced during the twentieth century, and their evolving role within African American life and American society generally in the twenty-first century United States.

HIST 350. Native Americans in Early Amer. (3 Credits)
A study of Native Americans in North American from the earliest settlements on the continent until the early nineteenth century.

HIST 352. Black Voices In American Histo. (3 Credits)
A reading and discussion intensive course that explores the ways in which African Americans have experienced and responded to life in the social, political, and economic spheres of American society.

HIST 353. Amer Constitutional History. (3 Credits)
A historical study of the creation of the U.S. constitution, its impact upon American development and society, and the evolution of the document through contemporary history.

HIST 360. Race, Sex and Gen in Amer. HIS. (3 Credits)
This course examines aspects of American history and culture through the intersecting lenses of race, sex, and gender. Topics include the evolution of sex and gender norms, the gendered roots of white supremacism, colonization, and westward expansion, multiple definitions of race in American culture, and changing understandings of sex and sexuality from the colonial era to the present.

HIST 362. WMN, Politics & Amer. Pub Life. (3 Credits)
Women actively contributed to American public life well before winning the vote. Along with the abolitionist, suffrage, civil rights, and other social justice movements, this course examines the ways women have exercised public influence in everyday life. Other topics may include boycotts, public protests, strikes, voluntary associations, and grass-roots organizing. Close attention will be paid to the varied ways race, class, legal status, and gender identity have interacted with women's experiences of public life.

HIST 372. Women's Voices in Wrld History. (3 Credits)
This course takes a topical approach to world history by examining selected eras and events through the lens of women's writings and acts of cultural remembrance. Specifics of place and time period will vary by semester. Topics will also vary by semester but may include war, migration, colonialism, education, social unrest, and political activism.

HIST 380. African Disaporic History. (3 Credits)
An examination of the African diaspora, from its origins in the slave trade to the present day. Topics may include the emergence of diasporic identities, the endurance of African cultural practices and traditions, and the interaction between diasporic people and Africa.

HIST 381. Black Women's History in Ameri. (3 Credits)
A study of black women in both North America and Latin America focusing on comparative historical themes and the changing historical roles of black women in the various parts of the Americas.

HIST 392. Public History. (3 Credits)
This course combines theory and experience to introduce students to the academic and practical aspects of public history. The focus will vary by semester and areas of interest may include museum exhibitions, efforts at historical commemoration, the use of history within various media, and the process of historic site excavation, interpretation, and preservation.

HIST 399. Special Topics In History. (3 Credits)
A temporary and/or topic-specific course with content appropriate for an upperclassman audience.

HIST 401. Colonial America To 1763. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 402. Student Teaching For History. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary history candidates.

HIST 405. Revolutionary Early Nat'L Peri. (3 Credits)
An examination of the founding of the United States from the Revolution through the War of 1812.

HIST 406. Native Americans In Early Amer. (3 Credits)
An examination of the founding of the United States from the Revolution through the War of 1812.

HIST 409. Antebellum America. (3 Credits)
An overview of the United States from 1815 to the outbreak of the Civil War, with an emphasis on major political, economic and social trends.

HIST 413. Civil War And Reconstruction. (3 Credits)
A study of the Civil War and its causes as well as the economic, political, and social changes in the South during Reconstruction.

HIST 415. The New South. (3 Credits)
A study of the effects of the Civil War and Emancipation on southern reconstruction, industrialization, and agriculture.

HIST 417. Progressivism Depression 1900. (3 Credits)
An intensive study of the United States in the first three decades of the twentieth century, including a consideration of Progressive Reform, World War I, the Twenties, the Crash, and the Depression.

HIST 421. New Deal To Now 1933 To Presen. (3 Credits)
A concentrated study of the recent history of the United States, including a consideration of the Depression and the New Deal, the Second World War, the Cold War, Civil Rights struggle, and other domestic developments.

HIST 425. Contemporary American History. (3 Credits)
An intensive study of contemporary topics and analysis of their background and impact.

HIST 426. Methods Materials Teach Soc St. (3 Credits)
Implications of contemporary teaching strategies, educational materials, and instructional designs for cross-disciplinary instruction in history and social studies.

HIST 428. America In Two World Wars. (3 Credits)
A study of America's participation in World War I and World War II, the conflicts that marked American's transition to a global superpower.

HIST 431. History Of Virginia. (3 Credits)
A general course on the development of Virginia and its role in the history of the nation.

HIST 435. American Diplomatic History. (3 Credits)
A comprehensive study of American foreign relations from the colonial era to the present day.

HIST 437. Econ & Bus His Us:Growth Capit. (3 Credits)
A study of the ideas, forces, and people behind the emergence of a capitalist economy in the United States, from the Revolution to the present.

HIST 439. American Constitutional Histor. (3 Credits)
A historical study of the creation of the U.S. constitution, its impact upon American development and society, and the evolution of the document through contemporary history.

HIST 441. Ameri Intellectual Cultural Hi. (3 Credits)
An overview of the major social trends of the various peoples of America, including intellectual, religious, cultural and literary movements.

HIST 443. History Internship. (3 Credits)
Provides students with the opportunity to experience the practice of history through placement in internships with public or private agencies.

HIST 444. Senior Seminar. (3 Credits)
Designed as a capstone course for History majors, the Senior Seminar requires students to demonstrate their historical knowledge and skills through the research, writing, presentation and defense of a seminar paper on a topic approved by the seminar director. Prerequisite/Co-requisite: HIST 344.

HIST 445. Women'S History. (3 Credits)
A study of the significance of women in American history, focusing on the changing historical roles of women in society and the emergence of the women's movement.

HIST 449. History Of The American Wet. (3 Credits)
An examination of the primary events, social movements and historical impact of American migration into the West from the nineteenth century to the present day.

HIST 450. Reel History. (3 Credits)
This course will focus on how the past is portrayed in visual media, and is thus a class in public history, or how the past is presented in non-academic settings. Subjects will be drawn from multiple nations and cultures and the course will explore presentations of the past from societies across the planet from antiquity to the contemporary period.

HIST 451. Black History. (3 Credits)
A study tracing the career of Afro-Americans throughout American history from the African background to present times.

HIST 453. History Of Black Ed In The Us. (3 Credits)
An investigation into the ideologies, methods, and struggles involved in the education of blacks in the United States across time and regions.

HIST 455. Black Protet Twentieth Century. (3 Credits)
An extensive examination of the efforts of Afro-Americans to secure freedom and dignity in twentieth- century America with emphasis on the philosophies and leaders of the major protest organizations.

HIST 459. History Black Religion Exp Ame. (3 Credits)
This course examines the origins and contributions of the black sectarian and established religious experiences in America from the Colonial period to the present.

HIST 461. History Of Africa To 1800. (3 Credits)
Survey of the history of Africa from the earliest times to the end of the 18th century. The course will explode the old myths of Africa as a 'dark continent', and emphasize the internal dynamics of the development of indigenous cultures and civilizations. Africa's contribution to world history, and the significance of external forces as they impacted Africa, especially the slave trade, will be underscored.

HIST 462. History Of Africa Since 1800. (3 Credits)
Survey of the history of Africa since the late 18th century as a background for understanding today's events. The course will examine socio-economic and political developments inside Africa, relations with outside forces, and the increasing European interest in Africa, which paved way for the imposition of European colonialism. The colonial impact and African reactions, decolonization, the post-colonial period and the current problems and prospects of Africa will be studied.

HIST 463. The Rise Of The Atlantic World. (3 Credits)
A study of the how European exploration and trade brought together Europe, Africa and the new World in a commercial relationship culminating in the Atlantic slave trade; the coping mechanisms and the role of Africans in the emergence of new communities around this Atlantic world.

HIST 465. W. Africa Era Of Atlantic Sla. (3 Credits)
A study of the social, political and economic developments inside West Africa in the era of the greatest forced migration in human history. Attention will be paid to the ways in which the slave trade influenced internal developments and impacted societies in West Africa.

HIST 481. Europe 1814-1914. (3 Credits)
An examination of the rise of nationalism and industrialism in Europe during the nineteenth century and the causes of World War I.

HIST 482. Methods/Materials Teach HIST. (3 Credits)
Implications of contemporary teaching strategies, educational materials, and instructional designs for cross-disciplinary instruction in history and social studies.

HIST 483. Europe Since 1914. (3 Credits)
An examination of conditions in Europe since 1914: the rise of dictatorship; the coming of World War II; the defeat of the Axis; the end of European imperialism; and post-war European organization and problems.

HIST 484. Senior Sem inTeaching History. (3 Credits)
A course designed to provide supervision in the content area for pre-service secondary history candidates.

HIST 487. British Empire/Commonwealth. (3 Credits)
A survey of the development of the British Empire from the American Revolution to the Commonwealth of Nations and its place in the Age of Anti-Colonialism.

HIST 489. American Legal History. (3 Credits)
A history of the American legal system from the colonial era to the present, emphasizing the changing nature of the law to reflect American society.

HIST 490. History Internship. (3 Credits)
An opportunity to experience the practice of history through placement in internships with public or private agencies.

HIST 491. The French Revolution. (3 Credits)
An analytical examination of the people and processes of the French Revolutionary period. A special focus of this course will be the study of revolutionary theories developed by social scientists during the last several decades.

HIST 492. American Immigration History. (3 Credits)
A history of immigration to the Western Hemisphere, including a discussion of where the immigrants came , why they came, and how they influenced America after their arrival.

HIST 493. Historical Pathways & Careers. (3 Credits)
HIST 493 Historical Pathways and Careers - 3 semester hours The course introduces students to trending theoretical and practical resources for securing rewarding careers in history. It is designed for history majors and others interested in history careers to align their strengths, talents, scholarly interest, and transferable skills for post-graduation professional school and other career options.

HIST 495. Independent Study In History. (3 Credits)
An open format history course featuring directed supervision of the student in their chosen topic by a designated faculty member.

HIST 497. Historiographical Methods. (3 Credits)
Designed as an elective lead-in course to the capstone course for History majors, Historiographical Methods requires students to complete a major historiographical essay on a topic approved by the professor of record. Prerequisite(s): Student must complete one "basic core" course in history (any course numbered HIST 240-289) and one "advanced core" course in history (any course numbered HIST 340-389) to enroll in HIST 497.

HIST 499. Senior Sem Historical Methods. (3 Credits)
Designed as a capstone course for History majors. Students will work closely with the seminar director on how to apply historical methods to their own primary research. To complete the course, students must successfully write, present, and defend a seminar paper based on original research on a topic approved by the seminar director.

HLTH: Health (HLTH)

HLTH 143. Prin Accident Causation & Prev. (3 Credits)
This course is designed to present an overview of the dimensions of the accident problem with special attention to accident prevention, concepts and theories. Emphasis is placed on student safety and other legal issues, signs, signals, pavement markings, and right-of-away rules; interaction with other highway users (pedestrians, animals, motorcycles, bicycles, trucks, buses, trains, trailers, motor homes, ATVs, and other recreational users); time/space and risk management; alcohol and other drugs and driving; behavior aspects of crash prevention and the natural laws of driving; adverse driving conditions and emergencies; planning ahead for a trip.

HLTH 210. Foundations of Health Science. (3 Credits)
This course is designed to provide students with an introduction to the historical and philosophical perspectives of the development of health science/public health. Major concepts and theories of health and characteristics of public health and health promotion/education are reviewed. Career opportunities in the health field are also explored.

HLTH 250. Functional Anatomy & Lab I. (4 Credits)
The purpose of this course is to investigate the musculoskeletal anatomy of the upper extremities of the human body. Students will explore functional aspects of nerve innervation, vascular anatomy, and function of the cervical spine, nervous system, head, face and upper extremities as it relates to injury, rehabilitation and sport performance. Laboratory session will reinforce lecture content through the applicative process of manual palpation and landmark recognition.

HLTH 260. Functional Anatomy & Lab II. (4 Credits)
The purpose of this course is to investigate the musculoskeletal anatomy of the lower extremities of the human body. Students will explore functional aspects of nerve innervation, vascular anatomy, and function of the Pelvic region, knee, glutes, and lower extremities as it relates to injury and sport performance. Laboratory session will reinforce lecture content through the applicative process of manual palpation and landmark recognition.

HLTH 270. Social Determinants of Health. (3 Credits)
This course introduces students to the impact that environmental conditions and risk factors where peopled are born, live, learn, work, play and worship (Social Determinants of Health), have on health functions and quality of life outcomes. The course will also explore the identification of critical issues arising from long-standing social policies that have disproportionately created health inequities among underserved populations.

HLTH 274. Sports Nutrition. (3 Credits)
This course is designed to provide an overview of nutrient use in exercise and athletic performance. The course includes a thorough review of current literature in Sports Nutrition as it pertains to the enhancement and rehabilitation of athletic performance and injuries. Topics include, nutrient requirements for optimal performance, behavioral strategies for improving dietary habits, and pre and post season nutrient requirements. Upon course completion students will be eligible for the ACSM sport nutrition certification.

HLTH 311. Special Topics in Health. (3 Credits)
This course provides opportunities for students to pursue topics of interest in Health beyond those accessible via the standard curriculum. The application of content to authentic situations is stressed.

HLTH 330. Drug Use & Drug Abuse Educatio. (3 Credits)
This course will discuss the different categories of drugs and explain their routes of administration. Patterns of illicit drug use, misuse, and abuse, including who uses illicit drugs and abuse of controlled substances and why they use them, will also be addressed. The legal, social, financial, and personal impact of drug abuse will be addressed.

HLTH 337. Health Practicum. (3 Credits)
Provides various opportunities for the professional student to work with individuals and groups in a variety of settings. These opportunities shall include observation and/or participation in health related activities in school and/or community locations.

HLTH 340. Community Health. (3 Credits)
Designed to cover community health issues relating to foundations and organizations of public health. It includes the study of community health organizations and programs, epidemiology and disease control, environmental health, community and occupational safety and health, the health care system, aging, and other community health issues.

HLTH 342. Contemporary Health Issues. (3 Credits)
Designed to meet the educational needs and interests of students through a study of contemporary health issues. Specific topics relevant for today's society will be determined and covered including women's health concerns, nutrition and nutritional disorders, pre-menstrual syndrome, sexually transmitted diseases, domestic violence, child abuse, rape, and cancer. Cardiovascular diseases and others may also be included.

HLTH 343. Cultural Diversity HLTH Counse. (3 Credits)
This course focuses on health traditions of culturally diverse clients and how those traditions must be considered during effective patient education. The course will move from the general health traditions of world populations and religions, to the more specific behaviors and expectations of U.S. populations.

HLTH 346. School & Community Health Prog. (2 Credits)
This course demonstrates the organization and administration of comprehensive school and community health programs. Topics include: student safety, child abuse, and other legal issues, health services, instruction, program planning and assessment, the role of administration in comprehensive school health, personal health and fitness, active lifestyles and health, environmental, mental and emotional health, family disruptions, nutrition, tobacco, alcohol and other drugs, school and consumer health, and disease prevention and treatment. An overview of the knowledge, skills, and processes needed to teach school health on the elementary, middle, and secondary levels is also provided.

HLTH 347. First Aid Emergency Medical Ca. (2 Credits)
Lectures and demonstrations on first aid measures for wounds, hemorrhages, burns, exposure, sprains, dislocations, fractures, unconscious conditions, suffocation, drowning, and poisons, with skill training in all procedures. Emphasis will be given to the following areas: safety and other legal issues, activating emergency medical services, safety and emergency care (first aid, CPR, AED, universal precaution), injury prevention, rehabilitation, an understanding of the basic content knowledge needed to teach first aid, and the structure and function of selected body systems. Successful completion of this course may lead to certification by the American Heart Association or the American Red Cross in First Aid and Cardiopulmonary Resuscitation.

HLTH 348. Directed Research. (3 Credits)
This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging health problems and issues in the health care industry.

HLTH 349. Scientific Readings In Health. (3 Credits)
A course that provides comprehensive knowledge, understanding and concepts in various areas of health.

HLTH 440. Human Reproduction/Sexual Deve. (3 Credits)
This course is intended for majors in Health and Physical Education and others who will use knowledge of the subject matter covered in their professional work. Anatomy and physiology of male and female reproductive systems; psychosocial sexual development, sources of sexual outlet; and family planning relationships are among discussion topics.

HLTH 441. HLTH Teach Methods & Materials. (3 Credits)
Fundamental methods of health teaching as applied to school and public health education. Materials applicable to health education, evaluation techniques, preparation of health training units and bibliographies, and surveys of current literature in the field of health education are presented and/or researched.

HLTH 443. Epidemiology & Biostatistics. (3 Credits)
This course emphasizes the goals and objectives of epidemiology, its policy and procedure, and its foundation and support in health care information are the focus of this course. Investigation of an epidemic, measures of mortality, incidence and prevalence, measures of risk, biological variability, probability, screening, sampling, statistical significance, correlation, multiple regression, survival analysis, retrospective and prospective studies.

HLTH 445. Driver Ed Instruc'L Principles. (3 Credits)
This course is designed to provide an analysis of the rules and regulations governing driver education in the Commonwealth of Virginia with application to program organization and administration, and the development and conduct of learning experiences in the classroom and laboratory. It also provides a guide for teachers, supervisors, and administrators in the organization, administration and planning of a driver and traffic safety curriculum.

HLTH 447. Needs Assess & Plan HLTH Promo. (3 Credits)
Principles of program planning in public health education, including needs assessment, health hazard appraisal, community analysis and organization, selection of program topics, coordination of health education and health promotion programs in school, community, occupational or clinical settings, audience analysis, task analysis, and the role of evaluation.

HLTH 450. Instruc'L Strategies Health Ed. (3 Credits)
Application of innovative strategies for teaching health education in the elementary, middle, and secondary school level. Attention is given to conceptualizing instruction, specifying instructional objectives, planning properly written units and lessons, utilizing various instructional methods, selecting and using instructional materials, and evaluating teaching effectiveness and technology. Topics include personal health and fitness-related issues such as: mental and emotional health, healthy social development skills, basic consumer, environmental and school health, nutrition, tobacco, alcohol and other drugs, basic disease prevention and treatment strategies, and the relationship between a physically active lifestyle and health.

HLTH 451. Independent Study I. (3 Credits)
This course provides an opportunity for students to work independently on health related topics approved under the guidance of an instructor.

HLTH 471. Internship Seminar. (1 Credit)
This course involves observation and practice of leadership in a supervised health organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth.

HLTH 472. Internship. (3 Credits)
Supervised work experience under expert guidance at approved sites provided for the prospective professional in Health. Emphasis is on various individual and group opportunities in health agencies, involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally.

HMGT: Hospitality Management (HMGT)

HMGT 101. Introd Hospitality Management. (3 Credits)
A historical overview of the hospitality and tourism industry and its economic significance. Forms of organization and development, theories; trends and issues will be explored. Students will be exposed to professional opportunities and leadership development through involvement of industry executives and field trips.

HMGT 102. HMGT Mgmt Prof Development. (3 Credits)
This is the first in the series of courses designed to provide exposure to the competencies required for success in the hospitality industry. The focus will be on improving the "soft skills" of the undergraduate in preparation for careers in the industry. Content includes, but is not limited to; Realities of the workplace, professional code of conduct, business and dining etiquette, dress code for success, field trips and HMP association membership mandatory. Sections offered in the second semester of the freshman year. Prerequisites: HMGT 101 Introduction to Hospitality Management.

HMGT 107. Food Sanitation And Safety. (3 Credits)
This course introduces the basic principles of food sanitation and safety and their relationship to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of food sanitation and safety in the hospitality industry.

HMGT 111. Professional Development. (1 Credit)
This is the first in the series of courses designed to provide exposure to the competencies required for success in the hospitality industry. The focus will be on improving the "soft skills" of the undergraduate in preparation for careers in the industry. Content includes, but is not limited to; Realities of the workplace, professional code of conduct, business and dining etiquette, dress code for success, field trips and HMP association membership mandatory. Sections offered in the second semester of the freshman year. Prerequisites: HMGT 101 Introduction to Hospitality Management.

HMGT 200. Tourism Management. (3 Credits)
A survey of travel and tourism concepts and management tools in the United States and internationally. Emphasis will be placed on terminologies, demographics, economics, socio-cultural and environmental impacts of travel and tourism, and the industry's management issues in a global context. Prerequisites: HMGT 101 Introduction to Hospitality Management.

HMGT 201. Hospitality Technology Applic. (3 Credits)
A survey of travel and tourism concepts and management tools in the United States and internationally. Emphasis will be placed on terminologies, demographics, economics, socio-cultural and environmental impacts of travel and tourism, and the industry's management issues in a global context. Prerequisites: HMGT 101 Introduction to Hospitality Management.

HMGT 203. Lodging Management. (3 Credits)
Study of the fundamental processes underlying the operation of lodging facilities, an analysis of all lodging brands, ratings, and classifications. The operation of the front office is emphasized and its relationship to guest service, reservations, housekeeping, coordination, maintenance of the folio, computer applications, and procedures needed for night auditing. Particular emphases are on selling strategies of forecasting, rate efficiencies, and guest relations. Prerequisites: HMGT 101 Introduction to Hospitality Management.

HMGT 211. Professional Development. (1 Credit)
This is second in the series of courses designed to provide exposure to the competencies required for success in the hospitality industry. They will focus on improvement of the "soft skills" of the undergraduate in preparation for careers in the industry. Includes, but is not limited to, professional conduct, guest lecture series, social etiquette, community service, dress code, student presentations. Resume writing and interviewing skills and industry lecture series and mentoring, field trips and professional association memberships required. Sections offered in the second semester of the sophomore year. Prerequisites: HMGT 111 Professional Development.

HMGT 221. Principles Of Food Preparation. (3 Credits)
Study of the fundamental processes underlying food selection, preparation and preservation with practical selection application through laboratory experiences. Emphasis is on the composition and properties of food, food handling to retain nutrients, standards for acceptable products and food costs. Laboratory supplies are required. Prerequisites: HMGT 101 Introduction to Hospitality Management HMGT 107 Food Sanitation and Safety.

HMGT 223. Introd to Baking & Pastry. (3 Credits)
Lecture and production of basic breads and rolls, desserts and pastry creations. Covers proofing, baking temperatures, muffins, quick breads, cakes, cookies and pies. Use of liquid measurements, scales, and equipment identification. Prerequisites: HMGT 107 Food Sanitation and Safety.

HMGT 299. Internship In Hospitality Mgmt. (1 Credit)
Designed to provide sophomore students with a developmental approach to on the job experiences in a hospitality facility/setting under a qualified supervisor. It may be done during the summer or during semesters following the sophomore year. 160 clock hours required. Prerequisites: HMGT 101 Introduction to Hospitality Management HMGT 102 Professional Development.

HMGT 300. International Study Tour. (3-6 Credits)
ELECTIVE: The international Study Tour is designed to add another level of experiential learning to the hospitality management curriculum. This course will use the world as a classroom for the education of the HMP student through travel and explorations. Tours will be arranged to a variety of tourist destinations to allow for exposure to a wide range of experiences. Prerequisites: HMGT 101 Introduction to Hospitality Management HMGT 200 Tourism Management.

HMGT 301. Lodging Operations Management. (3 Credits)
A course designed to show emphasis on the highly complex nature of the housekeeping department. It provides students with the managerial tools needed to handle this function with professionalism. It involves studies of the challenges associated with logistics and quality controls and purchasing to ensure efficiency in operation as well as customer satisfaction. Requires heavy usage of property management systems, (PMS). Prerequisites: HMGT 203 Lodging Management.

HMGT 302. Catering And Event Management. (3 Credits)
ELECTIVE: This course will focus on two major areas: Off-premise and on premise catering for social and business functions, and the management of large scale, special events, such as sporting events and artistic performances. A significant portion of the class will be dedicated to catered function and special events planning, design, and execution. Other topics will include: organizational structure, legal aspects of catering and special events management product and service development, marketing and sales, staff development, post-event analysis and evaluating the financial success of catering and special event business. Prerequisites: HMGT 107 Food Sanitation and Safety HMGT 221 Principles of Food Preparation.

HMGT 303. Hospitality Law And Ethics. (3 Credits)
Examination of laws and regulations which exert control on foodservice, lodging and tourism industries. Local, state and federal laws applicable to the operation of the hospitality industries will be analyzed. The innkeeper / guest relationship and liability issues impacting ownership and management of employees will also be examined. Bailment, agency and contracts are presented in the context of the hospitality and tourism enterprises. Prerequisites: HMGT 101 Introduction to Hospitality Management HMGT 200 Tourism Management.

HMGT 304. Food And Beverage Controls. (3 Credits)
An analysis of factors and techniques used to control food cost and generate revenues. This course addresses requisite competencies related to the application of cost control systems and the development and implementation and evaluation of such mechanisms. Includes inventory and supplies management. Prerequisites: HMGT 221 Principles of Food Preparation.

HMGT 305. Hospitality Management Contrac. (3 Credits)
ELECTIVE: A critical analysis of the negotiation and administration of hospitality management contracts. Topics include contracts, risks and their advantage and disadvantages; owner and ethical issues during negotiation and administration of the contract, and the future role of contract use. Prerequisite: HMGT 303-Hospitality Law and Ethics.

HMGT 306. Financial Analysis And Plannin. (3 Credits)
ELECTIVE: An examination of the techniques of financial analysis and planning, with discussions on the tax environment, profit planning and forecasting, budgeting, capital budgeting techniques and cost- of - capital determinations. Prerequisite: NBAC 201 Accounting for Non-Business Majors.

HMGT 310. Security/Loss Prevention Mgmt. (3 Credits)
ELECTIVE: This course will constitute the development of security and loss prevention programs. It examines risk management and security processes and insurance details from a lodging perspective and looks at security equipment, technology and the overall protection of guests, employees and physical assets of the property. Prerequisites: HMGT 201 Hospitality Application Technology HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 311. Professional Development. (1 Credit)
This is the third in the series of courses designed to provide exposure to the competencies required for success in the hospitality industry. They will focus on improvement of the “soft skills” of the undergraduate in preparation for careers in the industry. Includes, but is not limited to, professional conduct, guest lecture series, social etiquette, community service, dress code, student presentations. Community service project, hospitality operations analysis, professional association membership required. This section is offered in the second semester of the junior year. Prerequisites: HMGT 211 Professional Developments.

HMGT 320. Tourism Development. (3 Credits)
ELECTIVE: Relationship of economic theory and planning principles, processes, and policies of sustainable tourism development; application of pre-feasibility analysis to tourism development projects. Special emphasis placed on economic, socio-cultural and environmental trends in tourism development. This course requires extensive interaction with tourism organizations through field trips, guest lectures and cooperative projects. Prerequisites: HMGT 200 Tourism Management ECON 210 Principles of Microeconomics.

HMGT 321. Service Management. (3 Credits)
ELECTIVE: An evaluation of the service industry, history, current status, trends and futurism. Students will develop a deep understanding of the management principles and challenges unique to the service industries. Emphasis will be placed on the characteristics and operations of service delivery systems, management and organizations. The main course goal is to develop critical analytic skills and knowledge needed to implement service strategies for competitive advantage. Prerequisites: HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 322. Meal Management. (3 Credits)
Menu development, styles of meal service, table appointments, food presentation, meal planning and service. Emphasis is given to the economics, efficiency and aesthetics of meal service. Menu planning and cost analysis of menus required, marketing of goods and services are key components. The operation of M & M Restaurant, the Trojan Room (faculty dining room) and/or childcare meal preparation are required. Laboratory supplies needed. Prerequisites: HMGT 107 Food Sanitation and Safety HMGT 221 Principles of Food Preparation.

HMGT 324. Introd to Beverage Service. (3 Credits)
An introduction to beverages; this course provides specialized training for students interested in pursuing management careers in the food and beverage industry. Lecture topics will include what the consumer needs to know to purchase wine in retail outlets and in a restaurant setting, pairing wine with food, responsible drinking, selecting quality wines and wine etiquette. Different types of alcoholic and non-alcoholic beverages, coffee, tea and water will be evaluated in a controlled environment. This course is restricted to hospitality majors / minors and will be conducted at onsite and off-site locations. Prerequisites: HMGT 221 Principles of Food Preparation HMGT 304 Food and Beverage Control HMGT 322 Meal Management.

HMGT 325. Culture and Cuisine. (3 Credits)
ELECTIVE: An introduction to world cooking techniques including braising, stewing, grilling, and roasting. Lectures and demonstrations revolve around European, North, Central, and South American cuisine, ingredients and plate presentations and service. Prerequisites: HMGT 221 Principles of Food Preparation HMGT 322 Meal Management.

HMGT 326. Garde Manger. (3 Credits)
ELECTIVE: Students will be introduced to traditional and modern preparation techniques of cold entrees, pates, terrines, and galantines. Students plan, organize and set up buffet displays. The course concentrates on the practical techniques of platter presentation and management of related equipment and service ware. Prerequisites: HMGT 107 Food Sanitation and Safety HMGT 221 Principles of Food Preparation.

HMGT 330. International Hospitality Mgmt. (3 Credits)
This course is designed to provide students with basic understanding of international hospitality management and operations. It presents an overview of the historic perspectives of globalization, tourism and the lodging sector. Students will investigate the emergence of international hotels and their classifications and standards. Cultural diversity, human resources, marketing and global competition, politics of travel, trends in investment and financing international hotel projects will be addressed. Students taking this class are required to participate in one International Study Tour. Prerequisites: HMGT 200 Tourism Management, HMGT 203 Lodging Management.

HMGT 333. Quality Management. (3 Credits)
ELECTIVE: Thiscourseexploresthe concepts of total quality management and various quality measurements indices in relationship to high performance organizations. Concepts such as ISO9000, Malcolm Baldridge, continuous improvement, empowerment, goal setting, conflict management, change management and diversity will be addressed. Prerequisites: HMGT 201 Hospitality Application Technology HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 349. Hospitality Mgmt Internship I. (3 Credits)
This is a continuation of the internship series to be taken after completion of sophomore year. Students will be in the employ of a hospitality business and rotate throughout at least three departments / area over the term of the internship. This will allow the students practical application of concepts learned in class and exposure to the different facets of this diverse global industry. Prerequisite: HMGT 101 Introduction to Hospitality Management.

HMGT 350. Gaming & Cruise Ship Operation. (3 Credits)
ELECTIVE: The cruise course will present an introduction to the cruise line and gaming industry. It will address the history and development of cruises and distinguish between sea based and land-based operations and provide information on the cruise sales, marketing and operations. Gaming will include the development of gaming, a survey of gaming destinations and casino management and examines gaming as a social phenomenon, its legal issues and economic impact. Prerequisites: HMGT 201 Hospitality Application Technology HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 399. Hospitality Mgmt Internship II. (3 Credits)
Internship for students in HMGT to be taken during the summer or the semester following the completion of the junior year. Designed to provide junior level students with decision making and experiential learning experiences in a hospitality industry. 480 clock hours are required. Prerequisite: HMGT 299 Hospitality Management Internship I HMGT 349 Hospitality Management Internship II and all junior HMGT courses.

HMGT 400. Rooms Division Management. (3 Credits)
Design of a business plan and evaluation of business performance based on quality measurement indicators. This course integrates the concepts of management with the development of communication skills and decision making practices in the rooms division. Emphasis is placed on the development of management personnel in hospitality operations and techniques of financial planning and property analysis. Prerequisites: HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 402. Hospitality Human Resources Mg. (3 Credits)
Students obtain working knowledge of the terminology, concepts and procedures used by hospitality managers in developing information and making decisions relevant to forecasting and controlling human resource requirements. Major topics: staff planning, budgeting, scheduling and payroll, control collective bargaining consideration, productivity, human behavior, job design, recruitment, selection and retention system. Prerequisite: Senior standing HMGT 303 Hospitality Law and Ethics.

HMGT 404. Hospitality Accounting & Purch. (3 Credits)
Essentials of hospitality accounting controls from both the operational and corporate perspectives. Practice with typical methods of costing, rational analysis found in the hospitality industry as well as computer applications are included. Specific topics include: uniform system accounts, revenue and expense tracking, cost controls, comparative analysis and management of the purchasing function. Prerequisite: ACCT 201 Introductory Accounting I.

HMGT 407. Conference & Exposition Mgmt. (3 Credits)
A course designed to provide students with a basic understanding of the scope and processes of meetings, conferences and exposition/exhibition management. Students will be required to research, design, plan, coordinate, and evaluate both professional domestic and international conferences and expositions. This will include roles in budgeting, operations and evaluation of conference services. (Note: Industry professionals will be featured speakers). Prerequisites: HMGT 203 Lodging Management, HMGT 303 Hospitality Law and Ethics, or Junior standing.

HMGT 409. Hospitality Facility Plan Mgmt. (3 Credits)
The scientific principles and regulations guiding the layout and design for efficient management of hotels, restaurants and institutional facilities. Management and organization of facility operations and preventive maintenance, as well as energy management programs will be emphasized. Prerequisite: HMGT 203 Lodging Management.

HMGT 420. Resort Management. (3 Credits)
The study of principles and practices of the management procedures and leadership role in resorts and private clubs. This course provides a comprehensive approach to the operation of a resort with entertainment and recreational facilities. Vacation ownership, condominium concept and current trends and developments in resort developments will be addressed. Prerequisites: HMGT 400 Rooms Division Management.

HMGT 430. Revenue Mgmt & Strategic Plan. (3 Credits)
This course examines the principles of yield management from a strategic planning standpoint. Factors including yield management techniques and strategy formulation, content development, implementation, and evaluation in diverse hospitality operations. Prerequisites: HMGT 400 Rooms Division Management HMGT 404 Hospitality Accounting and Purchasing.

HMGT 432. Advanced Food Prep. (3 Credits)
Students are introduced to more in depth cooking techniques, preparatory skills, and inventory evaluation. Lecture, demonstration and production focuses on store room procedures, inventory systems, meat butchery and plate presentation. Prerequisites: HMGT 221 Principles of Food Preparation HMGT 304-Food and Beverage Control HMGT 322-Meal Management.

HMGT 433. Quantity Foods. (3 Credits)
Study and practice in planning, purchasing, preparing and serving food in quantities, calculating the cost of portions and meals for large groups, and calculating profit and loss statements given the operations of special enterprises. Laboratory supplies, project planning, organizing, implementation and evaluation are required. Prerequisite: HMGT 322 Meal Management.

HMGT 435. Org'L Leadership Mgt, Decision. (3 Credits)
This course provides students with the tools necessary to succeed in the dynamic and ever -changing global hospitality industry. Includes focus on the principles of management and leadership, total quality management (TQM) and empowerment models in the hospitality industry. Quantitative aspects of management and internal controls will be addressed, with an overview of managerial and financial concepts used in the decision-making process. Prerequisite: HMGT 402 Hospitality Human Resources Management HMGT 404 Hospitality Accounting and Purchasing.

HMGT 440. Contemp Issues in HGMT. (3 Credits)
ELECTIVE: This course is a study of current trends and issues facing the hospitality industry. Students will participate in active research of current interest topics and community based service learning projects. Prerequisites: HMGT 201 Hospitality Application Technology HMGT 203 Lodging Management HMGT 301 Lodging Operations Management.

HMGT 444. Hospitality & Tourism Research. (3 Credits)
ELECTIVE: Exposition of quantitative and qualitative hospitality and tourism research methods and their applications to lodging, foodservice and tourism management. Primary emphasis on how survey research methods can be used to generate the information needed to improve management and marketing decisions. Prerequisites: HMGT 200 Tourism Management HMGT 203 Lodging Management HMGT 435 Organizational Leadership & Management Decision-Making STAT 210 Elementary Statistics.

HMGT 449. Hospitality Marketing Manageme. (3 Credits)
An overview of the design and delivery of a marketing plan, concepts and techniques employed in marketing hospitality and tourism industry services to achieve guest satisfaction and competitive distinctiveness. Probes will be made into the techniques of evaluation and the analysis of service marketing, and its application to the hospitality and tourism industries. Prerequisite: HMGT 303 Hospitality Law and Ethics and Junior standing.

HMGT 450. Senior Seminar. (3 Credits)
A capstone course designed to apply technical, human and conceptual knowledge to solve current problems related to the hospitality industry. The course includes activities that will allow students to study and analyze critical requirements of the hospitality industry. Current issues related to managing and measuring service quality, current concepts and leadership qualities are the major emphasis. There will be a strong research component where the student will be required to conduct research and produce findings in the form of a report and presentation in a formal setting, typical of the hospitality business profession. Prerequisite: Senior Standing.

HMGT 455. Independent Study in HMGT. (1-6 Credits)
This course will allow the working Hospitality Management senior to complete the graduation requirements independently in an emerging and/or state-of-the-art hospitality or related area by investing a problem or topic of interest in his/her area of specialization. Prerequisite: Senior Standing.

HMGT 499. Hospitality Management Seminar. (3 Credits)
ELECTIVE: Exploration of three topics: Managing and Measuring Service Quality, Current Trends in Hospitality Administration and Leadership in the Hospitality Industry. Cases studies, decision-making simulations are used as critical to Exploration of three topics: Managing and Measuring Service Quality, Current Trends in Hospitality Administration, and Leadership in the Hospitality Industry. Case studies, decision-making simulations are used as critical tools to learning and application. Prerequisite: All required HMGT courses.

HORT: Horticulture (HORT)

HORT 253. Vegetable Production. (3 Credits)
A study of commercial vegetable production with special emphasis on large-scale production, harvesting, and marketing vegetables. Some home garden techniques will be studied.

HORT 340. Landscape Design. (3 Credits)
A study of commercial vegetable production with special emphasis on sustainable approaches to produce, harvest and market different vegetable crops. Students are taught hands-on techniques for vegetable production and harvesting. Prerequisite: A 100-level science course with a grade of C or higher.

HORT 350. Vegetable Production. (3 Credits)
A study of commercial vegetable production with special emphasis on sustainable approaches to produce, harvest and market different vegetable crops. Students are taught hands-on techniques for vegetable production and harvesting. Prerequisite: A 100-level science course with a grade of C or higher.

HORT 351. Small Fruit Crop Management. (3 Credits)
A study of the principles and practices underlying small fruit crop management, which includes the berry type fruit species of blueberry, blackberries, raspberries, grapes, and strawberries. Covers production systems, water and nutrient management, propagation, pruning, post-harvest handling, marketing and human health benefits.

HORT 352. Plant Materials I. (3 Credits)
study and identification of perennials, biennials and annuals for ornamental planting and planting plans. Special emphasis will be on the flower and leaf as a means of identification.

HORT 353. Plant Materials II. (3 Credits)
A study and identification of trees, shrubs and vines for general ornamental planting. Planting plans, sketches and written reports required. Tree and shrub identification will be emphasized.

HORT 440. Theory Of Landscape Design. (3 Credits)
Economic and aesthetic theory of design, taste, character historic styles and composition; natural elements in design; planting design. Students will be required to use various theories in planting designs.

HORT 444. Commercial Floral Arrangement. (3 Credits)
Essentials of flower arrangement, the commercial flower shop; sources of supplies and sales. Emphasis will be on techniques, fundamental skills and methods used when creating modern commercial designs.

HORT 446. Greenhouse Crops & Management. (3 Credits)
Principles of greenhouse operation, propagation, ventilation, heating, watering, fumigation, soil sterilization and potting. Emphasis will be placed on practical application of several management procedures.

HORT 448. Problems In Landscape. (3 Credits)
Investigations in landscape gardening by advanced students. Conferences and reports are required. Landscape designs and landscape plans will be a part of this course. Investigations must be modern problems of the landscape industry.

HORT 449. Plant Propagation & Nursery Pr. (3 Credits)
Methods of propagating plants, nursery organization and techniques. Emphasis will be placed on a complete up-to-date coverage of all phases of plant propagation from a theoretical and an applied aspect.

HORT 450. Problems In Horticulture. (3 Credits)
Investigations in horticultural problems by advanced students. Conferences and reports are required. Investigations by students must be modern concerns of the horticultural industry.

HPER: Health,Physical Educ,Rec (HPER)

HPER 160. Team Sports/Wellness. (1 Credit)
This course is designed to provide students with the development of basic skills and abilities needed to perform a variety of team sports and their relationship to personal health, wellness, and physical activity.

HPER 162. Team Sports II/Wellness. (1 Credit)
A continuation of HPER 160, this course is designed to provide students with the development of basic skills and abilities needed to perform a variety of team sports and their relationship to personal health, wellness, and physical activity.

HPER 165. Personal Fitness. (1 Credit)
Introductory level course designed to assist students with the development of lifetime fitness programs. Content includes the integration of personal health-related (flexibility, strength, aerobic endurance, body composition) and skill-related (coordination, agility, power, balance, speed) fitness components.

HPER 166. Beginning Swimming/Wellness. (1 Credit)
This course is designed for non-swimmers to equip students with basic water skills and knowledge needed to make them reasonably safe while in, on, or about the water. Satisfactory completion of this course enables the student to meet the requirements for the American Red Cross Beginner Swimming Certificate.

HPER 167. Intermediate Swimming/Wellness. (1 Credit)
Refine five basic strokes; development of endurance; drown proofing and water safety techniques; standing and running dives, and the relationship of swimming skills to personal health and fitness. This course is designed for the student who has passed beginning swimming or who already possesses beginner swimming skills.

HPER 169. Gymnastics Wellness. (1 Credit)
A basic course in gymnastics designed to assist students in acquiring fundamental skills in stunts, tumbling, and selected apparatus, and their relationship to personal health and fitness.

HPER 170. Health And Wellness. (2 Credits)
Health encompasses all aspects of an individual's wellbeing. School, work, relationships, social, and family responsibilities are all affected by the quality of health. This course is designed to help participants establish lifestyles that can lead to better health.

HPER 171. Lifetime Sports/Wellness. (1 Credit)
Development of fundamental skills and knowledge of rules needed to perform a variety of individual sports and their relationship to personal health and fitness.

HPER 172. Lifetime sports II Wellness. (1 Credit)
A continuation of HPER 171, this course is designed to provide a development of fundamental skills and knowledge of rules needed to perform a variety of individual sports and their relationship to personal health and wellness.

HPER 180. Fitness Walking. (1 Credit)
This course focuses on the fundamentals of walking and its benefits to increased health and wellness. Students will participate in walking activities and explore the physiological and psychological benefits of walking.

HPER 181. Golf. (1 Credit)
A practical course designed for students with little or no golf knowledge. The course involves activities to teach students the basic golf terms, rules, etiquette and techniques for the full swing, putting, chipping, and pitching, as well as playing on a golf course.

HPER 182. Skills/Field Experience Coach. (1 Credit)
The coaching practicum involves three separate practicum experiences (softball, baseball, basketball, soccer, tennis, etc.) and is designed to provide the student with a realistic experience in a setting and level similar to that in which he/she wishes to obtain employment. The practicum experience is a 50 hour learning opportunity in which the student assist in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present.

HPER 183. Weight Training I. (1 Credit)
This course addresses the selection and implementation of strength, power, speed, agility, endurance, and hypertrophy training methods. Components include discussions of physiological principles and strength assessment as they relate to resistance training and safe training practices.

HPER 184. Weight Training II. (1 Credit)
This course addresses advanced exercise assessment techniques and integrated functional exercise modalities that can be used to enhance performance in sport. Components include discussions of biomechanical, neuromuscular, and physiological principles as they relate to functional exercise training for sport.

HPER 187. Soccer. (1 Credit)
This course reviews the basic elements of soccer including dribbling, kicking, passing, trapping, tactics, and strategy and prepares the player for competitive game. Applies skills-training to competitive and recreational play. Covers strategies of offense and defense and variation of different systems of play.

HPER 188. Beginning Tennis. (1 Credit)
An introductory course teaching the fundamental skills of tennis. Basic strokes; the forehand and the backhand drives, the flat serve, volley, lob, and smash; history, rules, scoring, and court etiquette. Basic singles and doubles court play and game strategies. In addition, warm-up and cool-down procedures, as well as conditioning and nutrition for sport participation are covered.

HPER 190. Aqua Aerobics. (1 Credit)
This course is designed to provide students with the knowledge, skills, and abilities needed to develop proper water aerobics form and techniques and to explore the benefits of water aerobic exercise. The proper of use of water aerobics exercise equipment is also explored.

HPER 191. Flag/Touch Football. (1 Credit)
Teaches skills, content knowledge, and historical perspectives of flag football to include skill progression, strategies, officiating, and authentic assessment.

HPER 192. Basketball. (1 Credit)
Introduces the basic elements of basketball, including dribbling, passing, shooting, tactics, and strategy in game play.

IDST:Interdisciplinary Studies (IDST)

IDST 100. Analytical Reading & Reasoning. (2 Credits)
This course seeks to aid pre-candidates in the refinement and enhancement of learning strategies related to the Praxis I skills assessment. Reading, Writing and Mathematics instruction will focus on strategies to decode information from multiple disciplines. Reading activities include literature taken from Humanities, Social Sciences, Science and Technology. Writing activities are focused on responding to a variety of prompts from multiple disciplines and construction of appropriate essays. Mathematics activities will focus on problem solving and applying critical thinking skills. Students who are successful in passing Praxis I will not be required to take IDST 101.

IDST 101. Analytical Reading/Reasoning 2. (2 Credits)
This course is a continuation of IDST 100. Pre-candidates will continue to focus on skill development related to passing Praxis I. Instruction will be divided by assessment components and will utilize small group and individualized instruction to provide a more focused experience to improve test taking and time management skills related to standardize testing.

IDST 200. Digital Media Teacher Educatio. (3 Credits)
A variety of instructional media; such as DVD Disc, Digital imagery, Computer Assisted Instruction and personal productivity tools are presented in this course. The emphasis will be on systematically enhancing the teaching-learning process with multi-media instruction and effective computer usage. The course will focus on the basic operation of the computer and the utilization of computers to aid instruction and productivity in the classroom. Candidates will be given the opportunity to reflect upon the most effective and efficient uses of various technologies for individual students, groups of students, and for their own personal use in the classroom. They will be expected to create certain types of software, presentations and materials to achieve instructional goals and objectives. The course is intended for juniors in the School of Education.

IDUP: Interd'ply University P (IDUP)

IDUP 270. Introduction To Africana Stud. (3 Credits)
This course examines the various disciplinary and theoretical approaches to Africana Studies and its development as a field of scholarly inquiry. Through fiction and nonfiction, students will explore topics that will include Africa and its place in the world community, the Atlantic slave trade, nationalism, Pan- Africanism, Afro centricity, and the roles of race, gender, and class in shaping the experiences of people of African descent in African and the Diaspora. Prerequisites: ENGL 110 Composition I, ENGL 111 Composition II.

IDUP 371. Study Abroad In Africa. (3-6 Credits)
An individually designed and planned learning experience at an African university.

IDUP 470. Special Topics Africana Studie. (3 Credits)
In-depth study of a selected topic in the literatures and/or languages of Africa and/or the African Diaspora. Topics will vary from semester to semester. Prerequisites: ENGL110 Composition I, ENGL 111 Composition II.

Individualized Studies (INDS)

INDS 295. Internship I. (1-6 Credits)
INDS 295 offers lower-division students an opportunity to gain real-world work experience related to their academic program. This course supports the University's Work-Based Learning requirement and is open to students of all majors. Under faculty and workplace supervision, students engage in workplace tasks that enhance academic learning, build foundational professional skills, and contribute to career exploration. Students are required to complete reflective assignments and maintain documentation of their internship experience.

INDS 301. Experiential Learning Seminar. (1 Credit)
This course is required only for students seeking credit for learning from life/work experience. This course is optional. Advisor permission to enroll is required.

INDS 302. Individual Studies Career Sem. (3 Credits)
The Individualized Studies Careers Seminar with Workforce Credential is an eight-week course designed to prepare students in the Bachelor of Individualized Studies program for successful transition into the workforce. This course will focus on career exploration, professional development, and acquiring a workforce credential relevant to the student's career goals. Students will engage in activities, workshops, and projects aimed at enhancing their job readiness and competitiveness in the job market. This course will include completion of a professional workforce credential from a university affiliated provider.

INDS 495. Internship II. (1-6 Credits)
INDS 495 offers upper-level students (juniors and seniors) an advanced opportunity to gain specialized, hands-on professional experience. Building on skills from Internship I, this course deepens students' engagement with their field, requiring them to tackle more complex tasks, apply higher-order skills, and contribute strategically to their internship site. Supervised by a mentor and faculty advisor, students complete reflective assignments, a capstone project, and a final presentation.

INDS 499. Senior Research Project. (3 Credits)
Senior Research Project (An independent research project, which builds upon the student’s area of specialization and serves as a culminating experience.)

INDS 499A. Senior Capstone in INDS. (3 Credits)
This course is a continuation of INDS499A. Advisor preapproval is required to register for this course. The Senior Capstone in Individualized Studies emphasizes problem-solving and critical thinking through project-based learning. This course will focus on project planning, execution, evaluation, and presentation, culminating in the completion of a comprehensive capstone project. Students will work closely with a faculty advisor to develop the project plan and design to demonstrate their mastery of interdisciplinary knowledge and skills acquired throughout academic journey. Emphasizing creativity, critical thinking, and practical application, this project allows students to delve deeply into an area of personal passion and academic interest. Students will synthesize their learning from various disciplines and create a unique, multifaceted project that showcases their academic, professional, and personal growth.

INDS 499B. Senior Capstone in INDS. (3 Credits)
This course is a continuation of INDS 499A. Advisor preapproval is required to register for this course. The Senior Capstone in Individualized Studies emphasizes problem-solving and critical thinking through project-based learning. This course will focus on project planning, execution, evaluation, and presentation, culminating in the completion of a comprehensive capstone project. Students will work closely with a faculty advisor to develop the project plan and design to demonstrate their mastery of interdisciplinary knowledge and skills acquired throughout their academic journey. Emphasizing creativity, critical thinking, and practical application, this project allows students to delve deeply into an area of personal passion and academic interest. Students will synthesize their learning from various disciplines and create a unique, multifaceted project that showcases their academic, professional, and personal growth.

INLT: Ind. & Logistics Tech (INLT)

INLT 141. Introduction to Logistics. (3 Credits)
This course will cover topics related to logistics in a systems approach to managing activities associated with transportation, inventory management and control, forecasting, and integration of logistics with other functional areas, cross functional teams, supplier, distributor, and customer partnerships.

INLT 201. Technology and Society. (3 Credits)
A survey of the technology field as it relates to the academic background and opportunities for industrial technology graduates is covered. Advancing technology and its impact on industry, business, and society is reviewed.

INLT 212. Principles of Technology. (3 Credits)
Provide students with experience in the application of the principles of physics and mathematics as they relate to the modern technological systems, including robotics in a unified systems approach to explore mechanical, electrical, fluid, and thermal systems dealing with force, work, rate, resistance, energy, power, force transformers, momentum, wave, energy converters, transducers, radiation, optical systems, and time constants.

INLT 217. Tech Graphics Communication. (3 Credits)
Introduction to the use of various technical graphics media and methods of presentation of technical information. Topics include; electronic slide shows, graphic file formats, basic editing of graphic data, user interface design, graphic presentation, and interpreting graphic data.

INLT 245. Distribution Systems. (3 Credits)
The course is designed to provide students with an introduction to the methods and strategies used in distributing products and managing the inventory in supply chain. Topics covered include the design of channels and activities performed by node members to facilitate efficient movement of goods. Prerequisite: INLT 141.

INLT 247. Material Hand & Inven Controls. (3 Credits)
The principles of quantitative and operational approaches to the design of handling system including receiving, storage, retrieval, packaging, palletizing, material handling, order picking, shipping, facility sizing and layout. Information systems and operating policies of material handling and warehousing will be covered.

INLT 248. Geog Infor Systs Logistics. (3 Credits)
This course will expose students to the concept of spatial analysis using GIS tools. Topics covered will include GIS needs assessment, mapping of spatial entities, linear referencing, development of a GIS-based transportation routing and decision support system, and applications in asset management and planning Prerequisite: INLT 245.

INLT 249. Material Process & Safety Anal. (3 Credits)
This course provides a strong foundation of knowledge of manufacturing materials, standards and standard organizations; properties and nature of materials, materials testing and applications. Safety engineering and program management of specific construction and industrial hazards and other safety documents dealing with accident investigations. Prerequisite: INLT 212.

INLT 250. Manufact Materials & Processes. (3 Credits)
This course provides a strong foundation of knowledge of industrial materials, ranging from traditional metals, wood, ceramics, and polymers to advanced engineered materials and composites. Standards and standard organizations; properties and nature of materials, materials testing and applications. Prerequisite: INLT 212.

INLT 261. Engineering Graphics II. (3 Credits)
Introduction to 3D modeling including visualization skills, basic parametric modeling, CSG modeling, primitives, Boolean operators, view extraction, file management, assembly, dimensioning, and drawing standards. Student projects required (sketching, CAD software). Prerequisite: I.

INLT 270. Processes Systems & Infor. (3 Credits)
Introduction to processes and information systems from the point of view of creation, monitoring, and adaptation of processes, systems and information with tutorial exercises of an ERP system is covered in this course.

INLT 280. Industrial Ergonomics. (3 Credits)
This course focuses on work design and ergonomics in manufacturing. Specific attention will be on introducing the terminology and the techniques used in work design, and the fundamental concepts embodied in industrial ergonomics. Community based projects may be required. Prerequisite: MATH 122.

INLT 281. Industrial Safety. (3 Credits)
OSHA and its administration. Safety engineering and program management of specific construction and industrial hazards; standards, codes, and other safety documents. Accident investigation and safety analysis. Topics in occupational safety and environmental health are widely covered in the course. Prerequisite: INLT 249.

INLT 290. Introd Database Applications. (3 Credits)
This course introduces the underlying concepts behind data modeling and database systems using relational database management systems (RDBMS), the structured query language (SQL), and web applications (Perl DBI in CGI).

INLT 292. Introduction to ERP. (3 Credits)
ERP approaches to design, plan, and control of logistics management. Core aspects of enterpriser resources planning (ERP) infrastructure and application with extensive hands on practice example s applications will be covered.

INLT 320. Introd ERP & Financial Acct. (3 Credits)
Studies the need for integration and the challenges of managing complex interfaces of functional areas of business with its financial accounting. Activities that lead to integration of information funds and material flows across multiple organizations are discussed. Prerequisite: INLT 292.

INLT 330. Sales and Procurement. (3 Credits)
A realistic perspective on the role of industrial sales and the nature of the sales task in our business. Identification of critical influences on organizational buyer behavior, both internal and external, definition of various types of buying situations, and organizational purchasing processes. Prerequisite: INLT 245.

INLT 335. Lean Process Management. (3 Credits)
A systematic approach to eliminating non-value added activities throughout a production system. Lean principles and techniques will be applied to improve organizations ability to provide added customer value on products. Community based projects may be required. Prerequisite: INLT 212.

INLT 340. Supply Management. (3 Credits)
Student deeply explore the supply function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. Prerequisite: INLT 141, INLT 245.

INLT 345. Transportation Logistics. (3 Credits)
Introduction to the theory and applications of transportation, logistics, and associated costs is covered. Topics include modes of transportation and their networks; optimization of transportation systems across networks; flow across networks; supply, demand, and forecasting for transportation services; costs and benefits of specific modes and transportation policy analysis. Prerequisite: INLT 141 and INLT 245.

INLT 346. Plan Cont Syst Supp Chain Mgmt. (3 Credits)
Topics such as forecasting, capacity planning, inventory planning, MRP and ERP are discussed to provide students with knowledge of planning and control systems for supply chain management. Prerequisite: INLT 247, INLT 340.

INLT 359. Org'l Mgmt & Supervision. (3 Credits)
The course is a survey of organizational structures, operational, financial, marketing, and accounting management. Emphasis is places on planning, control, personnel, safety, wages, policies, and leadership for an effective industrial management.

INLT 374. Statics & Strength of Material. (3 Credits)
Structural principles and concepts linked to real buildings and components. Elementary statics and strength of materials as they related to the basic principles of mechanics. Gravity and lateral load tracings; determinate structural frame-works. Concept of stress and strain, and material properties; cross-sectional properties; Beam and column analysis and design; steel connections. Use of structural software to generate graphically display outlook. Prerequisite: MATH 212, INLT 372 or permission of instructor.

INLT 383. Quality Management. (3 Credits)
Quality management philosophies of Deming, Juran, and Cosby; total quality management (TQM); quality improvement and problem solving, with practical examples of quality problem tools; sampling techniques. The Taguchi loss function, quality function and policy deployment, materials control and just-in-time; quality audits; ISO 9000 inspection standards; charts for statistical process control and interpretation. Prerequisite: STAT 210.

INLT 385. Cost Estimating. (3 Credits)
Principles and techniques necessary for the economic analysis and cost evaluation of construction and industrial design projects. Interpretation of construction and engineering drawings and specifications; estimating, operations, products, projects, and systems. Estimate assurance and contract considerations. Prerequisite: INLT 249.

INLT 400. Intelligent Transport Systems. (3 Credits)
This course is designed to expose the student to the role of new technology in transportation and logistics particularly in the areas of travel information, traffic and incident management, public transportation, freight transportation, and inventory control. The history of cross-cutting issues in intelligent transportation systems development in the U.S. will be examined. Prerequisite: INLT 345.

INLT 443. Engr & Tech Entrepreneurship. (3 Credits)
This course covers concepts related to entrepreneurship relevant to engineering and technology applications. Major topics include entrepreneurial risk taking, startup strategies, innovative idea evaluation, business plan writing, financing and venture capital, managing growth and introducing and sustaining innovative products and services. Through case studies and guest speakers, the course introduces students to the knowledge and skills needed to recognize and seize technological entrepreneurial opportunities. Prerequisite: Junior or Senior standing.

INLT 444. Enterprise Resource Config. (3 Credits)
Analytical approaches to design, planning, and control of logistics management. Core aspects of enterprise resource planning (ERP) infra-structure and applications in industry. ERP planning strategies and implementation, including domestic and international manufacturing and service operations. Prerequisite: Consent of Instructor.

INLT 445. Procurement Management. (3 Credits)
The role of procurement in business and industry; relationships with other departments, procedures, and basic policies. Planning, organization, budgeting, negotiations, purchasing ethics, procurement control, strategic purchasing management, and impact of research and value analysis. Prerequisite: INLT 345.

INLT 446. Electronics Logistics. (3 Credits)
Reviews several E-Business trends related to logistics management; the impact of E-Business on creating a business plan and discussing E-Business architecture. CRM core competencies, organizational challenges, implementation trends, and planning strategies. Prerequisite: INLT 320.

INLT 447. Supply Chain Management. (3 Credits)
The planning and implementation of supply chain management, reverse logistics, integrated production. Inventory and distribution problems, multi-partner pricing analysis, and supply chain distribution network designs will be covered. Prerequisite: INLT 345.

INLT 448. Global Logistics. (3 Credits)
It covers topics related to global logistics as key component of supply chains that coordinates the movement of raw materials, work-in-process in a global network of shippers, forwarders, third party transportation providers, warehouses, customs agencies, and consignees to coordinate the activities that provide the logistics product. Prerequisite: INLT 345.

INLT 449. Supply Chain Strategy. (3 Credits)
This capstone course provides an opportunity for students to synthesize the knowledge gained in their previous coursework to integrate supply chain management, production, logistics and enterprise solutions to develop supply chain strategies. Prerequisite: INLT 340, INLT 346, INLT 447.

INLT 451. Analysis/Business Intelligence. (3 Credits)
This course is an introduction to business analytics that uses extensive data, statistical and qualitative analysis, exploratory and predictive models, and fact-based management to drive decisions and actions. The development and use of data warehouses and data marts to support business analytics is discussed. The use of key performance indicators, dashboards and scorecards for performance management and opportunity assessment are addressed. Text and web mining are discussed, and the application of selected data mining techniques to business decision making situations is illustrated. Hands-on exercises will be provided for active participation. Prerequisite: INLT 320.

INLT 465. Research and Negotiations. (3 Credits)
Students expand upon knowledge gained in INLT 340 and discuss current philosophy, methods and techniques for conducting strategic and tactical supply chain negotiations. Prerequisite: INLT 340, INLT 447.

INLT 480. Facilities Management. (3 Credits)
Facilities planning strategies, product, process, and schedule design; flow space and activity relationships; design of material handling system. Facilities functions and systems; quantitative facilities planning models, including the use of software applications. Industrial facility management. Prerequisite: ENGR 200 and INLT 245.

INLT 485. Project Management. (3 Credits)
The principles and techniques of managing engineering and construction projects from the conception phase through design and construction, to completion. Working with project teams, early estimates, and design proposals; project budgeting, scheduling, and aggregate planning. Case study approach is emphasized. Prerequisite: INLT 385.

INLT 486. Planning and Scheduling. (3 Credits)
Principles of planning and scheduling in manufacturing and service industries; the conversion of a project plan into an operating time-table. Application areas to cover project, job-shop, workforce, supply chain, and economic lot scheduling. Methodologies to include PERT, WBS, and GANTT chart. Utilization of current and emerging technologies and global dynamics with project management will be emphasized. Prerequisite: INLT 485.

INLT 499. Special Topics. (3 Credits)
A course or independent study covering a topic in Industrial Technology that may be used in lieu of a technical elective. The goal of this course is to enhance students' skills and knowledge in an area relevant to their area of study. Prerequisite: Permission of instructor.

MAED: Math Education (MAED)

MAED 402. Student Teaching In Mathematic. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary mathematics candidates. Prerequisite: Departmental Approval.

MAED 460. Teach Math Primary & Elem Grad. (3 Credits)
Methods, materials, and experiences to equip students to teach mathematics in a variety of settings, relevant to early childhood and elementary levels. The activities of the course will develop techniques and strategies of teaching concepts associated with sets, numeration systems, geometry, arithmetic operation, measurements, functions and relations, graphs, logic, number theory and patterns, probability and statistics. Concepts from the psychology of learning will be explored. Prerequisite: MATH 230.

MAED 464. Teaching Math In Middle Grades. (3 Credits)
A study of modern instructional strategies for teaching, planning and directing mathematics in the middle school. Prerequisites: EDUC 202 Introduction to Teaching II.

MAED 473. Teach Math Secondary Schools I. (3 Credits)
A study of modern instructional strategies for teaching, planning and directing mathematics learning in secondary schools. A comparative analysis of national and state mathematics teaching standards is conducted. (Students are strongly recommended to complete EDUC 201 and EDUC 202 before taking this course.) Prerequisite: MATH 299, MATH 360.

MANE:Manufacturing Engineering (MANE)

MANE 205. Manufacturing Process I. (3 Credits)
The types and properties of engineering materials including metals and polymers as employed in contemporary practice. The traditional manufacturing processing methods by which this materials are shaped into products such as machining, casting, forming, and fabricating techniques. Several experiments will be conducted. Prerequisite: ENGR 102 Introduction to Engineering II.

MANE 210. Manufacturing Process II. (3 Credits)
Modern manufacturing processes and related topics. Includes ceramics, composites, powder metallurgy, property enhancing and surface processing operations, rapid prototyping, and micro-fabricating.
An introductory review of manufacturing support system including production planning and control, quality control, and measurement and inspection. Prerequisite: MANE 205 Manufacturing Process I.

MANE 307. Manufacturing Processes. (3 Credits)
Introduction to operation and design of materials forming, materials removal processes, additive manufacturing, and joining in manufacturing, including product properties, process capabilities, processing equipment design, and economics. Prerequisite: ENGR 305 Materials Engineering.

MANE 310. Cad/Cam. (1-3 Credits)
Design components and assemblies using wire-frame, surface and solid model generation. Manual NC part programming. Benefits, limitations, and selection of CAD and CAM systems. CAD as an input to CAM, and graphics-based NC programming. Configuration of CAD/CAM software, post-processor generation. Prerequisite: ENGR 200 Engineering Graphics and MANE 210 Manufacturing Process II.

MANE 315. Manufacturing Automation. (3 Credits)
Design of integrated production systems including flexible, programmed automatic control for fabrication, assembly, packaging, movement, and storage. Introduction to numerical control, industrial robotics, programmable logic controllers, and computer integrated manufacturing. Several experiments will be conducted. Prerequisite: ENGR 201 Circuit Analysis, ENGR 315 Dynamics and MANE 210 Manufacturing Process II.

MANE 317. Manufacturing Systems. (3 Credits)
Basic principles of systems analysis and modeling applied to manufacturing processes and operations; numerical control, programmable controllers, flexible manufacturing systems, group technology, process planning and control, modeling and simulation of factory operations. Prerequisite: MANE 307 Manufacturing Processes.

MANE 400. Senior Seminar. (1 Credit)
Engineering design, literature searches, industry verses graduate school career options, ethics, professionalism and safety. The Fundamentals of Engineering (FE) Exam will be reviewed for students seeking certification as an Engineer-in-Training and subsequently as Professional Engineer. A departmental assessment examination on fundamental of engineering will be administrated. Prerequisite: Senior standing in MANE.

MANE 410. Prod Planning & Inventory Cont. (3 Credits)
Analysis and design of systems for planning, scheduling and controlling production, inventory and service operations and activities using operations research and dynamic systems method. Inventory analysis and control for single and multi-item systems. Production control methods like MRP, MRP-II, JIT, and Kanban. Manufacturing Strategy and competitiveness.

MANE 415. Project Engineering & Manageme. (3 Credits)
This course introduces Project Management skills needed to define, plan, monitor and complete projects as well as to identify the tools and techniques to resolve problems associated with bringing projects in on time and within an established budget and with high quality. Discussion will include application of network flow and sensitivity analysis in managing, scheduling and controlling a project with GANTT, CPM and PERT method. We will combines theories, techniques, group activities, and computer tools such as Microsoft Project.

MANE 420. Simulation. (3 Credits)
An introduction to discrete event simulation methods with emphasis on applications in manufacturing. The operations research topic of queuing theory is used to illustrate the importance of simulation as a problem- solving tool. Concepts and techniques of simulation modeling are covered as well as the statistical concepts and techniques required to obtain representative data, apply it to the model, and evaluate the results. A current high-level simulation language will be used to code the model for funning on the computer. Prerequisites: ENGR 301Engineering Statistics and ENGR 203 Introduction to Programming.

MANE 440. Off-Line Quality Control. (3 Credits)
A study of development of economic production systems for discrete products in a competitive manufacturing environment. Emphasis is on the interrelationships between product design and production process selection. Concepts of design for manufacture and assembly, tool engineering, and manufacturing systems design are included. Prerequisite: Senior standing in MANE.

MANE 450. Manufacturing Design Implement. (1-3 Credits)
A mix of industry and in-house structured group projects, using process, toll, computer control, quality knowledge, and societal considerations. Projects will progress through a complete manufacturing cycle from design through implementation. Field trips to manufacturing centers. Prerequisite: Senior standing.

MANE 461. Senior Project I. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MANE.

MANE 462. Senior Project II. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MANE.

MANE 499. Special Topics. (3 Credits)
A course of independent study covering topics in Manufacturing Engineering as technical elective. Goal is to enhance student skills and knowledge in relevant topic. Prerequisite: Permission of the instructor.

MATH: Mathematics (MATH)

MATH 112. Basic Mathematics I. (3 Credits)
Problem solving, real numbers, algebraic expressions, linear equations, systems of linear equations, proportions, geometry, graphs of linear functions, mathematics of finance.

MATH 113. Basic Mathematics II. (3 Credits)
The second part of a basic mathematics sequence. Sets, logic, probability and statistics. Prerequisite: MATH 112.

MATH 120. College Algebra. (3 Credits)
Functions and their graphs, transformation of functions, polynomial, rational, exponential and logarithmic functions, systems of equations; applications of these algebraic concepts to other disciplines.

MATH 121. Trigonometry. (3 Credits)
Trigonometric functions and their graphs, Trigonometric identities, inverse trigonometric functions, analytic trigonometry, and applications of trigonometry.

MATH 122. Finite Mathematics. (3 Credits)
Systems of linear equations and inequalities, introduction to matrices and linear programming, mathematics of finance, sets, counting and probability.

MATH 130. Number And Operations. (3 Credits)
ONLY for students seeking certification to reach PreK - 3/PreK - 6 Number systems and operations, elementary number theory, concepts of integers and rational number, proportions, computational algorithims, current techniques in a problem-solving environment. Including student investigations and hands-on activities.

MATH 131. Algebra And Functions. (3 Credits)
ONLY for students seeking certification to teach PreK - 3/PreK - 6 Basic algebraic operations, linear and quadratic equations, linear systems of equations and inequalities, algebraic functions in the context of modeling and various representations of functions (graphical, tabular, and symbolic). Will include student investigations and hands-on activities. Prerequisites: MATH 130.

MATH 150. Precalculus. (4 Credits)
Functions, Polynomial and rational functions, Inverse functions, exponential logarithmic functions, trigonometric functions and their inverses, transformations, polynomial division, roots of polynomials, partial fraction decomposition. Students successfully completing this course cannot take MATH 120 or MATH 121 for credit.

MATH 212. Business Calculus. (3 Credits)
Limits, continuity, derivatives and its applications in business, introduction to integrations. This course cannot be taken as a Mathematics elective by Mathematics majors. Prerequisites: MATH 120.

MATH 230. Geometry And Measurement. (3 Credits)
A basic study of properties and relationships of polygons and polyhedral, transformation geometry, coordinate geometry, construction, deductive and inductive reasoning, the processes of measurement through geometric investigations, and an introduction to non-Euclidean geometries. This course does not satisfy the requirements of MATH 340. ONLY for students seeking certification to reach PreK - 3/PreK - 6 Prerequisites: MATH 131.

MATH 260. Calculus I. (4 Credits)
Analytic geometry, limits, continuity, derivatives and its applications, introduction to integrations. Prerequisite: MATH 150 or MATH 121.

MATH 261. Calculus II. (4 Credits)
Techniques and applications of integrations, improper integrals, sequences and series, differentiation and integration of power series, Prerequisites: MATH 260.

MATH 280. Discrete Math Computer Science. (3 Credits)
Fundamental techniques in discrete mathematics for application in computer science. Sets, mathematical logic, proof techniques, relations, functions, mathematical induction, counting principle, and analysis of algorithms. Prerequisites: MATH 150.

MATH 284. Discrete Mathematics I. (3 Credits)
Logical statements, truth tables and logical equivalences, Boolean algebra, predicates and quantifies, proof techniques such as direct proof, by cases, by contraposition, and by contradiction, mathematical induction and recursion, proofs with sets and an introduction to counting. Prerequisite: MATH 150.

MATH 285. Discrete Mathematics II. (3 Credits)
Duality, mathematical induction and contradiction, recurrence relations, posets and sorting, vectors and matrices, planar and non-planar graphs, networks, error propagation, combinatorics, circuits, lattices, algebraic systems and machines, algorithms for flowcharting and programming. Prerequisite: MATH 284 Discrete Mathematics I or MATH 280 Discrete Mathematics for Computer Scientists.

MATH 290. Foundations Of Mathematics. (3 Credits)
A study of the development of mathematical concepts and of the great mathematicians who introduced these concepts; development of integral and differential calculus, development of concepts in modern algebra and the use of rigorous set theory as the foundation for analysis, algebra and topology. Prerequisite: MATH 261 Calculus II or concurrent with MATH 261.

MATH 292. Introduction to Number Theory. (3 Credits)
Divisibility theory and prime numbers, Euclidean algorithm, unique factorization, congruences, linear Diophantine equations, and quadratic reciprocity. Prerequisites: MATH 150.

MATH 294. Mathematics of Finance I. (3 Credits)
Interest rates, accumulated and discount function, annuities, forborne and deferred, perpetuities, amortization. Prerequisite: MATH 261.

MATH 295. Mathematics Of Finance II. (3 Credits)
Financial markets and derivatives, hedging and arbitrage pricing. Binomial model. Introduction to stochastic processes and their calculus. The Black-Scholes equations and solutions. Models with continuous dividends. Prerequisite(s): MATH 294, STAT 330 or STAT 340.

MATH 298. Internship in Mathematics I. (1 Credit)
The internship allows students to obtain practical work experience related to mathematics under closely supervised conditions for approximately 45 clock hours. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than 3 times. Prerequisite: Junior standing and permission of department.

MATH 299. Introd Problem Solving Seminar. (3 Credits)
A seminar-based approach which examines areas including the appropriate uses of technology, cooperative learning projects, problem-solving, and mathematics content on the state mandated licensing examination for secondary mathematics. Mathematical topics will include algebra and number theory, measurement, trigonometry, functions, and calculus and basic probability theory. Prerequisite: MATH 261.

MATH 300. Foundation of Mathematics. (3 Credits)
Review of proof techniques and sets, functions and relations, posets, equivalence relations, quotient sets, cardinal numbers, recurrence relations, and introduction to graph theory. Prerequisite: MATH 280 or MATH 284.

MATH 317. Stochastic Processes. (3 Credits)
Conditional probability and conditional expectations, continuous and discrete time stochastic processes including random walks. Markov chains, Poissons process, Brownian motion, and Gaussian processes. Prerequisites: MATH 360, STAT 330 or STAT 340.

MATH 321. Combinatorics. (3 Credits)
Techniques for counting and enumeration including recurrence relations, binominal coefficients, the principle of inclusion and exclusion, graph theory, and networks. Prerequisites: MATH 280 or MATH 284.

MATH 325. Linear Algebra. (3 Credits)
Systems of linear equations, matrices, determinants, vector spaces, bases, dimensions, linear independence, eigenvalues and eigenvectors, and linear transformations. Prerequisite: MATH 260.

MATH 335. Mathematical Modeling. (3 Credits)
Formulation and analysis of mathematical models with applications to Biology, Finance, Engineering and other areas of science. Prerequisite: MATH 261.

MATH 340. Euclidean & Noneuclid Geomet I. (3 Credits)
A study of the foundations of Euclidean geometry including transformations deductive and inductive reasoning and an introduction to non-Euclidean geometries. Prerequisite: MATH 260.

MATH 341. Euclidean & Noneucl Geometr II. (3 Credits)
Euclidean geometry, logic and incidence geometry, Hilbert's axioms, projective geometry, neutral geometry, parallel postulate - history and independence, Non-Euclidean geometry, geometric transformations, hyperbolic geometry and philosophical implications. Prerequisite: MATH 340.

MATH 348. Introduction to Game Theory. (3 Credits)
Introduction to game theory, the study of strategic behavior among parties having opposed, mixed or similar interests. Topics include social choice functions, May's Theorem, Pareto and Condorcet criteria, Arrow's Impossibility Theorem, zero-sum games, best responses and saddle points, mixed strategies, neutralizing strategies, bi-matrix games, solving 2-by-2 bi-matrix games, Nash equilibria, and the Prisoner's Dilemma. Prerequisite: MATH 325.

MATH 350. Differential Equations. (3 Credits)
Introduction to differential equations, initial value problems, modeling and solutions of first-order differential equations, solutions of higher-order differential equations, boundary value problems, series solutions, Laplace transform. Prerequisite: MATH 261.

MATH 352. Intro to Mathematical Biology. (3 Credits)
This course is designed to develop mathematical models in biology and study the behavior of such models using numerical techniques and review the mathematical concepts behind many important biological principles. Topics will be drawn from conversation biology, genetics, and physiology. Mathematics and computational methods to be reviewed include functions in biology, difference and differential equations, integration as needed, probability, numerical matrix algebra and curve fitting software. Students can receive credit either for MATH 352 or BIOL 352 but not for both. Prerequisites: MATH 260 Calculus I, BIOL 120 Principles of Biology I and BIOL 121 Principles of Biology II, or consent of instructor.

MATH 355. Dynamical Systems & Chaos. (3 Credits)
Existence and uniqueness for solutions of ordinary differential equations and difference equations, linear systems, nonlinear systems, stability, periodic solutions, bifurcation theory. Prerequisite: MATH 350.

MATH 360. Calculus III. (4 Credits)
Polar coordinates, parametric equations, calculus of vector-valued functions, partial derivatives, multiple integrals, line and surface integrals, Lagrange multipliers, Curl and divergence, Green's and Stokes' Theorems. Applications. Prerequisite: MATH 261.

MATH 380. Seminar in Actuarial Science. (3 Credits)
Application of the fundamental probability tools to problems encountered in actuarial science. Risk management and insurance, corporate finance, price theory, actuarial models, loss models, simulation and survival models. Course serves as the capstone course in the Actuarial Science track. Co-requisite: MATH 295.

MATH 392. Introduction Linear Programmin. (3 Credits)
Introduction to operation research, modeling with linear programming, the simplex method and sensitivity analysis, duality, degeneracy, and applications. Prerequisite: MATH 260.

MATH 395. Math Problem Solving Seminar. (3 Credits)
A capstone course designed to examine the appropriate uses of technology, cooperative learning projects, problem-solving, mathematics content on the state mandated licensing examination for Secondary Mathematics, and presentations by experienced mathematics educators and business leaders. Mathematical topics include data analysis, probability, matrix algebra and discrete mathematics. Students must register and take the state mandated licensing examination for secondary mathematics as a requirement of the course. (May not be used as a mathematics elective). Prerequisite: Admitted to Teacher Education Candidacy and MATH 299, STAT 330 or STAT 340.

MATH 398. Internship in Mathematics II. (3 Credits)
The internship allows students to obtain practical work experience related to mathematics under closely supervised conditions for approximately 135 clock hours. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than two times. Prerequisite: Junior standing and permission of department.

MATH 400. Advanced Calculus I. (3 Credits)
Reinforcing proofs with sets and functions, cardinality of sets, axiom of completeness, basic topology of real numbers, sequences, subsequences and limit theorems, properties of continuous functions, differentiation. Prerequisite: MATH 300 Foundations of Mathematics.

MATH 401. Advanced Calculus II. (3 Credits)
Differentiability, Riemann integrals, Riemann-Stieljes, improper integrals, fundamental theorem of calculus, sequence and series of functions, convergence of series, uniform convergence, power series of functions. Prerequisite: MATH 400.

MATH 415. Matrix Theory. (3 Credits)
Matrix algebra, matrix factorization, vector and matrix norms, condition numbers, singular values, diagonalization and similar matrices, Jordan canonical form. Unitary and orthogonal transformations, and the eigenvalue problems. Prerequisite: MATH 325.

MATH 417. Numerical Linear Algebra. (3 Credits)
Numerical methods for solution of linear systems, perturbation theory and linear least square problem, QR factorization, conditioning and stability of linear systems, iterative methods for linear systems, symmetric eigenvalue problems and singular value decomposition, non-symmetric eigenvalue problems. Prerequisite: MATH 325.

MATH 425. Abstract Algebra I. (3 Credits)
Groups, subgroups, cyclic groups, groups of symmetries, permutation groups, alternating group, cosets, normal subgroups, Lagrange's theorem, quotient groups, direct product of groups, group homeomorphisms and isomorphism. Prerequisite: MATH 300.

MATH 426. Abstract Algebra II. (3 Credits)
Rings, ring homeomorphisms, subrings, ideals, quotient rings, integral domains, polynomial extensions of rings, fields and field extensions. Prerequisite: MATH 425.

MATH 429. Approximation Theory. (3 Credits)
Best approximation in normal spaces, approximation by algebraic polynomials and Weierstrass theorem, trigonometric polynomials, uniform approximation by trigonometric polynomials, Chebyshev polynomials, characterization of the best approximation, and orthogonal polynomials. Prerequisite: MATH 400.

MATH 430. Optimizations Theory. (3 Credits)
Optimization fundamentals, unconstrained and constrained optimization. Lagrange multipliers, nonlinear programming algorithms and convex optimization. Prerequisite: MATH 360.

MATH 432. Complex Variables. (3 Credits)
Brief introduction of complex numbers and its properties, Elementary functions of Complex variable, Analytic functions and its basic properties, Contour integration, Cauchy's Theorem and Integral formula, Maximum modulus principles, Series representation of analytic functions, Taylor's Theorem, Classification of singularities, Laurent series, Calculation of residues. Prerequisite: MATH 360, MATH 400.

MATH 445. Introduction to Topology. (3 Credits)
Metric spaces, topological spaces, separation of axioms, connectedness, compactness, homeomorphisms and product spaces. Prerequisite: MATH 400.

MATH 452. Numerical Analysis. (3 Credits)
Error analysis, iterative methods for solving equations in one variable including bisection, fixed-point, Newton's and secant iterations, interpolation and polynomial approximation, numerical differentiation and integration, solutions of differential equations. Prerequisite: MATH 350.

MATH 470. History Of Mathematics. (3 Credits)
An introduction to the chronological history of mathematics and the mathematics who made significant contributions from ancient to modern time. Emphases will be given to development of mathematics from the 19th century BC to the 20th century AD. Prerequisite: MATH 300.

MATH 473. Discrete Wavelet Transfor/Appl. (3 Credits)
Introduction to digital images, complex numbers and Fourier series, convolution and filters, the Haar wavelet transformation, Daubechies wavelet transformations, wavelet shrinkage.

MATH 475. Introd to Difference Equations. (3 Credits)
Dynamics of first-order differences equations, equilibrium points and their stability, periodic points, cycles and their stability, difference equations associated to differential equations, Euler's method, differences calculus, linear differences equations, first and higher order, homogeneous with constant coefficients, non-homogeneous by the methods of undetermined coefficients, limiting behavior of solutions, nonlinear equations transformable to linear difference equations. Prerequisites: MATH 350.

MATH 490. Graph Theory. (3 Credits)
Basic definitions of graphs, Eulerian and Hamiltonian graphs, graph decompositions, matchings, trees, bipartite graphs, vertex colorings, network algorithms planar graphs, Kuratowski's theorem and the Four-color Theorem. Prerequisites: MATH 284 or MATH 280.

MATH 493. Topics in Mathematics. (3 Credits)
Topics in mathematics not covered in ordinary courses. The course may be repeated once for credit if content is different. Prerequisite: Consent of instructor.

MATH 495. Senior Project. (1-3 Credits)
Required of all senior mathematics majors. A capstone course designed to improve students' research skills, students will work on a research project chosen by the faculty in consultation with the students, write a paper and make a presentation at the end of the semester. Prerequisite: Senior academic standing.

MATH 499. Gre Mathematics Review. (3 Credits)
Whole numbers, fractions, decimals, percent's, signed numbers, averages and medians, powers, exponents and roots, algebraic expressions, equations, verbal problems, counting problems, ratio and proportions, sequence and progressions, inequalities, lines, polygons, tri-angles, quadrilaterals, circles, area and perimeter, coordinate geometry, tables, circle, line and bar graphs, cumulative graphs, analytical reasoning tactics, and logical reasoning tactics. A considerable part of the course will be devoted to practice tests similar to quantitative tests of GRE in order to develop the problem-solving and test-taking techniques required.

MCET: Mechanical Engineering (MCET)

MCET 102. Machines Laboratory. (1 Credit)
Basic hand tools, shop safety procedures; fundamental machine operations of drilling, sawing, milling, turning; inspection tools, gauges, measuring instruments. Prerequisite: None.

MCET 200. Statics. (3 Credits)
Force systems, resultants, and equilibrium; trusses, method of joints, method of sections; friction; centroids, moments of inertia. Prerequisites: MATH 150 Precalculus or equivalent and ENGT 100 Introduction to Engineering Technology.

MCET 201. Strength Of Materials. (3 Credits)
Stress and deformation; axial, tensile and compressive stresses, torsion; shear and moment in beams; stresses in beams; and design of beams. Prerequisite: MCET 200 Statics.

MCET 202. Strength Of Materials Lab. (1 Credit)
Tensile, compressive, torsional, bending, impact, hardness, and fatigue tests of materials; use of electrical resistance strain gages; statistical evaluation of data. Prerequisites: MCET 200 Statics and MCET 102 Machines Lab. Corequisite:

MCET 301. Intro To Thermodynamics. (3 Credits)
An introduction to fundamentals of thermodynamics; including work and heat; first and second laws; properties of gases, gas mixtures; compression and expansion of gas steam tables are covered. Prerequisites: MATH 260 Calculus I.

MCET 305. Manufac Materials & Processes. (3 Credits)
The study of the physical and mechanical properties of various materials as applied to design, processing, fabrication methods, and advanced manufacturing Methodologies. Prerequisites: MCET 201 Strength of Materials.

MCET 306. Machine Design I. (3 Credits)
The design of basic elements used in machines, including machine columns, welds, rivets, screws, springs, flexible couplings, belt and chain drives. Design for fatigue strength is included. Prerequisites: MCET 201 Strength of Materials, ENGR 200 Engineering Graphics/ENGT 261 Fundamentals of ENGR Graphics and MATH 260 Calculus I.

MCET 307. Kinematics Of Machines. (3 Credits)
The study of techniques for the analysis of displacement, velocity, and acceleration of machine elements; emphasis on graphical kinematics of linkages; introduction to cams. Prerequisites: ENGR 200 Engineering Graphics/ ENGT 261 Fundamentals of ENGR Graphics and MCET 311 Dynamics.

MCET 311. Dynamics. (3 Credits)
The kinematics and kinetics of particles and rigid bodies; rectilinear and curvilinear motion, work, energy, impulse and momentum. Use of computers for problem solving is included. Prerequisites: MCET 200 Statics, MATH 261 Calculus II and PHYS 105 Physics I.

MCET 313. Fluid Mechanics. (3 Credits)
Properties of fluids; fluid statics and dynamics, including momentum, energy, Bernoulli's equation, fluid flow in pipes, fluid machinery, and open channels: study of the siphon, pitot tube, venturi meter, orifices, nozzles, diffusers, weirs, etc. Prerequisites: MCET 200 Statics and MATH 260 Calculus I.

MCET 314. Fluid Mechanics Laboratory. (1 Credit)
Laboratory demonstrations, experiments, and exercises dealing with the verification of fluid equations, and principles and characteristics of fluid machinery. Co-requisite: MCET 313 Fluid Mechanics.

MCET 401. Applied Thermodynamics. (3 Credits)
Study of thermodynamic cycles; includes Carnot, Rankine, Sterling and Application of thermodynamic principles to turbines and compressors. Prerequisites: MCET 301 Introduction to Thermodynamics and MATH 261 Calculus II.

MCET 403. Quality Control. (3 Credits)
A study of the principles and techniques of quality control and its applications to industrial processes. Topics include: An overview of Total Quality Management (TQM), statistics, process control charts, and probability. The relationship between process capability and product specifications is analyzed. Prerequisite: ENGT 105 Engineering Problem Solving.

MCET 404. Energy Laboratory. (1 Credit)
A study of heat transfer equipment; shell and tube heat exchangers, energy conversion from chemical to mechanical energy; calorimeters; internal combustion engines (diesel and Otto cycles). Corequisite: MCET 401 Applied Thermodynamics.

MCET 406. Machine Design II. (3 Credits)
A further development of the principles and techniques of machine element design with particular regard to gears, axles and shafts, bearings, clutches, brakes, gaskets and seals. Design projects are included. Prerequisite: MCET 306 Machine Design I.

MCET 412. Tool Design Laboratory. (1 Credit)

MCET 415. Instrumentation And Control. (3 Credits)
A study of the basic concepts and principles associated with the operation and use of sensors and instruments for the measurement and for the control of various properties (temperature, pressure, liquid level, fluid flow, etc.); accuracy and reliability of instruments and their role in control systems. Prerequisites: ENGT 290 Intro to Elect/Electronics.

MCET 416. Measurements Laboratory. (1 Credit)
Experiments are conducted to reinforce and expand on concepts learned in MCET 415 lecture course; emphasis is on electrical and electronic devices used in mechanical measurements; included as various types of transducers, bridge circuits, and operational amplifiers. Co-requisite: MCET 415 Instrumentation and Controls.

MCET 421. Hydraulics And Pneumatics. (3 Credits)
Fundamentals of hydraulic and pneumatic system design and troubleshooting; topics include circuit diagrams, valves, rotary activators, cylinders, pumps, piping and fitting losses. Prerequisite: MCET 313 Fluid Mechanics.

MCET 422. Hydraulics & Pneumatics Lab. (1 Credit)
Selected design problems and projects dealing with principles and methods discussed in MCET 421. Preparation of circuit diagrams, flow charts, and detailed designs; circuits are set up and analyzed. Corequisite: MCET 421 Hydraulics And Pneumatics.

MCET 441. Heat Transfer. (3 Credits)
A course on the fundamental principles of heat transfer with a broad range of engineering applications. The classic modes of heat transfer, steady state and transient conduction, natural and forced convection, and radiation, will be emphasized. Both numerical and analytical solutions are discussed and illustrated. Application to problems associated with both mechanical and electronic engineering will be demonstrated through problems such as those related to the heating and cooling of buildings and the cooling of electronic equipment. Prerequisite: Math 261 Calculus II and permission of instructor.

MCET 499. Special Topics In Engr Tech. (3 Credits)
A course or independent study covering some topic in Engineering Technology as technical elective. Goal is to enhance student skill and knowledge in relevant topic. Prerequisite: Permission of instructor.

MEEG: Mechanical Engineering (MEEG)

MEEG 205. Statics. (3 Credits)
The theory and application of engineering vector mechanics to the design and analysis of rigid structures. Application of the principle of equilibrium to particles, rigid bodies, and simple structures are included. Friction, distributed forces, center of gravity, centroids, and moment of inertia are introduced. U.S. engineering and metric systems of units and applications are used. Prerequisite: PHYS 112 Physics I. Co-requisite: MATH 261 Calculus II.

MEEG 210. Dynamics. (3 Credits)
Kinematics of particles and rigid bodies. Rectilinear motion, Curvilinear motion, Coordinates systems, velocity, acceleration, relative motion. Newton's second law. Kinetics of particles, Angular momentum, Work-energy methods, Impulse and momentum. Vector mathematics where appropriate. Prerequisite: MATH 261 Calculus II and MEEG 205 Statics.

MEEG 225. Thermodynamics. (3 Credits)
Fundamental concepts of thermodynamics in which first and second law of thermodynamics are studied. Topics include properties of a simple pure substance, equations of state, work and heat; chemical reactions, internal energy, specific heats, enthalpy, and the application work and heat to a system or a control volume, entropy and equilibrium, and power cycles. Prerequisite: PHYS 112 Physics I. Co-requisite: MATH 261 Calculus II.

MEEG 305. Mechanics of Deformable. (3 Credits)
Introduction to analysis of deformable bodies solids. Topics include stress, strain, stress-strain relations, torsion, beam bending and shearing stresses, stress transformations, beam deflections, statically indeterminate problems, energy methods, column buckling; fatigue; failure theory; analysis and design of bar-type members. Prerequisite: MATH 261 Calculus II and MEEG 205 Statics.

MEEG 306. Solid Mechanics Lab. (1 Credit)
Experimental studies on several engineering fundamentals of material behavior under mechanical loads. Topics include testing materials for tensile, compression, bending and torsional loads, hardness, fatigue, and fracture toughness. Co-Requisite: MEEG 305 Mechanics of Deformable.

MEEG 325. Fluid Mechanics. (3 Credits)
Introduction to the concepts and applications of fluid mechanics and dimensional analysis. Topics include, fluid properties, fluid statics, Bernoulli and Navier-Stokes equations, layer theory, internal and external flows, friction factors in pipes and packed beds, drag coefficients; compressible flow; flow measurements, and turbo machinery. Prerequisite: MEEG 225 Thermodynamics Co-requisite: MATH 350 Differential Equations.

MEEG 335. Heat Transfer. (3 Credits)
Introduction to the principal concepts and methods of heat transfer. Topics includes steady and transient conduction in one- two- and three dimension, external and internal laminar and turbulent convection, radiation. Application of heat transfer in designing heat exchangers, fins, electronic packages will be discussed. Prerequisite: MEEG 225 Thermodynamics and MEEG 325 Fluid Mechanics.

MEEG 336. Thermal Science Lab. (1 Credit)
Introduction to the principal concepts and methods of heat transfer. Topics includes steady and transient conduction in one- two- and three dimension, external and internal laminar and turbulent convection, radiation. Application of heat transfer in designing heat exchangers, fins, electronic packages will be discussed. Co-requisite: MEEG 335 Heat Transfer.

MEEG 405. Machine Design. (3 Credits)
Fundamentals of mechanical design process and Basic principles of applied mechanics and materials employed for the design of machine elements and mechanical systems. Design and application of machine components such as brakes, bet drives, gears, mechanisms, bearings, ways, sleeves, and bushings. Prerequisite: ENGR 200 Graphics and MEEG 305 Mechanics of Deformable.

MEEG 406. Machine Desing Lab. (1 Credit)
Fundamental of planar mechanisms design and analysis and simulation. The laboratory experience provides open-ended projects to reinforce the design process. Co-requisite: MEEG 405 Machine Design.

MEEG 410. Computer Aided Engineering. (3 Credits)
Introduction to the use of modern computational tools used for design and analysis. Emphasis is places on product design with solid modeling and finite-element analysis. Software such as NX/NASTRAN, ANSYS, and MATHLAB that are representative of that found in industry. Prerequisite: ENGR 200 Graphics and MEEG 305 Mechanics of Deformable.

MEEG 425. Thermal System Design. (3 Credits)
Design and analysis of thermofluid systems using principles of thermodynamics, fluid mechanics and heat transfer. Topics include computer simulation, engineering economics, thermal component sizing, steady-state model, and optimization techniques applied to the design and performance analysis of thermal systems. Prerequisite: MEEG 225 Thermodynamics, MEEG 325 Fluid Mechanics, and MEEG 335 Heat Transfer.

MEEG 455. Systems and Controls. (3 Credits)
An introduction to linear systems, transfer functions, and Laplace transforms. It covers stability and feedback, and provides basic design tools for specifications of transient response and frequency-domain techniques. Prerequisite: ENGR 201 Circuit Analysis and MATH 350 Differential Equations.

MEEG 461. Senior Project I. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions, and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MEEG.

MEEG 462. Senior Project II. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions, and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MEEG.

MGMT: Management (MGMT)

MGMT 150. Principles Of Business. (3 Credits)
For non-business majors. This course introduces the student to the fundamental principles of business, organizations, finance, banking, credit management, salesmanship, advertising, ecology and consumers. Through this introduction the student will be able to relate/work with real world examples in higher-level courses.

MGMT 300. Organization & Management. (3 Credits)
This course provides an overview of the many aspects of managing organizations. Emphasis will be placed on management processes, human behavior in organizations and applications of classroom knowledge to actual challenges facing managers. The application of management concepts will be practiced using such activities as case studies, team projects, decision making exercises, presentations, and active in-class discussion of current management issues.

MGMT 320. International Business. (3 Credits)
This course explores the critical importance of the environments that surround international business and how multinational and global enterprises are expected to adapt their operations and functional strategies to these constantly changing environments. Additional topics explored include theories of international trade, international development and investment, international organizations that impact international business, the international system, exporting and importing, etc. Prerequisite: COBU 302.

MGMT 330. Org'l Behavior & Leadership. (3 Credits)
An in-depth study of the behaviors of individuals and small groups in organizations. A problem solving approach is applied to such concepts as motivation, personalities, work attitudes, leadership, communication effectiveness, managerial decision making, conflict resolution, office politics, and change management. Prerequisite: COBU 302.

MGMT 340. Personnel/Human Resources Mgmt. (3 Credits)
The basic principles of managing the workforce are covered in this course. Topics such as recruitment and selection, employee training, performance evaluation, compensation, occupational safety and health, equal employment opportunity and employment discrimination policies as well as retirement and pension issues will be discussed. Prerequisite: COBU 302.

MGMT 371. Business Law. (3 Credits)
This course deals with business law topics frequently addressed on the CPA examination as well as an in-depth coverage of selected articles of the Uniform Commercial Code. Prerequisite: COBU 170 and sophomore standing.

MGMT 375. Internship. (3 Credits)
The internship course allows students to obtain practical work experience in a management position under supervised conditions. The internship provides real-world application of management education under the critical supervision of an on-site administrator and a management faculty member. Prerequisite: COBU 302 and Junior standing or special permission of the instructor.

MGMT 406. Managerial Analytics. (3 Credits)
This course covers statistical and analytical tools for interpreting managerial data for making effective business decisions. The course provides students with essential concepts and tools to understand the role of business intelligence, analytics, and data science in Management. Students will learn how to apply primary analytics tools for managerial decisions and communicate the results of analysis with stakeholders in order to improve organizational collaboration and knowledge sharing for effective managerial outcomes. Emphasis would be placed on key concepts of managerial analytics, its potential applications and implications, and the interpretation of results from the analysis rather than theories and computations themselves. This course is required for all students whose major is management, and the course must be completed with a minimum grade of C to meet the requirements for graduation. Pre-requisite (or Co-requisite): COBU 260, COBU 306, or permission by the instructor.

MGMT 418. Organization And Environment. (3 Credits)
The course deals generally with the mutual influences of public policies and business activities. Selected public policy issues and programs are examined in-depth from the perspectives of how they impact on business planning and operations, including anti- trust legislations and landmark court decisions arising from them. Prerequisite: COBU 302.

MGMT 420. Managing In A Global Economy. (3 Credits)
The student will examine the techniques of managing international businesses with emphasis on the problems of communications as well as cultural, political and social differences with reference to multi-national businesses operating in different parts of the world. Prerequisite: COBU 302.

MGMT 444. Entrepreneurship Small Bus Mgm. (3 Credits)
This course provides and introductory analysis of the entrepreneur's role in conceptualizing, developing and managing small business ventures. It is designed to expose students to the problems and opportunities inherent in establishing and managing a small business, the initial research and resources required, and the techniques employed in launching and sustaining a new venture. Students will be exposed to information and resources that expand their knowledge basis and creativity, and that will spur them to explore potential small business opportunities they would like to initiate in the future. They also have the opportunity to employ various management, marketing, human resources, financial planning and ethics/social responsibility principles as they specifically relate to entrepreneurship and small business management.

MGMT 445. Small Business Consulting. (3 Credits)
The small business consulting course is designed to develop practical consulting skills of students in the area of small business management and development. Students will apply conceptual and theoretical skills to identify opportunities, diagnose, analyze and resolve problems of small business owners. Prerequisites: MGMT 444 and Senior standing or permission of instructor.

MGMT 446. Entrepren Mktg &New Prod Innov. (3 Credits)
This course is designed for business and non-business students who want to use their creativity and knowledge to create and market novel products and services for consumers. Student pursuing for-profit or non-profit entrepreneurship ventures will be required to create a value proposition for their new innovation, strategies to protect their intellectual property, and a marketing plan to deliver their new product/service to customers. As a result of this course, students will be capable of conducting effective market analysis, industry analysis, competitive analysis and risk analysis to successfully market an innovation or an entrepreneurship venture. Prerequisites: MGMT 444.

MGMT 447. Social Entrepren & Sustain Ven. (3 Credits)
The purpose of this course is to examine entrepreneurship as a mechanism for social change, community economic development, and societal sustainability. Via interaction with social entrepreneurs and owners of sustainable enterprises, we will examine the social impacts that both social enterprises and social responsible for–profit ventures can have in the markets where they are located. A key goal of this course is for students to be able to develop a business model that is scalable (with potential for exponential growth and impact) and sustainable for either a non-profit or for-profit venture. Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior non-profit or for profit venture.

MGMT 448. Technology & Entrepreneurship. (3 Credits)
This course will provide an overview of the relevance of technology to the success of new ventures and highlight specific technology tools, including financial management software, website development services and programs, e-commerce and social media and e-marketing tools that are crucial for 21st century entrepreneurs in any industry. As part of the course, student will have the opportunity to develop their own website for their small business and e-marketing plan. Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior experience.

MGMT 449. Special Topics Entrepreneurshi. (3 Credits)
This course will cover dynamic topics of relevance to entrepreneurs in various industries, including specialty coverage of music entrepreneurship, education entrepreneurship, social media marketing, global entrepreneurship, technology based ventures and other contemporary topics relevant to prospective and current entrepreneurs. Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior experience.

MGMT 450. Organizational Theory & Design. (3 Credits)
An in-depth study of how to restructure any organization. Restructuring groups, people and organizes activities to accomplish the organization's goals. Each student will develop the ability to analyze an organization's internal and external structural contingencies and design the correspondingly appropriate structures. Emphasis will be placed on applying this ability through case studies. Prerequisite: COBU 302 OR MGMT 300.

MGMT 451. Global Entrepreship Consulting. (3 Credits)
In this course, students will explore strategies for foreign market entry for small businesses and topics related to international trade so they can provide a small foreign company with consulting assistance to expand their business efforts to the United States, or a small domestic company with their expansion efforts abroad. Students will engage in international market research, assist with identifying a company's ideal mode(s) of entry, develop a market entry plan, update a company's business plan, and/or assist a small business with other relevant business processes to facilitate their foreign market entry. Prerequisite (s): MGMT 444.

MGMT 452. Organizational Culture Diversi. (3 Credits)
This course is an examination of an organization's culture, how it is created, sustained and learned. The issue of changing organizational culture within the context of a global, multi-ethnic and pluralistic workplace will be addressed. Topics to be addressed include: culturally based patterns of difference, current research in multicultural management and action steps for managing multicultural workforce. Prerequisite: COBU 302 OR MGMT 300.

MGMT 453. Minority Entrepreneurship. (3 Credits)
This course is designed to expose students to the opportunities and challenges of minority entrepreneurship in the United States. Students will: 1) learn about the history of minority entrepreneurship in the American social context with an emphasis on the impact of race and ethnicity on access to entrepreneurship-facilitating resources; 2) analyze the historical entrepreneurship rates of minorities from the early 20th century through the present; and 3) research historical and contemporary minority entrepreneurs who have overcome challenges to become successful. The experiences and contributions of immigrant entrepreneurs to the U.S. economy will also be addressed in this course. Students will be required to produce a short research project on a successful minority entrepreneur as the culminating project. Prerequisite (s): MGMT 444.

MGMT 454. Workplace Democracy. (3 Credits)
The student will examine non-hierarchical organizational forms and structures that would facilitate democratic involvement and participation in workplace decision- making and activities. The content will include: cooperatives, worker-owned firms, self- managed enterprises, ESOPS, Workers Council and Quality Circles. Prerequisite: COBU 302.

MGMT 464. Employment Laws And Policies. (3 Credits)
This course is designed as a critical review of current or proposed laws and public policies dealing with the dynamics of employment including the important areas of human resources acquisition, development, maintenance, utilization and compensation. Prerequisite: COBU 302.

MGMT 466. Compensation Management. (3 Credits)
The student will gain an understanding of the principles and factors involved in designing and implementing an effective and equitable compensation system for administrative, operative and professional employees in private and public organizations. Compensation management also deals with the role of compensation as a managerial and motivational tool. Prerequisites: COBU 302.

MGMT 468. Comparative Union Movements. (3 Credits)
This course is a comparison of labor union movements and industrial relations practices in different countries, particularly in Western Europe, North America, Japan and Africa with respect to their history, rationale, objectives and laws and their implications for multinational enterprises which must deal with the differences associated with these systems. Prerequisite: COBU 302.

MGMT 470. Human Resources Plan Staff Dev. (3 Credits)
This course surveys the concepts and techniques of determining human resources requirements and methods of acquisition, training and development of the workforce. Prerequisites: COBU 302 and MGMT 340 or equivalent.

MGMT 480. Organizational Development. (3 Credits)
An integrated application of behavioral science to the improvement of overall organizational performance. Studied will be several techniques of large-scale planned change which redesign an organization's culture and processes. Emphasis will be placed on applying these techniques through case studies. Prerequisites: COBU 302, MGMT 330, MGMT 340, and MGMT 450.

MGMT 484. Indus Relations Collec Bargain. (3 Credits)
This course is a survey of labor union movement and collective bargaining in the United States. Includes the rationale, structure and government of labor union internal affairs and the laws and policies relating to unfair labor practices in plant unionization and collective bargaining between management and labor organizations. Prerequisites: COBU 302 and MGMT 340.

MGMT 490. Seminar: Issues In Management. (3 Credits)
The seminar course is designed to provide students the opportunity to study in-depth topics pertaining to management. Students will take initiative in identifying current topics, issues and problems confronting managers. Prerequisites: COBU 302 and Senior standing.

MILS: Military Science (MILS)

MILS 101. Introduction to Leadership. (2 Credits)
A study of the organization of the Army and ROTC, with emphasis on the local program and career opportunities for the ROTC graduates. Significance of military courtesy, discipline, customs and traditions of the service.

MILS 102. Introduction to Leadership. (2 Credits)
A study of the military as a profession, the historical growth and development of the Army, stressing the magnitude of management implications. Development of leadership through practical exercises.

MILS 201. Foundations of Leadership. (2 Credits)
A study of the functions, duties, and responsibilities of junior leaders, with continuing development of leadership through practical exercises.

MILS 202. Foundations of Leadership. (2 Credits)
A study of basic military skills and operations of the basic military team, to include military geography, and the use of maps and aerial photographs.

MILS 300. Leadership Training Course. (4 Credits)
This 42-day leadership skills course at Fort Knox, KY, equates to Military Science 101, 102, 201, and 202. Student will be given the challenges of leadership, physical fitness, rappelling, drown-proofing, basic tactical maneuvering, use of basic Army weapons, map reading, compass course and basic military drill and ceremonies.

MILS 301. Tactical Leadership. (3 Credits)
A course stressing the development of the small unit leader skills, basic military skills, physical fitness and squad and platoon tactics. Prerequisites: MILS 101 Army Customs and Traditions I; MILS 102 Army Customs and Traditions II; MILS 201 Basic Officers Skills I; MILS 202 Basic Officers Skills I.

MILS 302. Applied Leadership. (3 Credits)
A course stressing the development of military skills with emphasis placed upon physical fitness, map reading and communications. Includes down-proofing exercises, field training exercises, and drill and ceremonies. Prerequisite: MILS 301 Advanced Leadership Development I.

MILS 303. Leadership Dev & Assess Course. (6 Credits)
**Internship semester hours can be used during any semester for 3 to 6 semester hours.

MILS 401. Developmental Leadership. (3 Credits)
A study of officer-enlisted relationship, staffs procedures, military writing and correspondence and military justice. Prerequisites: MILS 301 ADVANCED LEADERSHIP DEVELOPMENT I; MILS 302 ADVANCED LEADERSHIP DEVELOPMENT II.

MILS 402. Adaptive Leadership. (3 Credits)
Pre-commissioning seminars, study of Officer Evaluation Reports (OER's), Non-Commissioned Officer Evaluation Reports (NCOER's) division organizational structure, personal affairs, and unit administration are part of this course. Prerequisites: MILS 301 Advanced Leadership Development I; MILS 302 Advanced Leadership Development II (1) Students with previous military experience may be given semester hour for these prerequisites.

MILS 403. Leadership Laboratory. (0 Credits)
Serves as learning laboratories for hands-on practical experiences. Training is supplementary and includes operations and tactics, land navigation, first aid, and general military subjects. The Army Physical Fitness Test (APFT) is administered to assess the state of physical development. (All cadets must participate in the 2- hour leadership lab.)

MILS 404. MILS Independent Study. (3-6 Credits)
This internship is offered primarily to ROTC cadets to allow them to obtain practical work experience in their major under supervised conditions. The internship provides real-world application in Marketing, Political Science, Social Science, History, Physical Education, etc. majors with emphasis on Army or ROTC aspects.

MISY: Mgmt Information Systems (MISY)

MISY 311. Systems Architecture & Design. (3 Credits)
This course is designed to introduce the student to current operating systems, computing networks, and data communication infrastructure. Students are expected to come away with an understanding of the functions of operating systems, data and voice communication concepts and terminology, modes of data transmissions, transmission media, different types of networks, mass storage and I/O technologies, file systems, and computing technology trends. Prerequisites: MISY 305 or permission of the instructor.

MISY 330. Introd to Java Programming. (3 Credits)
This course provides an introduction to JAVA programming and its environment. Students will learn how to develop small to medium-sized JAVA applications and JAVA applets. Special topics include JAVA programming concepts, Object-Oriented design, JAVA Application Programming Interface (API), Graphical User Interface (GUI) components, event handling, exceptions, graphics, input/output, and inheritance. Prerequisites: COBU 155 or permission of the instructor.

MISY 344. Introd to Visual Basic Program. (3 Credits)
The course introduces the student to programming using and Object-oriented programming language. The course focuses on the principles of user interface design, general software engineering principles and business application development. Prerequisites: MISY 305 or permission of the instructor.

MISY 350. Management Information Systems. (3 Credits)
An informative course designed to provide students with an understanding of the importance and the role of Business Information Systems in making decisions affecting the success of an organization, and the types of information systems that support business functions. Emphasis will be placed on the planning, development, installation and maintenance of business computer applications that are utilized in the typical business environment. Prerequisite: COBU 155 or equivalent.

MISY 385. Introd Web Development & Appli. (3 Credits)
This course provides a practical approach to the development of web related technologies. Emphasis is on the use of current web development languages as tools to develop interactive web pages. Students also learn concepts such as the architecture of the web, the use of browsers, the effectiveness of user interfaces, and effective search strategies. Multimedia and web security are addressed to familiarize the student with the web as a business tool. Prerequisite: An introductory level computer programming language or permission of the instructor.

MISY 430. Advanced Java Programming. (3 Credits)
how to write small to medium sized JAVA applications and JAVA applets. Special topics include key issues related to software engineering, object oriented design, Java Application Programming Interface (API), graphical user interface components, event handling, exceptions, input/output, and inheritance, data structures, and multithreading and animation. Prerequisite: MISY 330 or permission of the instructor.

MISY 444. Advanced Visual Basic Programm. (3 Credits)
This course is a continuation of MISY 344. Topics include event-driven programming techniques, scripting, business computing, and integration with databases. Prerequisite: MISY 344 or permission of the instructor.

MISY 467. Advanced Cmptr Networks Techno. (3 Credits)
This course focuses on computer networking technologies for individual workstations, LANS, WANS, and the Internet. Topics include network support; storage area networks; virtual servers; managed switches, and routers, and firewalls. This course also prepares the student for the industry's Network+ certification examination. Prerequisite: MISY 367.

MISY 485. Advanced Web Development & App. (3 Credits)
This course provides students with the understanding and practical experience in web-enabled database and e-commerce business application development. Topics include scripting business rules and application logic on a web server, client and server side technologies, and techniques to develop fully functional business applications. Application design uses current application software. E-commerce business issues and security implementations are also covered. Prerequisite: MISY 385 or permission of the instructor.

MISY 486. Enterprise Resou Plan Sys Appl. (3 Credits)
Enterprise resource planning (ERP) is an integrated information system that manages internal, external resources including suppliers, employees, customers, and partners. The course provides students with an understanding of how firms consolidate all business operations (i.e., manufacturing, finance and accounting, sales and marketing, and human resources) into a centralized database; facilitate information flows among all business functions, and turn into innovative business decisions. Emphasis will be placed on exploring SAP. Prerequisite: MISY 381 and an introductory level computer programming language.

MKTG: Marketing (MKTG)

MKTG 300. Principles Of Marketing. (3 Credits)
This course is designed to cover the basic concepts of marketing management in consumer and industrial markets, and the formulation of marketing strategies relating to products, channels of distribution, promotion, and price. The course seeks to promote a managerial approach to solving marketing problems and reviews the fundamental marketing institutions, with an awareness of ethical considerations and the global environment.

MKTG 303. Integrated Marketing Comm. (3 Credits)
Examines the nature and role of communications in marketing, focusing on the goals and uses of advertising, sales promotion, public relations, direct marketing, and personal selling in achieving the communications objectives of marketing. Explores the design, organization, and implementation of the communications mix, and the economic, social, and ethical implications of integrated marketing communications. Prerequisite: COBU 301 or NBMK 300.

MKTG 305. Brand Management. (3 Credits)
This course will prepare students to lead a brand-centered marketing team in the consumer products/ services arena. The emphasis in the course is on brands, brand-equity and strategic brand management. The course will prepare students to operate successfully to improve the long-term profitability of brand strategies in the real world. Prerequisite: COBU 301 or NBMK 300.

MKTG 306. Mktg Channels Physical Distr M. (3 Credits)
Marketing Channels and Physical Distribution Management is a comprehensive course emphasizing the specific activities of manufacturers, wholesalers, retailers, and various other participants in marketing channels created for the purpose of delivering goods and services to consumers in an efficient and effective manner. This course covers in broad terms, all the managerial activities in the distribution of a firm's products from the point of production to the ultimate consumer. These managerial activities include modal and carrier choice decisions, choices among storage alternatives and different channel members such as distribution centers, wholesalers, retailers, and other distribution specialists as well as their impact on the distribution system will be covered.

MKTG 372. Marketing Internship. (3 Credits)
The marketing internship allows students to obtain practical work experiences in marketing-oriented positions of business firms under supervised conditions. The purpose is for the Internee to improve his/her quantitative and qualitative experiences as a marketing manager in a real business world under critical supervision of an on-site administrator and a marketing faculty member. Prerequisites: COBU 301, MKTG 303, MKTG 305, MKTG 306 and/or permission of instructor.

MKTG 401. Marketing Research. (3 Credits)
The course covers the concept and techniques of marketing research with special emphasis on sampling methods, interviews, statistical analysis of data and its implications. Methods of developing and evaluating research design for actual problems, collection of the information, and its analysis are stressed. Prerequisites: COBU 301 and COBU 260.

MKTG 402. Advertising. (3 Credits)
This course places emphasis on planning, budgeting, research, media selection, and preparation of advertising messages. The evaluation of advertising from an economic and social aspect by clients and agencies is emphasized. Prerequisite: COBU 301.

MKTG 404. Consumer Behavior. (3 Credits)
Consumer behavior is a comprehensive study of the relevant psychological, sociological, and anthropological variables that shape consumer attitude, behavior, motivation, and characteristics. Throughout the course, students should consider the issue of why consumers behave as they do in the market. Prerequisite: COBU 301.

MKTG 405. Seminar In Marketing. (3 Credits)
This course is designed to integrate the marketing concepts learned in marketing-related courses taught over the student's matriculation, and to encourage the pursuit of further research and in- depth study in the specialized field of his/her choice. Special emphasis is placed on strategic thinking through the use of lectures, classroom presentations, class discussions, projects and "field" studies of managerial issues. The course will assist the student in comprehending and incorporating the basic tenets of the discipline as he/she makes the transition from academic life to the working world and faces new perspectives of a changing and challenging world. Prerequisite: COBU 301.

MKTG 406. Digital Marketing. (3 Credits)
Examines how the Internet and other new media/technology are altering the exchange of marketing offerings between buyers and sellers. Investigates the roles of the digital channels and platforms (internet, mobile, social media, search engine etc.) as an integral element of marketing strategies, incorporating a critical evaluation of electronic commerce strategies. Provides an understanding of developing, evaluating, and executing a comprehensive digital marketing strategy. Students will complete the course with a comprehensive knowledge of and experience with how to develop and implement an integrated digital marketing strategy.

MKTG 407. Digital Marketing Analytics. (3 Credits)
Digital platforms generate extensive data on customer participation in social media activities and active engagement with brands, products and corporations. Product management and marketing strategy development are increasingly based on analysis of data from digital platforms. This course provides students with analytic tools and methods that can be applied to digital data for drawing insights necessary to the development of marketing strategy.

MKTG 408. International Marketing. (3 Credits)
The student will focus on the principles, issues, and problems of international marketing among the nations of the world. Marketing systems in all stages of development and various approaches to marketing problems by other nations will be addressed. Prerequisite: COBU 301.

MKTG 410. Marketing Analytics. (3 Credits)
This course provides students experience with solving marketing problems using analytic models. Marketing models used in segmentation, conjoint analysis, demand forecasting, customer lifetime value and predictive modeling willl be emphasized among others. Use of case studies will ensure a realistic business setting for problem solving. Prerequisites(s): COBU 306; MKTG 401.

MKTG 411. Purchasing Materials Managemen. (3 Credits)
This course deals with management of inbound logistics activities including purchasing, transportation, storage and warehouse control, for either a manufacturing firm or any of the channel members in a distribution system. Procurement, pricing, sourcing, leasing versus purchasing and materials management tools will be emphasized. Prerequisite: COBU 301 or COBU 302.

MKTG 414. Retail Management. (3 Credits)
This course provides an in-depth coverage of the basic concepts of retailing, including retail institutions, the retail environment, consumer buying behavior, retail strategy, retail organization and information systems, store location, planning merchandise management, buying merchandise, pricing, promotion, store management, customer service, retail selling, fashion retailing, and the retailing of services. Special emphasis is given to the strategic and managerial functions involved with this area of marketing. Prerequisite: COBU 301.

MKTG 415. Logistics Management. (3 Credits)
The course provides an in-depth overview of logistics management to include the study and analysis of integrated logistical systems, policy planning, and overall management relating to the complexities of distribution, transportation issues, consumption, redistribution and marketing. Prerequisite: COBU 301.

MKTG 460. Direct Marketing. (3 Credits)
This course provides an examination of the concepts, strategies and applications involved in direct marketing, including mail order and direct response advertising. Measurability, accountability, lists, data and the integration of direct marketing programs into total marketing efforts and overall organization goals and functions will be emphasized. Prerequisite: COBU 301.

MKTG 461. Sales Management. (3 Credits)
A study of scientific methods of salesmanship analysis of prospects, knowledge of merchandise and its use, needs and benefits concepts, selling steps, selection and training of salesperson, theories and techniques of sales, and recognition of individual value. Prerequisite: COBU 301.

MKTG 462. Industrial Marketing. (3 Credits)
This course is designed to cover the basic concepts and management of industrial marketing such as the industrial marketing environment, industrial customer and market behavior, industrial marketing processes, segmentation, planning strategies, the industrial marketing mix, industrial marketing performance, and international implications. Prerequisite: COBU 301.

MKTG 470. Services & Non-Profit Marketin. (3 Credits)
This course focuses on concepts, practices, and strategies of services marketing, as well as the complexities involved in the area. Development of specialized marketing strategies from a managerial perspective is discussed for typical service entities such as professional, financial, education, entertainment, hotel and restaurant, health care, governmental, religious, research, advertising, and media organizations. Prerequisite: COBU 301.

MKTG 478. Independent Study. (3 Credits)
The course provides an opportunity for the marketing student to do an independent study in an emerging and/or state-of-the-art marketing area by investigating a problem or topic of interest in his/her area of specialization under the supervision of two professors. Prerequisite: Senior Standing; Completion of the first elective course in the student's area of specialization; development of a research/study proposal for independent study that is approved by two professors who will supervise the independent study.

MKTG 489. Strategic Marketing. (3 Credits)
An integrative capstone course, the course explores how firms develop integrated marketing programs and policies to achieve sustainable competitive advantage in the market place. It will be taught through case analysis and computer simulation of competitive market interactions. Prerequisites: COBU 301, MKTG 401, MKTG 404 and Senior standing.

MUSA: Music Applied (MUSA)

MUSA 101. Applied Minor Keyboard. (1 Credit)
Applied study in piano or organ. This course is intended for music minors or music majors wishing to study keyboard as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 102. Applied Minor Voice. (1 Credit)
Applied study in voice. This course is intended for music minors or music majors wishing to study voice as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 103. Applied Minor Strings. (1 Credit)
Applied study in violin, viola, cello, or bass. This course is intended for music minors or music majors wishing to study the instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 104. Applied Minor Winds. (1 Credit)
Applied study in a brass or woodwind instrument. This course is intended for music minors or music majors wishing to study the instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 105. Applied Minor Percussion. (1 Credit)
Applied study in percussion. This course is intended for music minors or music majors wishing to study percussion as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 106. Applied Minor Guitar. (1 Credit)
Applied study in guitar. This course is intended for music minors or music majors wishing to study a keyboard instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 111. Applied Piano. (2 Credits)
Applied study in piano at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement.

MUSA 112. Applied Voice. (2 Credits)
Applied study in voice at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 113. Applied Organ. (2 Credits)
Applied study in organ at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 114. Applied Violin. (2 Credits)
Applied study in violin at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 115. Applied Viola. (2 Credits)
Applied study in viola at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 116. Applied Cello. (2 Credits)
Applied study in viola at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 117. Applied Bass. (2 Credits)
Applied study in bass at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 118. Applied Harp. (2 Credits)
Applied study in harp at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 119. Applied Guitar. (2 Credits)
Applied study in guitar at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 120. Applied Flute. (2 Credits)
Applied study in flute at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 121. Applied Oboe. (2 Credits)
Applied study in oboe at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 122. Applied Clarinet. (2 Credits)
Applied study in clarinet at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 123. Applied Bassoon. (2 Credits)
Applied study in bassoon at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 124. Applied Saxophone. (2 Credits)
Applied study in saxophone at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 125. Applied Trumpet. (2 Credits)
Applied study in harp at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 126. Applied Horn. (2 Credits)
Applied study in horn at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 127. Applied Trombone. (2 Credits)
Applied study in trombone at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 128. Applied Euphonium. (2 Credits)
Applied study in euphonium at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 129. Applied Tuba. (2 Credits)
Applied study in tuba at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 130. Applied Percussion. (2 Credits)
Applied study in percussion at the lower level (first four semesters). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). First semester students are exempt from the Seminar performance requirement. Corequisites: MUSI 117; MUSI 280 during fourth semester.

MUSA 150. Applied Composition. (2 Credits)
Applied study in composition. The student participates in 60-minute weekly lessons and an end-of-semester jury. A weekly studio class may be required.

MUSA 301. Applied Minor Keyboard. (1 Credit)
Applied study in piano or organ. This course is intended for music minors or music majors wishing to study keyboard as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 302. Applied Minor Voice. (1 Credit)
Applied study in voice. This course is intended for music minors or music majors wishing to study voice as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 303. Applied Minor Strings. (1 Credit)
Applied study in violin, viola, cello, or bass. This course is intended for music minors or music majors wishing to study the instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 304. Applied Minor Winds. (1 Credit)
Applied study in a brass or woodwind instrument. This course is intended for music minors or music majors wishing to study the instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 305. Applied Minor Percussion. (1 Credit)
Applied study in percussion. This course is intended for music minors or music majors wishing to study percussion as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 306. Applied Minor Guitar. (1 Credit)
Applied study in guitar. This course is intended for music minors or music majors wishing to study a keyboard instrument as a secondary applied area. It is also open to other students depending upon the student's background, availability, and instructor approval. The student participates in 30-minute weekly lessons.

MUSA 311. Applied Piano. (2 Credits)
Applied study in piano at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 111; Corequisite: MUSI 317.

MUSA 312. Applied Voice. (2 Credits)
Applied study in voice at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 112; Corequisite: MUSI 317.

MUSA 313. Applied Organ. (2 Credits)
Applied study in organ at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 113; Corequisite: MUSI 317.

MUSA 314. Applied Violin. (2 Credits)
Applied study in violin at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 114; Corequisite: MUSI 317.

MUSA 315. Applied Viola. (2 Credits)
Applied study in viola at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 115; Corequisite: MUSI 317.

MUSA 316. Applied Cello. (2 Credits)
Applied study in cello at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 116; Corequisite: MUSI 317.

MUSA 317. Applied Bass. (2 Credits)
Applied study in bass at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 117; Corequisite: MUSI 317.

MUSA 318. Applied Harp. (2 Credits)
Applied study in harp at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 118; Corequisite: MUSI 317.

MUSA 319. Applied Guitar. (2 Credits)
Applied study in guitar at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 119; Corequisite: MUSI 317.

MUSA 320. Applied Flute. (2 Credits)
Applied study in flute at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 120; Corequisite: MUSI 317.

MUSA 321. Applied Oboe. (2 Credits)
Applied study in oboe at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 121; Corequisite: MUSI 317.

MUSA 322. Applied Clarinet. (2 Credits)
Applied study in clarinet at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 122; Corequisite: MUSI 317.

MUSA 323. Applied Bassoon. (2 Credits)
Applied study in bassoon at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 123; Corequisite: MUSI 317.

MUSA 324. Applied Saxophone. (2 Credits)
Applied study in saxophone at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 124; Corequisite: MUSI 317.

MUSA 325. Applied Trumpet. (2 Credits)
Applied study in trumpet at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 125; Corequisite: MUSI 317.

MUSA 326. Applied Horn. (2 Credits)
Applied study in horn at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 126; Corequisite: MUSI 317.

MUSA 327. Applied Trombone. (2 Credits)
Applied study in trombone at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 127; Corequisite: MUSI 317.

MUSA 328. Applied Euphonium. (2 Credits)
Applied study in euphonium at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 128; Corequisite: MUSI 317.

MUSA 329. Applied Tuba. (2 Credits)
Applied study in euphonium at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 128; Corequisite: MUSI 317.

MUSA 330. Applied Percussion. (2 Credits)
Applied study in percussion at the upper level (starting in the third year). The student participates in 60-minute weekly lessons, weekly studio class, and an end-of-semester jury. The student is expected to perform in studio class and at least once in Seminar (twice for performance majors). Music Performance majors register for and perform the Junior Recital (MUSI 380) in the second semester of the junior year, and the Senior Recital (MUSI 480) in the final semester of study. Students in the B.A. Music with Jazz Studies concentration and B.M. Music Education programs register for and perform a Senior Recital (MUSI 499) in the last semester of study (for music education majors, the last semester before student teaching). Prerequisite: MUSA 130; Corequisite: MUSI 317.

MUSA 350. Applied Composition. (2 Credits)
Applied study in composition. The student participates in 60-minute weekly lessons and an end-of-semester jury. A weekly studio class may be required. Prerequisite: MUSA 150.

MUSE: Music Ensemble (MUSE)

MUSE 101. Concert Band. (1 Credit)
Large wind and percussion ensemble that rehearses and performs works from the wind band repertoire. Students of all majors are encouraged to audition for this ensemble.

MUSE 102. Wind Symphony. (1 Credit)
Wind and percussion ensemble that performs classic and modern wind ensemble compositions. This is the primary ensemble for wind and percussion music majors and is also open to excellent players in other majors through an audition.

MUSE 105. Marching Band. (1 Credit)
The VSU Trojan Explosion marching band performs at football games and other events. Participation in this ensemble is open to all VSU students through an audition. Participation requires a rigorous rehearsal schedule and frequent travel.

MUSE 107. Symphony Orchestra. (1 Credit)
As a collaboration between VSU and the Petersburg Symphony Orchestra, the Symphony Orchestra includes rehearsals and performances with the PSO. It is the primary ensemble for music majors in strings. It is open to all VSU students through an audition.

MUSE 108. String Ensemble. (1 Credit)
The String Ensemble performs works written for string orchestra and chamber strings. It is open to all VSU students through an audition.

MUSE 111. Concert Choir. (1 Credit)
Full choir that performs a variety of choral works from classical to contemporary. The concert choir is the primary ensemble for music majors in voice. It is open to all VSU students through an audition.

MUSE 112. Chamber Choir. (1 Credit)
Smaller choral ensemble that performs music from a variety of chamber choir repertoire. This ensemble is open to music majors and to excellent singers from other majors through an audition.

MUSE 115. Gospel Chorale. (1 Credit)
The VSU Gospel Chorale is a registered student organization with the mission to provide gospel music for the university and community. VSU Gospel Chorale activities include public concerts, touring, church events, recording sessions, and University ceremonies.

MUSE 120. Jazz Ensemble. (1 Credit)
Full jazz band that performs jazz of various styles, from classics and contemporary compositions. It is the primary ensemble for students in the Jazz Studies major and is available to other students through an audition.

MUSE 122. Jazz Combo. (1 Credit)
Small jazz groups that perform works from the small-group repertoire as well as contemporary and original compositions.

MUSE 130. Woodwind Ensemble. (1 Credit)
Ensemble for music major students in woodwind applied study.

MUSE 131. Brass Ensemble. (1 Credit)
Ensemble for music major students in brass applied study.

MUSE 132. Percussion Ensemble. (1 Credit)
Ensemble for music major students in percussion applied study.

MUSE 135. Chamber Music Ensemble. (1 Credit)
Ensemble for music major students in strings and keyboard applied study, and other instruments as needed, performing pieces from the chamber music repertoire.

MUSE 140. Live Music Ensemble. (1 Credit)
Ensemble of instrumentalists and vocalists that performs classic and contemporary songs from popular music genres. This group provides entertainment for events on and off campus. It is available to all students through an audition.

MUSE 145. Recording Studio Musicianship. (1 Credit)
Ensemble that focuses on performance practices in the recording studio environment.#Students learn to work with lead sheets, DAWs, click tracks, arranging, recording, and other techniques essential to studio.

MUSE 151. Concert Band. (0 Credits)
Large wind and percussion ensemble that rehearses and performs works from the wind band repertoire. Students of all majors are encouraged to audition for this ensemble.

MUSE 152. Wind Symphony. (0 Credits)
Wind and percussion ensemble that performs classic and modern wind ensemble compositions. This is the primary ensemble for wind and percussion music majors and is also open to excellent players in other majors through an audition.

MUSE 155. Marching Band. (0 Credits)
The VSU Trojan Explosion marching band performs at football games and other events. Participation in this ensemble is open to all VSU students through an audition. Participation requires a rigorous rehearsal schedule and frequent travel.

MUSE 157. Symphony Orchestra. (0 Credits)
As a collaboration between VSU and the Petersburg Symphony Orchestra, the Symphony Orchestra includes rehearsals and performances with the PSO. It is the primary ensemble for music majors in strings. It is open to all VSU students through an audition.

MUSE 161. Concert Choir. (0 Credits)
Full choir that performs a variety of choral works from classical to contemporary. The concert choir is the primary ensemble for music majors in voice. It is open to all VSU students through an audition.

MUSE 165. Gospel Chorale. (0 Credits)
The VSU Gospel Chorale is a registered student organization with the mission to provide gospel music for the university and community. VSU Gospel Chorale activities include public concerts, touring, church events, recording sessions, and University ceremonies.

MUSE 301. Concert Band. (1 Credit)
Large wind and percussion ensemble that rehearses and performs works from the wind band repertoire. Students of all majors are encouraged to audition for this ensemble.

MUSE 302. Wind Symphony. (1 Credit)
Wind and percussion ensemble that performs classic and modern wind ensemble compositions. This is the primary ensemble for wind and percussion music majors and is also open to excellent players in other majors through an audition.

MUSE 305. Marching Band. (1 Credit)
The VSU Trojan Explosion marching band performs at football games and other events. Participation in this ensemble is open to all VSU students through an audition. Participation requires a rigorous rehearsal schedule and frequent travel.

MUSE 307. Symphony Orchestra. (1 Credit)
As a collaboration between VSU and the Petersburg Symphony Orchestra, the Symphony Orchestra includes rehearsals and performances with the PSO. It is the primary ensemble for music majors in strings. It is open to all VSU students through an audition.

MUSE 308. String Ensemble. (1 Credit)
The String Ensemble performs works written for string orchestra and chamber strings. It is open to all VSU students through an audition.

MUSE 311. Concert Choir. (1 Credit)
Full choir that performs a variety of choral works from classical to contemporary. The concert choir is the primary ensemble for music majors in voice. It is open to all VSU students through an audition.

MUSE 312. Chamber Choir. (1 Credit)
Smaller choral ensemble that performs music from a variety of chamber choir repertoire. This ensemble is open to music majors and to excellent singers from other majors through an audition.

MUSE 315. Gospel Chorale. (1 Credit)
The VSU Gospel Chorale is a registered student organization with the mission to provide gospel music for the university and community. VSU Gospel Chorale activities include public concerts, touring, church events, recording sessions, and University ceremonies.

MUSE 320. Jazz Ensemble. (1 Credit)
Full jazz band that performs jazz of various styles, from classics and contemporary compositions. It is the primary ensemble for students in the Jazz Studies major and is available to other students through an audition.

MUSE 322. Jazz Combo. (1 Credit)
Small jazz groups that perform works from the small-group repertoire as well as contemporary and original compositions.

MUSE 330. Woodwind Ensemble. (1 Credit)
Ensemble for music major students in woodwind applied study.

MUSE 331. Brass Ensemble. (1 Credit)
Ensemble for music major students in brass applied study.

MUSE 332. Percussion Ensemble. (1 Credit)
Ensemble for music major students in percussion applied study.

MUSE 335. Chamber Music Ensemble. (1 Credit)
Ensemble for music major students in strings and keyboard applied study, and other instruments as needed, performing pieces from the chamber music repertoire.

MUSE 340. Live Music Ensemble. (1 Credit)
Ensemble of instrumentalists and vocalists that performs classic and contemporary songs from popular music genres. This group provides entertainment for events on and off campus. It is available to all students through an audition.

MUSE 345. Recording Studio Musicianship. (1 Credit)
Ensemble that focuses on performance practices in the recording studio environment.#Students learn to work with lead sheets, DAWs, click tracks, arranging, recording, and other techniques essential to studio.

MUSE 351. Concert Band. (0 Credits)
Large wind and percussion ensemble that rehearses and performs works from the wind band repertoire. Students of all majors are encouraged to audition for this ensemble.

MUSE 352. Wind Symphony. (0 Credits)
Wind and percussion ensemble that performs classic and modern wind ensemble compositions. This is the primary ensemble for wind and percussion music majors and is also open to excellent players in other majors through an audition.

MUSE 355. Marching Band. (0 Credits)
The VSU Trojan Explosion marching band performs at football games and other events. Participation in this ensemble is open to all VSU students through an audition. Participation requires a rigorous rehearsal schedule and frequent travel.

MUSE 357. Symphony Orchestra. (0 Credits)
As a collaboration between VSU and the Petersburg Symphony Orchestra, the Symphony Orchestra includes rehearsals and performances with the PSO. It is the primary ensemble for music majors in strings. It is open to all VSU students through an audition.

MUSE 361. Concert Choir. (0 Credits)
Full choir that performs a variety of choral works from classical to contemporary. The concert choir is the primary ensemble for music majors in voice. It is open to all VSU students through an audition.

MUSE 365. Gospel Chorale. (0 Credits)
The VSU Gospel Chorale is a registered student organization with the mission to provide gospel music for the university and community. VSU Gospel Chorale activities include public concerts, touring, church events, recording sessions, and University ceremonies.

MUSI: Music (MUSI)

MUSI 101. Applied Major Piano. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 102. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 103. Applied Major Piano. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 104. Applied Major Piano. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected early Haydyn sonatas, Mozart sonatas, C.P.E. Bach, or Beethoven op. 49, 79. Selected compositions from the Romantic and/or 20th Century periods.

MUSI 105. Class Piano I. (1 Credit)
Development of basic keyboard skills and technique including introduction of scales, chords, arpeggios, harmonization, transposition, sight-reading, and simple solo repertoire. For music majors and minors whose principal instrument is not piano.

MUSI 106. Class Piano II. (1 Credit)
Continuing development of essential keyboard skills and technique including ability to play major and minor scales, harmonize and transpose in a variety of keys, and perform beginner to intermediate-level solo piano repertoire. Prerequisite: MUSI 105.

MUSI 111. Applied Voice Major. (2 Credits)
Advanced technical study and repertoire development. Representative literature from principal historical periods. Preparation for senior recital.

MUSI 112. Applied Voice Major. (2 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 113. Applied Voice Major. (3 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 114. Applied Voice Major. (3 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 115. Voice Class I. (1 Credit)
The basics of vocal technique taught in a group lesson setting. Students learn correct vocal technique and have lab experience teaching beginning vocal techniques individually, in small groups, and in larger classes. This course is designed for music majors whose principal applied area is not voice. Fall semesters.

MUSI 116. Voice Class II. (1 Credit)
The basics of vocal technique taught in a group lesson setting, continued from MUSI 115. Students learn correct vocal technique and have lab experience teaching beginning vocal techniques individually, in small groups, and in larger classes. This course is designed for music majors whose principal applied area is not voice. Spring semesters. Prerequisite: MUSI 115.

MUSI 117. Seminar. (0 Credits)
Weekly meeting for all music majors at students enrolled in applied music courses perform as part of their applied course requirements. Seminar is also a time for faculty to communicate general information to students, for students to ask questions, and for faculty and guest performances and lectures.

MUSI 121. Applied Major Instrument. (2 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to tonal production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios. Embouchure development, tone production. Selected technical and solo material.

MUSI 122. Applied Major Instrument. (2 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to tonal production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios. Embouchure development, tone production. Selected technical and solo material.

MUSI 123. Applied Major Instrument. (3 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to ton al production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos. APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios .Embouchure development, tone production. Selected technical and solo material.

MUSI 124. Applied Major Instrument. (3 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to ton al production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos. APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios .Embouchure development, tone production. Selected technical and solo material.

MUSI 141. Applied Minor Instrument. (1 Credit)
These courses are for applied minor instruction in the instrumental or vocal area. Prerequisite: Permission from the applied instructor.

MUSI 142. Applied Minor Instrument. (1 Credit)
These courses are for applied minor instruction in the instrumental or vocal area. Prerequisite: Permission from the applied instructor.

MUSI 153. Piano Fundamentals. (1 Credit)
Development of rudimentary skills and technique at the keyboard, including note-reading, keyboard basics, five-finger patterns, chords, and beginning level transposition, harmonization, and repertoire.

MUSI 154. Music Fundamentals. (3 Credits)
Introduction to the fundamental elements of music notation and tonal harmony, including pitch, meter, rhythm, intervals, keys, scales, chords, melody, cadence, and essential harmonic progression. This course is available to students who are not music majors upon availability.

MUSI 155. Technology for Musicians. (2 Credits)
Introduction to the fundamental elements of music notation and tonal harmony, including pitch, meter, rhythm, intervals, keys, scales, chords, melody, cadence, and essential harmonic progression. This course is available to students who are not music majors upon availability.

MUSI 181. Music Theory I. (3 Credits)
Students develop proficiency with the fundamentals of music notation and the essential elements of tonal music through listening, analysis, and written exercises. Corequisite: MUSI 183.

MUSI 182. Music Theory II. (3 Credits)
Continued development of proficiency with elements of tonal music through listening, analysis, and model composition (two-voice counterpoint and four-part harmonic progression). Prerequisite: MUSI 181, Corequisite MUSI 184.

MUSI 183. Aural Skills I. (1 Credit)
Solfege, rhythm syllabification, singing and recognition of simple diatonic melodic patterns and rhythmic patterns of increasing complexity, basic harmony applied to keyboard and dictation exercises. Corequisite: MUSI 181.

MUSI 184. Aural Skills II. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition in the context of diatonic harmony. Corequisite: MUSI 182.

MUSI 191. Methods & Techniques:Strings. (1 Credit)
Study of violin, viola, cello, and bass with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels. Fall semesters.

MUSI 192. Method & Techniques:Percussion. (1 Credit)
Study of percussion instruments and techniques with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels. Spring semesters.

MUSI 198. Jazz Appreciaton. (3 Credits)
This course is designed to provide the general student with knowledge and understanding of the history, structure and style of various types of jazz literature and artists.

MUSI 199. Music Appreciation. (3 Credits)
A study of music designed to provide the general student with knowledge and understanding of the history, structure and style of various types of music literature.

MUSI 200. Blacks in American Music. (3 Credits)
A humanities course concerned with the full range of Black contributions to music from African heritage to the present day.

MUSI 201. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods.

MUSI 202. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods.

MUSI 203. Musicianship for Keybrd Maj I. (1 Credit)
Development of basic musicianship skills and technique including, harmonization, transposition, sight-reading, chord progressions, and advanced scales and arpeggios. For music majors and minors whose principal instrument is piano.

MUSI 204. Musicianship for Keybrd Maj II. (1 Credit)
Continuing development of essential musicianship skills including chord progressions, transposition, harmonization, sight-reading, and advanced scales and arpeggios. For music majors and minors whose principal instrument is piano. Prerequisite: MUSI 203.

MUSI 205. Class Piano III. (1 Credit)
Continuing development of essential keyboard skills technique including major and minor scales and arpeggios, modal harmonization and harmonization utilizing a variety of seventh chords, transposition and sight-reading of vocal and ensemble scores utilizing transposing instruments, and learning intermediate level solo piano repertoire. Prerequisite: MUSI 106.

MUSI 206. Class Piano IV. (1 Credit)
Development of essential keyboard skills and technique for professional competency in keyboard playing. Preparation for the piano proficiency examination, including major, minor scales and arpeggios, harmonization utilizing chromatic harmonies, ability to transpose and read open score vocal and instrumental literature at the keyboard up to three staves, and the preparation and performance of intermediate/early advanced piano repertoire. Prerequisite: MUSI 205.

MUSI 208. Jazz Piano I. (2 Credits)
This course serves both Jazz Studies students and Keyboard Performance students, with the purpose of the development of keyboard skills for jazz with emphasis on traditional and extended harmony and voicing applicable to basic performance, accompaniment, composition, and sight-reading. Fall semesters.

MUSI 209. Jazz Piano II. (2 Credits)
Continued development of keyboard skills for jazz with emphasis on traditional and extended harmony and voicing applicable to basic performance, accompaniment, composition, and sight-reading. Spring semesters. Prerequisite: MUSI 208.

MUSI 210. Piano Proficiency. (0 Credits)
The piano proficiency assessment is a demonstration of the student's progress in functional keyboard study through the curriculum of Class Piano I–IV (and Keyboard Musicianship for students in applied piano). This assessment provides program assessment as well as data for the sophomore review of satisfactory progress.

MUSI 211. Applied Voice Major. (2 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German Lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 212. Applied Voice Major. (2 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German Lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 213. Applied Voice Major. (3 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 214. Applied Voice Major. (3 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 215. Voice Class. (1 Credit)
This course is designed for the non-voice major, i.e., keyboard, band and orchestral instrumental majors. The vocal mechanism and performance practices, including expression and interpretation through vocal literature (to include French and German songs) will be discussed. Prerequisite: MUSI 116.

MUSI 216. Voice Class. (1 Credit)
This course is designed for the non-voice major, i.e., keyboard, band and orchestral instrumental majors and is a continuation of MUSI 215 VOICE CLASS. Prerequisite: MUSI 215.

MUSI 221. Applied Major Instrument. (2 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios. Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance; tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 222. Applied Major Instrument. (2 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios. Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance; tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 223. Appled Major Instrument. (3 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios.Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance, tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 224. Applied Major Instrument. (3 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios.Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance, tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 235. Jazz Improvisation I. (2 Credits)
This performance-centered class introduces basic skills essential to effective jazz improvisation, with emphasis on developing a vocabulary of scales and patterns, ear training, reading and listening analysis, playing in various styles, and effective practice habits. Fall semesters. Corequisite: MUSI 297.

MUSI 236. Jazz Improvisation II. (2 Credits)
This performance-centered class builds skills essential to effective jazz improvisation, with emphasis on connecting patterns to melodic and harmonic structure, motivic development, building a solo or arrangement, transcription, and extending to more styles. Spring semesters. Prerequisite: MUSI 235, Corequisite: MUSI 298.

MUSI 237. Jazz Improvisation III. (2 Credits)
In this advanced jazz improvisation course, students develop skills further to craft and perform compelling improvisation and engage with others in improvisatory jazz music making. Fall semesters. Prerequisites: MUSI 298, MUSI 236.

MUSI 238. Jazz Improvisation IV. (2 Credits)
A study of the history, theories, and application of jazz improvisation via literature review, transcription, and performance toward the development of the student's unique individual improvisational voice.

MUSI 241. Applied Minor Instrument. (1 Credit)
These courses continue applied minor instruction in the instrumental or vocal area.

MUSI 242. Applied Minor Instrument. (1 Credit)
These courses continue applied minor instruction in the instrumental or vocal area.

MUSI 253. Instrumental Survey. (1 Credit)
A course designed to acquaint majors with the historical development, nomenclature, methods of tone production, transpositions, and basic instructional methods of the brass, percussion, string, and woodwind instruments.

MUSI 258. Vocal Diction I. (1 Credit)
A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. For music education majors. Fall semesters.

MUSI 259. Vocal Diction II. (1 Credit)
A study of the International Phonetic Alphabet (IPA) and its application to singing in French, German, and other languages. For music education majors. Spring semesters. Prerequisite: MUSI 258.

MUSI 280. Sophomore Recital. (0 Credits)
A fifteen-minute Sophomore Recital is required of all music majors in every degree program and concentration. It provides a snapshot of student progress in the first four semesters of applied study and serves as a program assessment point and provides data for the sophomore review of satisfactory progress. The student consults with the applied instructor to prepare for and schedule the recital. Concurrent with applied study (MUSA 1xx)

MUSI 281. Music Theory III. (3 Credits)
Continued development of proficiency with the structures of tonal music, including chromatic harmony and essentials of classical form, through listening, analysis, and model composition. Prerequisite: MUSI 182, Corequisite: MUSI 283.

MUSI 282. Music Theory IV. (3 Credits)
This course builds on the development of proficiency with the structures of tonal music, including large forms and advanced analytic techniques, and helps students develop a working knowledge of the structures of post-tonal music. Prerequisite: MUSI 281, Corequisite: MUSI 284.

MUSI 283. Aural Skills III. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition in the context of tonal harmony, with the addition of chromatic harmony, more complex melodic, metric, and rhythmic contexts, and recognition of formal characteristics. Prerequisite: MUSI 184, Corequisite: MUSI 281.

MUSI 284. Aural Skills IV. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition using a full complement of chromatic harmony with the addition of modulation, recognition of formal characteristics, and performance/recognition of common extended harmonies and non-tertian structures.

MUSI 285. Music History I. (3 Credits)
A survey of the development of Western music from antiquity through the Baroque period. Fall semesters. Prerequisite: MUSI 182.

MUSI 286. Music History II. (3 Credits)
A survey of Western music from the pre-Classical era through the Romantic era. Spring semesters. Prerequisite: MUSI 182, MUSI 285.

MUSI 287. Elementary Conducting. (2 Credits)
The basic principles of conducting vocal/instrumental groups. Laboratory experience with vocal and instrumental groups is required. Spring semesters. Prerequisite: MUSI 281.

MUSI 288. Vocal Diction I. (2 Credits)
A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. For Voice Performance majors.

MUSI 289. Vocal Diction II. (2 Credits)
A study of the International Phonetic Alphabet (IPA) and its application to singing in French, German and other languages. For Voice Performance majors.

MUSI 290. Music History III. (3 Credits)
A survey of Western Music beginning with the 20th Century and continuing to contemporary times.

MUSI 292. Introd to the Music Industry. (2 Credits)
An overview of the Music Industry. Areas of study will include industry history, culture, and current career options.

MUSI 294. Introd to the Recording Studio. (3 Credits)
An overview of Modern Recording Production. Topics will include an introduction to digital audio technology, sequencing, the use of MIDI, the application of computers and MIDI technology, using Music Writing Software, and the basics of Sampling and Synthesis. Hands-on experience required. For Music Majors Only.

MUSI 294L. Introd to the Recording Studio. (1 Credit)
MUSI 294L Introduction to the Recording Studio - 1 semester hour Spring This Lab introduces basic mixing, signal flow and signal processing techniques. Students will be given weekly hands on projects. The content of the lab will coincide with the lecture presentations. Prerequisite(s): MUSI 292 Corequisite(s): MUSI 294.

MUSI 295. Methods & Techniques:Woodwinds. (1 Credit)
Study of woodwind instruments with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels.

MUSI 296. Methods & Techniques: Brass. (1 Credit)
Study of brass instruments with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels.

MUSI 297. Jazz Theory I. (3 Credits)
The study of the rudiments of music as idiomatically applied to jazz, extending beyond the conventions of common-practice tertain harmony, to include extended harmonic tensions, quartal harmony, modal harmony, use of altered scales, and non-traditional harmonic progression.

MUSI 298. Jazz Theory II. (3 Credits)
Continuation of jazz harmony concepts from MUSI 296 and 285. This course includes music of a wider variety of styles and levels of complexity. More time is spent with analysis, transcription, reharmonization, and model composition.

MUSI 301. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Select repertoire and begin preparation of Senior Recital.

MUSI 302. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Select repertoire and begin preparation of Senior Recital.

MUSI 303. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 304. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 305. Introduction to Live Sound. (3 Credits)
MUSI 305 - Introduction to Live Sound - 3 semester hours Spring This course introduces the concepts and practices of live sound engineering, including analog console functionality, system preparation, system management and operation. Additional focus on microphone techniques, monitoring and mixing for live sound. Prerequisite(s): MUSI 294 or COMM 331.

MUSI 308. Jazz Composition & Arranging I. (2 Credits)
Writing and arranging for small jazz groups, and introductory exercises in writing for larger ensembles.

MUSI 309. Jazz Composition &Arranging II. (2 Credits)
Continuation of MUSI 208, writing and arranging for large jazz groups and completing larger projects.

MUSI 311. Applied Voice Major. (2 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. Preparation for senior recital.

MUSI 312. Applied Voice Major. (2 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. Preparation for senior recital.

MUSI 313. Applied Voice Major. (3 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. In MUSI 314 a junior recital is required. A Jury will be heard six weeks before public performance date for approval.

MUSI 314. Applied Voice Major. (3 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. In MUSI 314 a junior recital is required. A Jury will be heard six weeks before public performance date for approval.

MUSI 315. Pro Tools 101. (3 Credits)
This course provides the foundations for basic recording, mixing and editing within the Pro Tools environment. Areas of focus include building multi- track sessions, recording and importing audio and MIDI, editing session media, navigating sessions and arranging media on tracks, and using basic processing and mixing techniques to finalize a production.

MUSI 316. Pro Tools 110. (3 Credits)
This course expands upon the basic principles taught in Pro Tools 101 and introduces the core concepts and techniques students need to competently operate a Pro Tools system running mid-sized sessions. Students learn to build sessions designed for commercial purposes and improve the results of their recording, editing, and mixing efforts and gain experience setting up sessions, importing media, working with digital video, spotting sound effects, using loop recording and MIDI Merge techniques, working with virtual instruments, warping with Elastic Audio, applying Real-Time Properties, creating clip loops, applying signal processing, using automation, and using sub mixes and track groups to simplify a final mix.

MUSI 317. Seminar. (0 Credits)
Weekly meeting for all music majors at students enrolled in applied music courses perform as part of their applied course requirements. Seminar is also a time for faculty to communicate general information to students, for students to ask questions, and for faculty and guest performances and lectures.

MUSI 321. Applied Major Instrument. (2 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Preparation for senior recital. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Preparation for senior recital. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Preparation for senior recital. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourths, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo, ensemble and orchestral literature. Preparation for senior recital.

MUSI 322. Applied Major Instrument. (2 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Preparation for senior recital. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Preparation for senior recital. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Preparation for senior recital. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourths, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo, ensemble and orchestral literature. Preparation for senior recital.

MUSI 323. Applied Major Instrument. (3 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Junior recital required in MUSI 324. A Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourth, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo ensemble and orchestral literature. Junior recital is required for MUSI 324. A Jury will be heard six weeks before public performance date for approval.

MUSI 324. Applied Major Instrument. (3 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Junior recital required in MUSI 324. A Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourth, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo ensemble and orchestral literature. Junior recital is required for MUSI 324. A Jury will be heard six weeks before public performance date for approval.

MUSI 325. Applied Studio Techniques. (3 Credits)
MUSI 325 - Applied Studio Techniques - 1 semester hour Fall/Spring Investigates audio fundamentals, microphone techniques, signal flow, common recording technologies, and studio operation procedures. Prerequisite(s): COMM 332/MUSI 305 Corequisite(s): MUSI 325L.

MUSI 325L. Applied Studio Techniques Lab. (2 Credits)
MUSI 325L Applied Studio Techniques Laboratory - 2 semester hours Fall/Spring Students learn microphone, console, and session management techniques by recording live performers. In personal labs, students hon mixing and recording skills. Prerequisite(s): COMM 332/ MUSI 305 Corequisite(s): MUSI 325.

MUSI 354. Marching Band Techniques. (2 Credits)
A comprehensive study of marching band show design, drill, writing, charting techniques, marching band teaching techniques, rehearsal organization, selecting and purchase of equipment and materials, proper administrative organization, band travel planning and public relations.

MUSI 357. Electronic Music. (3 Credits)
An introduction to synthesizer programming, sampling, audio processing, and MIDI with a focus on history, theory, and application. Coursework includes synthesizer programming with virtual instruments, basic sampling techniques with software samplers, audio manipulation techniques within the context of contemporary music production, and MIDI sequencing within digital audio workstations (DAWs).

MUSI 358. Electronic Music Laboratory. (0 Credits)

MUSI 360. Fund of Sound Des for Film&Vid. (3 Credits)
Students learn to create and implement sound design elements in film and video game productions. Students learn basic sound effects capturing, processing, editing, and implementation techniques within Film and TV productions as well as game engines such as Unreal and Unity. Students also learn workflow structure, file management, and how to prepare deliverables. Prerequisite MUSI 357 or instructor approval.

MUSI 373. Opera & Musical Theatre Wrkshp. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 374. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 377. History of Music Technology. (2 Credits)
An overview of history of electronic music and music technology. Topics will include synthesizers, oscillators, envelope generators, basics of electronic sound production, waveform theory, modulation theory, basics of acoustics, and more advanced topics in electronic music synthesis. Hands-on experience required. Prerequisites: MUSI 181, MUSI 182, MUSI 183, MUSI 184, MUSI 292, and MUSI 294.

MUSI 378. Music Comp for Film & Video Ga. (3 Credits)
This course is designed to develop foundational music composition skills based on the needs of visual and interactive media productions. Topic include working with video files in a DAW, syncing music compositions to picture, creating looping compositions for video games, MIDI based compositional techniques with synths and virtual orchestral instruments, and mixing virtual instrument compositions.

MUSI 381. Counterpoint. (3 Credits)
This course provides survey of contrapuntal techniques in chronological sequence, with focus on composition exercises and analysis. More detailed emphasis is placed on sixteenth-century modal counterpoint and eighteenth-century fugue.

MUSI 384. Jazz History. (2 Credits)
The study of the history of jazz from its origins in slave songs (spirituals and work songs), Western classic music (from monophony through common practice and 20th century music), and other ethnic music.

MUSI 385. Vocal Literature I. (2 Credits)
A survey of the art song in historical perspective. A detailed analysis and study of selected songs are included in order to develop a sense of style and application for the art of singing.

MUSI 386. Arranging. (2 Credits)
Instrumentation and arranging with particular focus on music education settings.

MUSI 388. Adv Instrumental Conducting. (2 Credits)
This course will give students the knowledge, tools, insights and opportunity to develop and refine individual conducting skills. During the course students will cultivate a comprehensive understanding of effective and efficient rehearsal techniques, verbal and non-verbal communication, score study and analysis, artistic gestures, and meaningful rehearsal strategies.

MUSI 389. Advanced Choral Conducting. (2 Credits)
Conducting techniques with particular attention to interpretation, techniques of choral conducting, tempo, diction, nuance, seating of choral groups, and the testing and auditioning of vocalists. Prerequisite: MUSI 287.

MUSI 390. Sample Based Production. (3 Credits)
Students learn and apply sampling technology used in genres such as Hip-Hop, Electronic Dance Music, and Pop. Topics include building arrangements with samples, sound design using samples, creating custom sample-based software instruments, and performing live with samplers and electronic music controllers.

MUSI 390L. Sample Based Production Lab. (1 Credit)
MUSI 390L Sample Based Production Laboratory - 1 semester hour Fall This lab introduces basic techniques when working with sampling hardware and software. The skills learned in this class will help prepare the student for work in the field of contemporary audio and music production. Prerequisite(s): MUSI 357 Electronic Music Corequisite(s): MUSI 390.

MUSI 393. Methods & Practicum in Elem ME. (3 Credits)
Study of current methods and materials of music education at the elementary level. Orff, Dalcroze, Kodaly, Gordon, and other current music education approaches for the young child are discussed, observed, and demonstrated. An intensive directed practicum is a fundamental aspect of this course.

MUSI 396. 20th Century Music. (2 Credits)
An overview of art music in the 20th Century, concentrating on the ways in which the different styles have developed and interacted throughout the century, the knowledge of major composers and their most prominent style characteristics.

MUSI 397. Music In The Romantic Period. (2 Credits)
A study of the music literature of the Romantic Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 398. Music In The Classical Period. (2 Credits)
A study of the music literature of the Classical Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 399. Music In The Baroque Period. (2 Credits)
A study of the music literature of the Baroque Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 401. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 402. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation of Senior Recital.

MUSI 403. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods, including work with a piano concerto. . Preparation of Senior Recital.

MUSI 404. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods, including work with a piano concerto. . Preparation of Senior Recital.

MUSI 405. Advanced Media Sound Design. (3 Credits)
Students build upon skills learned in MUSI 360. Students explore concepts of immersive audio formats including surround sound, Ambisonics, and Dolby Atmos. This course also introduces basic use of game engines such as Unity, and the basics of audio middleware applications for game development such as Wwise and FMOD.

MUSI 411. Applied Voice Major. (2 Credits)
Continuation of basic voice study. Arias from both opera and oratorio.

MUSI 412. Applied Voice Major. (2 Credits)
Continuation of basic voice study. Arias from both opera and oratorio.

MUSI 413. Applied Voice Major. (3 Credits)
Continuation of basic voice study. Arias from both opera and oratorio. Preparation for senior recital.

MUSI 415. Music Business. (3 Credits)
MUSI 415 Music Business - 3 semester hours Spring Music business surveys the changing landscape of the modern music industry. Students entering into a career in sound production and technology should be aware of the music business trends, practice and basic legalities. Topics will include copyright law, royalties, entrepreneurship, and streaming. Prerequisite(s): COMM 338 and COMM 338L Fundamentals of Post or by permission from Instructor Corequisite(s):

MUSI 421. Applied Major Instrument. (2 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills.

MUSI 422. Applied Major Instrument. (2 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills.

MUSI 423. Applied Major Instrument. (3 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. Preparation for senior recital. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. Preparation for senior recital. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills. Preparation for senior recital.

MUSI 424. Senior Recital. (3 Credits)
APPLIED BRASS Preparation and presentation of senior recital. Senior recital Jury will be heard by voice faculty six weeks before public performance date for approval. APPLIED PERCUSSION Preparation and presentation of senior recital. Senior recital Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. APPLIED WOODWINDS Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval.

MUSI 425. Advanced Mixing. (3 Credits)
This course extends mixing theory, and the vocabulary of Fundaments of Mixing, by examining advanced signal processing techniques in a mixing context. In addition, the topics of data backup, the mastering process, and master recording delivery will be discussed. Prerequisite(s): MUSI 325.

MUSI 425L. Advanced Mixing Lab. (1 Credit)
MUSI 425L Advanced Mixing - 1 semester hour Spring This lab applies advanced mixing techniques. Mixing techniques include working with large format sessions, parallel processing, mix templates, and mastering. Prerequisite(s): COMM 432 Applied Studio Techniques Corequisite(s): MUSI 425.

MUSI 426. Advanced Music Production. (3 Credits)
Students apply recording, mixing, and mastering techniques. Students are responsible for selecting an artist, helping them prepare and record their material, then mix, master, and deliver results in a production-ready package.

MUSI 428. Music Industry Internship. (3 Credits)
An internship in the music industry field. Students must work a total of 120 Hours within the semester taken.

MUSI 431. Piano Literature I. (2 Credits)
A survey of the solo and concerto literature for the piano, beginning with its antecedents in the harpsichord/clavichord repertoire and extending through the piano music of Beethoven and Schubert.

MUSI 433. Piano Pedagogy I. (2 Credits)
An introduction to the art of teaching the piano, including surveys of individual and group beginning methods, introduction to elementary repertoire, piano teaching as a business, and practical experience in piano teaching. Required for Keyboard Performance majors; recommended for non-majors who wish to teach piano.

MUSI 473. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 474. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 475. Special Topics in Music. (2 Credits)
A temporary or topic-specific course for exploration of specific or advanced topics in music of relevance to upper-level music majors.

MUSI 478. Student Teaching in Music. (3 Credits)

MUSI 479. International Jazz Studies. (3 Credits)
A course on the influence of jazz--as a uniquely American art form--in other cultures across the globe as a musical staple of performance and musicology in international performance and education at all levels.

MUSI 480. Senior Recital. (0 Credits)
A 50 to 60-minute Senior Recital is required of students in the Performance concentration of the Bachelor of Music degree. It is normally presented during the last semester of applied study. The Senior Recital represents a culmination of student progress in applied study through the degree program. The student consults with the applied instructor in planning the recital. Planning should begin in the last part of the third year of study. Students may not register for Senior Recital if they have not passed MUSI 210 Piano Proficiency. Prerequisite: MUSI 210, Corequisite: MUSA 3xx.

MUSI 481. Vocal Literature II. (2 Credits)
Introduction to vocal literature, including opera, oratorio, art song, and other forms.

MUSI 482. Instrumental Pedagogy. (2 Credits)
Designed to explore current and historical pedagogical approaches to the teaching of band and orchestral instruments.

MUSI 483. Vocal Pedagogy. (2 Credits)
Designed to explore the current and historical pedagogical approaches to the teaching of vocal music.

MUSI 484. Piano Pedagogy. (2 Credits)
An introduction to the art of teaching the piano, including surveys of individual and group beginning methods, introduction to intermediate repertoire, history of piano technique, and piano teaching as a business. Required for Piano Performance Majors. Recommended for non-majors who wish to teach piano.

MUSI 485. Orchestration. (2 Credits)
Continued study of vocal literature, including opera, oratorio, art song, and other forms.

MUSI 486. Piano Literature. (2 Credits)
A survey of the solo and concerto literature for the piano beginning with its antecedents in the harpsichord repertoire and extending to the major trends and works of the twentieth century.

MUSI 487. Art of Accompanying. (1 Credit)
Preparation for collaborative pianism in duo and chamber music settings. Repeatable, three semesters required for keyboard performance majors.

MUSI 489. Senior Project Preparation. (1 Credit)
For students in the Bachelor of Arts in Music program who are preparing a capstone project, this course provides the means to work with the project advisor. It should be taken the semester before and the semester of the completion and presentation of the project. In the semester of project completion and presentation, the student must also register for MUSI 490 Senior Research Project.

MUSI 490. Senior Project. (0 Credits)
The senior research project is a capstone artifact in the B.A. Music Research concentration. This assessment provides final program assessment for the Music Research concentration. This course uses pass/fail grading.

MUSI 491. Methods & Practicum in 2nd IME. (3 Credits)
Designed for instrumental music education majors, this course will provide students with an understanding of resources and techniques for the proper supervision and delivery of instruction in the instrumental music program. Emphasis will also be placed on rehearsal management, organization, personnel, scheduling, knowledge of literature, pedagogy, and other important aspects of running an effective secondary instrumental music program. The practicum aspect of the course is designed to provide instrumental music education students the opportunity to observe and teach at the middle school and high school level in a public-school instrumental classroom.

MUSI 493. Methods & Practicum in 2nd CME. (3 Credits)
Designed for choral music education majors, this course will provide students with an understanding of resources and techniques for the proper supervision and delivery of instruction in the choral music program. Emphasis will also be placed on rehearsal management, organization, personnel, scheduling, knowledge of literature, pedagogy, and other important aspects of running an effective secondary choral music program. The practicum aspect of course is designed is designed to provide choral music education students the opportunity to observe and teach at the middle school and high school level in a public-school choral classroom.

MUSI 495. Vocal Literature. (2 Credits)
The introduction of representative solo and ensemble literature for voice.

MUSI 496. Instrumental Literature. (2 Credits)
A course designed for the instrumental music major which introduces representative literature for the instruments of the orchestra and band.

MUSI 497. Studio Seminar. (2 Credits)
An advanced studio practicum and capstone course allowing students to fine tune recordings and media content they have created throughout their time in the Recording Arts program. Students organize a portfolio and website of their work which they present in a recital lecture/performance.

MUSI 499. Senior Recital. (0 Credits)
A 30 to 40-minute Senior Recital represents a culmination of student progress in applied study through the degree program. The student consults with the applied instructor in planning the recital. Planning should begin in the last part of the third year of study. This course uses pass/fail grading. Students may not register for Senior Recital if they have not passed MUSI 210 Piano Proficiency.

National Student Exchange Prog (NSEP)

NSEP 300. National Student Exchange Prog. (12-18 Credits)

NURS: Nursing (NURS)

NURS 100. Introduction To Nursing. (6 Credits)
This course introduces the learner to safe and effective nursing care through the conceptual domains of client, healthcare systems, and nursing practice. Clinical laboratory will focus on integration of psychomotor skills through the use of simulation and inpatient care settings across the life span. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: Admission into the clinical phase Co requisite: NURS 101.

NURS 101. Explorations in Nursing. (2 Credits)
This course introduces the learner to the nursing major. Discussion will include orientation to nursing as a profession, the healthcare system, study skills, time management, medical terminology, and critical thinking. Prerequisite: Admission into the clinical phase of the program or permission of the department.

NURS 110. Pharmacology For Nursing. (3 Credits)
This course will focus on the basic concepts of pharmacology with emphasis on safe drug administration. There is continues concentration on the conceptual domains of the client, healthcare systems, and nursing practice. Prerequisite: MATH 120, admission into the clinical phase or permission of the department Co requisite: NURS 150.

NURS 150. Principles Of Nursing I. (6 Credits)
This course further develops the conceptual domains of client, healthcare systems and nursing practice that were introduced in NURS 100. Clinical laboratory will focus on psychomotor skills, psychosocial interventions, and the role of the nurse through the use of simulation and inpatient care settings. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: NURS 100, NURS 101, admission into the clinical phase Co requisite: NURS 110.

NURS 199. Focused Topics in Nursing. (3-6 Credits)
This is a special topics course for students who are unsuccessful in the previous clinical nursing course. The course will present essential concepts for success in the next nursing course. The course will include concepts and psychomotor skills. Students will have the opportunity for practice in the simulation and in selected situations, in the off campus clinical environment. Prerequisite: Permission of department.

NURS 200. Individualized Nursing Studies. (6 Credits)
This course is designed to prepare students for an immersive learning experience within the Virginia Community College System (VCCS), demonstrating competency in a pre-licensure nursing program. Through supervised instruction, students will engage in hands-on learning in nursing readiness, and exploration of strategies for engaging in concept-based nursing education. This course focuses on developing critical thinking skills and clinical reasoning to enhance their readiness for professional nursing practice. Prerequisite: Admission to Reynolds AAS Nursing program Special Restrictive Elective The course is taught asynchronously online. Textbook and Required Materials: American Psychological Association. (2020). Publication manual of the American Psychological Association Additional resources for each session topic will be provided in advance of each session date.

NURS 250. Dimensions of Nursing. (2 Credits)
This seminar course will focus on contemporary factors affecting the conceptual domains of client, healthcare systems and nursing practice. Prerequisite: NURS 100, NURS 101, NURS 110, NURS 150, and admission into the clinical phase Co requisite: NURS 252.

NURS 252. Principles Of Nursing II. (8 Credits)
This course advances the conceptual domains of client, healthcare systems and nursing practice. Clinical laboratory will focus on family health care through the use of simulation, inpatient, and community health settings. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: NURS 100, NURS 101, NURS 110, NURS 150, and admission into the clinical phase Co requisite: NURS 250.

NURS 255. Principles of Nursing III. (8 Credits)
This course culminates the focus of the conceptual domains of client, healthcare systems and nursing practice. Clinical laboratory will focus on the assimilation of the knowledge, skills, and attitudes necessary for delivery of safe and effective nursing care. Upon completion, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: NURS 100, NURS 101, NURS 110, NURS 150, NURS 250, NURS 252, and admission into the clinical phase Co requisite: NURS 256.

NURS 256. The Practice Of Nursing. (2 Credits)
This capstone nursing seminar course will prepare the learner for transition into entry level nursing practice with an emphasis on NCLEX-RN examination preparation. Prerequisite: NURS 100, NURS 101, NURS 110, NURS 150, NURS 250, NURS 252 and admission into the clinical phase Co requisite: NURS 255.

NURS 300. Individualized Nursing Studies. (6 Credits)
This course is designed to reinforce students' knowledge and skills essential for the successful completion of the pre-licensure nursing program. This course serves as a bridge to the online RN to BSN completion program, providing focused preparation for the National Council Licensure Examination (NCLEX-RN) and professional development mentoring. Students will participate in a variety of activities, workshops, and projects to reinforce their readiness for professional nursing practice. The course aims to provide a seamless transition into advanced nursing education and practice. Prerequisite: Admission to Reynolds AAS Nursing program Special Restrictive Elective The course is taught asynchronously online. Textbook and Required Materials: American Psychological Association. (2020). Publication manual of the American Psychological Association Additional resources for each session topic will be provided in advance of each session date.

NURS 320. Transition to Prof NURS Practi. (3 Credits)
This course introduces the RN to the role of the baccalaureate prepared nurse generalist. Through an examination of values, ethics, and practice standards, the Registered Nurse (RN) will promote competencies for safe and effective nursing care. The course will provide the foundation for professional practice. Prerequisite: Admissions to the program.

NURS 321. Integrated Health Assessment. (3 Credits)
This course focuses on comprehensive health assessment. Assessment skills are applied to the practice of nursing across the lifespan. The focus is on assessing cultural, psychosocial, behavioral, physiological, and spiritual health parameters to maintain homeostasis. Pharmacological principles essential to promoting clinical reasoning will be examine. Laboratory experiences are provided for comprehensive skill acquisition. Prerequisite: Admissions to the program.

NURS 322. Theoretical Foundations. (3 Credits)
NURS 322 Theoretical Foundations - 3 semester hours This course reviews models, concepts, and theories that serve as the basis for professional nursing. The RN will demonstrate an understanding of nursing theorists approach to patient centered care across the lifespan in diverse settings. Historical, legal, cultural, economic and social factors that affect nursing and healthcare delivery are analyzed. The RN will develop a framework for future nursing practice. Prerequisite: Admissions to the program.

NURS 323. Healthcare Trends & Policy. (3 Credits)
This course introduces the RN to contemporary changes in the internal and external environment affecting nursing practice. The RN will examine trends in healthcare and regulatory policies to establish an appreciation of factors influencing professional practice in a global society. Prerequisite: NURS 320.

NURS 324. Evidence-based Practice. (3 Credits)
NURS 324 Evidence-based Practice - 3 semester hours This course serves as the foundation for the use of the research process to critically analyze research studies. Through an introduction to the language and skills of evidence-based nursing practice, the RN student will focus on qualitative, quantitative, and mixed methods designs. Through an exploration of current and past studies, the RN student is introduced to the use of data as the basis for decision making in the healthcare environment. Prerequisite(s): NURS 320, NURS 321, NURS 322.

NURS 420. Alterations in Health. (3 Credits)
This course focuses on the wellness-illness continuum across the lifespan with an emphasis on disease processes and the body's response to illness, Principles of genetics and genomics in relation to health are examined. Disease prevention, early diagnosing and rehabilitation strategies are analyzed to achieve optimal outcomes among individuals, families and groups. Prerequisite: NURS 323, 324.

NURS 421. Nursing Informatics. (3 Credits)
This course explores the use of informatics within healthcare delivery systems. An examination of electronic health records management, practice standards, and data analysis will prepare the RN to utilize informatics within the dynamic healthcare environment. Policies promoting the appropriate use of social media in healthcare will be discussed. Prerequisite: NURS 323, 324.

NURS 422. Population & Global Health. (3 Credits)
This course will emphazie health promotion and disease prevention within communities. The communities consist of individuals, families, groups, and societies within a local, state, national, or international setting. The focus is on formulating strategies to improve patient care outcomes. Principles of epidemiology within vulnerable populations will be highlighted. Community based social justice, cultural sensitivity, health disparities and equity of care will be addressed. Prerequisite: 323, 324.

NURS 423. Leadership & Healthcare Mgmt. (3 Credits)
This course focuses on evidence-based leadership and managment theories, principles, and models. The RN will analyze current practices related to the leadership role within healthcare systems. Interdisciplinary team communication and collaboration across disciplines will be examined. Quality management and safety of patient centered care will be emphasized. Prerequisites: NURS 420, 421, 422.

NURS 424. Fin Mgmt & Health Delivery Sys. (3 Credits)
This course examines the effects of social, cultural, economic, legal and political factors affecting healthcare delivery and practice. Resources and best practice methods for financing healths services are identified. Healthcare reimbursement principles as related to the delivery of cost effective healthcare services in a variety of settings will be discussed. Legislative processes on the state and national level are examined.\ Prerequisite: NURS 420, 421, 422.

PADM: Public Administration (PADM)

PADM 410. Grants Management. (3 Credits)
Comprehensive and thorough study of the techniques used in managing federal and state grant-in-aid programs. Emphasis will be placed upon the contracts and grants management, procurement practices under federal and state law, accounting requirements, reporting requirements, program control, and fiscal performance.

PESM: Sports Management (PESM)

PESM 200. Foundations of Sport Mgmt. (3 Credits)
This course will introduce students to the sports industry, the history and principles of sports, the wide range of career opportunities involving sports, and the economic impact of sports in America.

PESM 240. Sport in the Media. (3 Credits)
This course will explore the relationships between the sports industry, athletes, media, and audience. Topics of discussion will include various types of information sources, such as newspapers, magazines, books, radio, television, online, forums, blogs, and social media in terms of their history, function, impact, and ethical implications.

PESM 301. Special Topics in Sport Mgmt. (3 Credits)
This course provides opportunities for students to pursue topics of interest in sport management beyond those accessible via the standard curriculum. The application of content to authentic situations is stressed.

PESM 330. Sport Marketing. (3 Credits)
A study and critical examination of the marketing mix (product, price, place and promotion) related to sports marketing. Special emphasis will be placed on production and advertising and sales techniques applied to educational environments, athletic programs and to amateur and professional sports.

PESM 350. Sport Facilty & Event Mgmt. (3 Credits)
This course will provide students with effective management skills for the operation of sport facilities in regard to operations, security, and event planning.

PESM 352. Sport Ethics. (3 Credits)
This course will investigate ethical, managerial and moral issues related to individuals who work and participate in the areas of sport and physical activity.

PESM 402. Directed Research. (3 Credits)
This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging sport management issues in the instructional program.

PESM 405. Sport in American Society. (3 Credits)
Discusses the phenomenon of sport as it represents one of the most pervasive social institutions today. The major theme of this course is to demonstrate how sports reflect and enforce the beliefs, values, and ideologies of society. Emphasis is placed on changing attitudes and current trends in the world of sports. The course will be taught from a sociological and philosophical perspective.

PESM 406. Sport Law. (3 Credits)
This course is the identification and application on various areas of law to the sports industry. Includes how constitutional law, contract law, employment law and tort law impact sport management decisions and the sports industry.

PESM 407. Sport Governance & Policy. (3 Credits)
This course will examine governance structures within professional and amateur sport organizations. Emphasis will be placed on the mission, structure and function of sport governing bodies within intercollegiate athletics, scholastic, amateur, professional and olympic sports.

PESM 408. Finc Aspects Recr & Sport Mgmt. (3 Credits)
This course will investigate fund raising activities and the appropriate use of financial resources within the sport industry.

PESM 472. Internship. (3 Credits)
Supervised work experience under expert guidance at approved sites provided for the prospective professional in sport and recreation management. Emphasis is on various individual and group opportunities in sport and recreation management organizations involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally. 300 supervised hours required.

PHED: Physical Education (PHED)

PHED 120. Foundations Of Physical Ed. (2 Credits)
An introduction to the personal and professional challenges and opportunities available in the field of human movement. Its primary purpose is to help the student gain insight into the broad discipline of physical education; to acquaint the student, generally, with the organized body of knowledge embraced within the discipline of physical education; and to show the proper relationship of physical education to the fields of health and recreation.

PHED 125. Body Mechanics. (1 Credit)
This course is a requirement for all physical education majors. The primary purpose of this course is to acquaint students with the basic knowledge, understanding, and value of physical activity as related to optimal healthful living. Emphasis is placed on improving students' performance of basic gross motor skills.

PHED 126. Theory & Practice Gym Apparatu. (1 Credit)
Acquaints students with basic knowledge, understanding, and value of gymnastics as related to optimal healthful living. Emphasis is placed on improving students' performance of basic gross motor skills, and the utilization of physical fitness assessment data to plan and implement a lifelong personal fitness program. Content includes the incorporation of scientific principles of movement as they apply to personal health- related fitness (flexibility, strength, aerobic, endurance, body composition) and personal skill-related fitness (coordination, agility, power, balance, and speed).

PHED 127. Beginning Swimming. (1 Credit)
Course is designed to equip students with basic water skills and knowledge needed to make them reasonably safe while in, on, or about the water. Attention given to safety and emergency care (First Aid, CPR, Universal Precaution).

PHED 128. Intermediate Swimming. (1 Credit)
Upon completion of this course, students should comprehend the elements of good swimming. Instruction in intermediate swimming is given to students who have taken and passed the beginner's swimming course, or those who have never had swimming instruction but can pass the beginner's swimming test.

PHED 200. Team Sports I. (1 Credit)
The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach soccer, volleyball, and softball on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary One unit and three lesson plans for each activity. The cultural significance of team sports, competition, and sportsmanship is also included.

PHED 201. Team Sports II. (1 Credit)
The development of basic skills and an understanding of the knowledge, skills and abilities needed to teach a variety of team sports including basketball, softball, and flag football on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary units and lesson plans for each activity. The cultural significance of team sports, competition, and sportsmanship is also included.

PHED 211. Lifetime Sports I. (1 Credit)
The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach a variety of individual sports, including archery, badminton, and bowling on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary unit and lesson plans for each activity. The cultural significance of individual sports, competition, and sportsmanship is also included.

PHED 212. Lifetime Sports II. (1 Credit)
The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach a variety of individual sports, including golf, tennis, track and field on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary one unit and lesson for each activity plans. The cultural significance of individual sports, competition, and sportsmanship is also included.

PHED 214. Outdoor Ed & Leisure Activitie. (1 Credit)
Provides knowledge, skills, and processes for teaching contemporary outdoor (e.g. camping, hiking, walking, and tenets of cooperative living) and leisure activities suitable for life-long participation. Attention given to the selection, development, and utilization of appropriate instructional resources such as leisure, competition, and sportsman; the relationship between a physically active lifestyle and health; the needs of special and diverse populations; safety and emergency care; and injury prevention.

PHED 217. Lifesaving. (2 Credits)
Course designed to enable students to meet the requirements for the American National Red Cross Advanced Lifesaving Certificate.

PHED 224. Fitness Program Management. (3 Credits)
This course focuses on the economic and administration of programs within the fitness industry. Principles include administrative and theoretical aspects of designing, managing, marketing and promoting a health-fitness facility. Concepts include personnel, communication, problem solving, fiscal management, budgeting, ethical considerations, productivity and evaluation of community, commercial and corporate level programs.

PHED 226. Prin. of Fitness Instruction. (3 Credits)
This course focuses on developing knowledge to plan and implement group fitness classes as well as personal training sessions. Topics include: risk management, exercise plans, group fitness instruction, personal training, fitness pedagogy, training special populations, cardiovascular fitness, resistance training, flexibility training, and core stability.

PHED 232. Coaching And Officiating. (2 Credits)
Concepts and competencies applicable for the physical educator who desires breadth and depth of preparation in athletic coaching and officiating. Designed to prepare the student to understand the role of coaching and the art of officiating in ways that complement his/her basic knowledge of each course activity and its skills.

PHED 238. Water Safety. (3 Credits)
Satisfactory completion of this course qualifies the student for the American National Red Cross Instructor's Certificate.

PHED 273. Football Officiating. (1 Credit)
The rules and mechanics of officiating football. Students will gain practical experience by officiating intramural, recreation league, or other organized games. This course also prepares students for future careers in officiating.

PHED 274. History Principles Objective P. (3 Credits)
The study of the historical foundations of physical education from earlier times to the present and their implications for society. Attention is given to understanding principles which have been developed to insure a valid interpretation of the place of the physical education program. Content also includes the cultural significance of dance, leisure, competition, and sportsmanship, and the value of physical fitness.

PHED 281. Business of Golf. (3 Credits)
This course covers business aspects of golf, basic golf rules, etiquette, and mechanics with a golf simulator. Five full rounds of golf must be completed by semesters end. Class meets on campus and off campus at a local golf course.

PHED 310. Advanced Personal Fitness. (3 Credits)
This course will introduce students to the practical application of the principles of fitness. These components include flexibility, cardiovascular endurance, muscle strength, muscle endurance, and body composition. Students will also study principles of personal training, nutritional fitness, as they apply to the physiological improvement of the human body. Students completing this course will be eligible to sit for the AFAA personal training and group exercise certification. This course requires students to engage in daily physical activity.

PHED 329. Motor Learning. (2 Credits)
Course designed to provide the student with an understanding of motor behavior. It is specifically concerned with the efficacy of motor skill acquisition and motor skill performance. Specific topics include classifications and measurement of motor performance; the role and function of sensory processes, perception, memory, and attention; and the delivery of feedback and structure of practice. This course also covers the basics of research design.

PHED 335. Rhythmic Forms. (1 Credit)
Explores the historical perspective and cultural significance of American and international folk, square, and social dance, and their steps, patterns, and formations. Integrates an understanding of personal health and skill-related fitness components (e.g., flexibility, strength, coordination and balance). And the knowledge, skills, and processes needed to teach rhythmic forms and dance. Attention given to the selection, development, and utilization of appropriate instructional resources, and technology.

PHED 338. Kinesiology. (3 Credits)
Course designed to provide the student with an understanding of the anatomical and biomechanical bases of human motion, with applications for motor skill acquisition, and developmental and rehabilitative exercise. This course also emphasizes the application of mechanical physics to body movement and sports medicine. Prerequisites: BIOL 318 Human Anatomy; BIOL 319 Human Physiology; or consent of instructor.

PHED 339. Measurement Evaluation Health. (3 Credits)
The focus of this course is on the development of evaluation and measurement skills used by teachers and administrators of physical education throughout the nation. Major emphasis is placed on interpreting descriptive statistics and developing test construction techniques. Students are given many opportunities to administer physical performance tests and to acquire knowledge of different grading techniques. Prerequisites: PHED 120 Foundations of Physical Education or consent of instructor.

PHED 343. Elem School Pe Method Activiti. (2 Credits)
Provides knowledge, skills, and processes needed to teach elementary physical education. Includes the election, development, and utilization of appropriate instructional methods, resources, and technology. Emphasis is place on: the importance of the development and maintenance of physically active lifestyles and good health, skills theme approaches and developmental physical education; activities designed to help students understand, develop and value personal fitness; cooperative activities; and activities for special and diverse populations including gifted and talented. Field experiences in this course will provide opportunities for pre-candidates to observe and participate in different roles as a teacher in a school setting prior to doing student teaching. Pre-candidates will observe experienced teachers in a clinical setting to properly orientate them to the teaching profession.

PHED 344. Middle & Secondary Sch Pe Meth. (3 Credits)
Methods and materials of teaching physical education in secondary schools. Emphasis is on program content, and the selection, organization, and guidance of learning experiences appropriate for secondary level students. Content also includes a review of personal health-related (flexibility, strength, aerobic, endurance, body composition) and skill-related (coordination, agility, power, balance, speed) fitness components, an understanding of the knowledge, skills, and processes needed to teach cooperative activities, team and individual activities, the relationship between a physically active lifestyle and health. The value of lifelong fitness programs, activities for the mentally and physically challenged, activities for the talented and gifted and the cultural significance of dance, leisure, competition, and sportsmanship. Field experiences in this course will provide opportunities for pre-candidates to observe and participate in different roles as a teacher in a school setting prior to doing student teaching. Pre-candidates will observe experienced teachers in a clinical setting to properly orient them to the teaching profession. Prerequisites: PHED 120 Foundations of Physical Education or consent of instructor.

PHED 374. Human Physiology&Sport Perform. (3 Credits)
This course surveys and critically evaluates the basic principles of human physiology with direct application to acute and chronic exercise and muscle rehabilitation.

PHED 400. Adapted Physical Education. (3 Credits)
This course is designed to provide the student with an understanding of disabling conditions, definitions, and implications as they relate to special education, adapted physical education, injury prevention and rehabilitation, the regular physical education program, integration, and future trends. Emphasis is placed on instructional methods and materials as well as teaching laboratory practical experiences, teaching and planning methods appropriate for exceptional students and the integration of technology. Prerequisites: PHED 120 Foundations of Physical Education or consent of instructor.

PHED 401. Org & Adm Hlth Pe & Athletic P. (3 Credits)
Provides a basic understanding of the many aspects of administering health, physical education, recreation and athletic programs on the pre k-12 levels, in colleges and universities, as well as in recreational and private industry sectors. Content includes the need for quality instruction, risk management, student safety and other legal issues, the role of administration in comprehensive school health programs and personnel and programmatic planning, management, and assessment. Contemporary and computer-driven team building exercises, research presentations, and community service projects, afford students opportunities to integrate theoretical concepts into practical application, and strengthen their verbal, written and technological levels of proficiency. Prerequisites: Completion of junior year or consent of instructor.

PHED 402. Student Teachinging Hlth & PE. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary health and physical education candidates and involves observing student teachers. Coursework includes class instruction on student developed and implemented projects in assessment, technology, school culture as well as lesson and unit planning. Prerequisites: Departmental Approval Prerequisites: PHED 120 Foundations of Physical Education or consent of instructor. Co-requisites: EDUC 401 Student Teaching Seminar; EDUC 402 Student Teaching.

PHED 403. Physiology of Exercise. (3 Credits)
This course is designed to provide the student with a better understanding of the physiological aspects of physical activity, relationships between physical activity, fitness and health, knowledge of the basic fundamentals necessary to understand and apply exercise physiology, and guidelines for devising and managing programs for both active and sedentary individuals. Physical fitness assessments will be conducted during this course. Prerequisites: BIOL 318 Human Anatomy and Physiology.

PHED 407. Sport & Exercise Psychology. (3 Credits)
This course presents the theoretical and empirical foundations of sport psychology. Operating from a conceptual rather than an applied framework, this class develops an understanding of social psychological phenomena and processes related to participation in sport and physical activity (e.g., personality, anxiety, arousal, achievement motivation, social facilitation, aggression, emotions, and fan behavior). Prerequisites: PHED 120 Foundations of Physical Education; Senior standing or consent of instructor.

PHIL: Philosophy (PHIL)

PHIL 140. Philosophy. (3 Credits)
An introduction to methods of critical thinking, and to the major problem areas of philosophy such as epistemology, metaphysics and ethics.

PHIL 180. Critical Thinking. (3 Credits)
An introductory course exploring the nature and structure of arguments and enhancing reasoning abilities. Students will learn to develop and analyze arguments, identify informal fallacies, differentiate among assumptions, opinions, and facts, and hone critical reading and writing skills.

PHIL 213. History Of Philosophy. (3 Credits)
A survey of the history of Western philosophy from the Renaissance through the nineteenth century, including Hobbes, Descartes, Leibnitz, Spinoza, Locke, Berkeley, Hume, Kant, and Hegel.

PHIL 214. Non-Western Philosophies. (3 Credits)
A survey of non-western philosophies. Topics will vary by semester but may include epistemology, ethics, and metaphysics as they are approached throughout Asia and Africa.

PHIL 216. Philosophy of Religion. (3 Credits)
PHIL 216 Philosophy of Religion - 3 semester hours A survey of Eastern and Western religious thought, including the idea of God, knowledge of God, the problem of evil, immortality, and reincarnation.

PHIL 218. African American Philosphy. (3 Credits)
A survey of African American philosophical thought. The course will explore both the distinctive tradition of African American philosophy as well as the unique contributions made by African Americans to different branches of philosophy.

PHIL 220. Introduction To Logic. (3 Credits)
An introduction to the methods of elementary formal logic, including traditional syllogistic, Venn diagrams, sentential logic, truth tables, methods of deduction, and inductive reasoning.

PHIL 275. Ethics. (3 Credits)
An introductory study of the nature, analysis, and justification of moral judgments.

PHIL 280. Medical Ethics. (3 Credits)
A course designed to introduce students to ethical theories and moral reasoning that they will then apply to case studies concerning health care and medicine and their intersections with biotechnology. Students will consider contemporary moral dilemmas that confront health care professionals and scientists, as well as individuals who need to make medical decisions that deal with challenging ethical questions.

PHIL 290. Business Ethics. (3 Credits)
A course designed to introduce students to ethical theories and moral reasoning which they will then apply to business case studies. Students will consider contemporary moral dilemmas confronting businesses and corporations. They will develop the critical skills needed to analyze complex moral situations and formulate, weigh, discuss and defend appropriate moral solutions.

PHIL 314. Philosophy Of Religion. (3 Credits)
A survey of Eastern and Western religious thought, including the idea of God, knowledge of God, the problem of evil, immortality, and reincarnation.

PHIL 315. African Philosophy. (3 Credits)
An exploration of metaphysical, epistemological and ethical theories arising from peoples of the African continent. Students will analyze, discuss and compare the differing principles and world views of the diverse African societies.

PHIL 323. Special Topics In Philosophy. (3 Credits)
A close reading of original philosophical works on an in-depth treatment of a philosophical problem, such as readings in the philosophy of law, Black philosophy, existentialism, the philosophy of language, and symbolic logic.

PHIL 326. Mythology. (3 Credits)
An introductory survey of the traditional mythological narratives of ancient civilizations, considering the origins of myths, their nature, and their functions in shaping and expressing a culture's understanding of the divine, the natural world, human nature, and the institutions of human community.

PHIL 327. Philosophy In Literature. (3 Credits)
Study of basic philosophical problems in major works of literature. Prerequisite: GEPI 140 or other philosophy course, or permission of instructor(s).

PHIL 340. Philosophy Of Mind. (3 Credits)
The question 'what is it to have a mind?' forms the focus of the course, and the objective is to arrive at an answer by examining the multifarious manifestations of mind. The course is organized around an interdisciplinary approach by incorporating theories from psychology, artificial intelligence and cognitive science.

PHIL 350. Philosophy Of Law. (3 Credits)
An examination of the sources, content and extent of political and moral rights and obligations. Other concepts explored will be autonomy, privacy, freedom of religion, equal opportunity, paternalism, and how these concepts impact issues such as conscientious objection, flag burning, pornography, affirmative action, abortion, and euthanasia.

PHIL 400. Contemporary Philosophy. (3 Credits)
A study of twentieth century Western philosophy, including the work of such contemporary philosophers as Russell, Wittgenstein, Pierce, James, Dewey, Heidegger, and Sartre.

PHIL 422. Philosophy Of Science. (3 Credits)
An examination of the fundamental conceptual basis of the sciences; consideration given to scientific methods of certification, theory construction and explanation, the metaphysical assumptions and implications of scientific theories, and the relations between the scientific and non-scientific views of the world.

PHIL 424. Seminar In Philosophy. (3 Credits)
An opportunity for students to pursue original research in an area of the instructor's special interest and study.

PHIL 450. Applied Ethics. (3 Credits)
An in-depth exploration of moral theory and discussion of its application to broad areas such as business, the environment, or bio-medical issues.

PHIL 460. Epistemology. (3 Credits)
This is a senior-level class on epistemology, a field of philosophical inquiry that addresses the study of the nature of knowledge. The course will cover a number of issues in epistemology, such as: the analysis of knowledge; skepticism; the structure of justification; relevance of gender and race to understanding and the ethics of belief; contextualism; epistemological methodology.

PHIL 470. Metaphysics. (3 Credits)
This is a senior-level class on metaphysics, a field of philosophical inquiry that addresses questions about the fundamental nature of reality. Topics covered in this course include, for example: personal identity; the mind-body problem; causation and laws; space and time; modality; mereology; the nature of freedom.

PHYS: Physics (PHYS)

PHYS 100. Physical Science. (1-4 Credits)
This physical science course is designed for non-science majors. It covers basic physical science areas relating to motion, momentum, angular momentum, energy, gravity, and thermodynamics. Co-requisite: PHYS 100.

PHYS 105. Introduction to Physics I. (1-3 Credits)
A study of the basic concepts of physics including vector algebra, motion, momentum, angular momentum, energy, gravity and thermodynamics. This course is designed for science students not majoring in physics. Lab Laboratory experiments in measurement techniques, mechanics, heat, and vibrations and waves emphasizing proper methods of data and error analysis designed to complement PHYS 105.

PHYS 106. Introduction to Physics II. (1-3 Credits)
A continuation of PHYS 105 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles. Pre-requisite: PHYS 105 Introduction to Physics I Lab A continuation of PHYS 105 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles. Pre-requisite: PHYS 105 Introduction to Physics I.

PHYS 112. General Physics I. (1-4 Credits)
A calculus-based study of the basic concepts of physics. Topics include vector algebra, kinematics, dynamics of single and many-particle systems, gravitation, energy, momentum, conservation laws, circular and rigid body motion, elasticity, fluid mechanics, thermal equilibrium, temperature, and the laws of thermodynamics with applications to ideal gases and thermodynamic processes. Co-requisite: MATH 200 Calculus I Lab Laboratory experiments in mechanics, fluids, and heat designed to compliment PHYS 112. Co-requisite: PHYS 112 General Physics I.

PHYS 113. General Physics II. (1-4 Credits)
A continuation of PHYS 112 treating electromagnetism and optics. Pre-requisite: PHYS 112 General Physics I Co-requisite: MATH 201 Calculus II Lab Laboratory experiments in electromagnetism and optics designed to complement PHYS 113. Pre-requisite: PHYS 112 General Physics I Laboratory Co-requisite: PHYS 113 General Physics II.

PHYS 116. General College Physics I. (1-4 Credits)

PHYS 117. General Physics II. (1-4 Credits)

PHYS 120. Household Physics. (1-4 Credits)

PHYS 122. Physics Of Music. (2 Credits)

PHYS 214. General Physics III. (1-4 Credits)

PHYS 215. General Physics IV. (1-4 Credits)

PHYS 217. Intermediate Laboratory I. (2 Credits)

PHYS 218. Intermediate Laboratory II. (2 Credits)

PHYS 300. Practicum. (3 Credits)

PHYS 301. Contemporary Issues In Physics. (4 Credits)

PHYS 302. Conceptual Physics. (1-3 Credits)

PHYS 311. Optical Physics. (3 Credits)

PHYS 312. Thermal Physics. (1-4 Credits)

PHYS 313. Physical Mechanics. (3 Credits)

PHYS 319. Advanced Laboratory I. (1-4 Credits)

PHYS 320. Advanced Laboratory II. (2 Credits)

PHYS 321. Physics Demonstrations. (3 Credits)

PHYS 350. Continuum Mechanics. (3 Credits)

PHYS 351. Fundamentals Of Accoustics. (3 Credits)

PHYS 414. Electromagnetism & Relativity. (3 Credits)

PHYS 415. Electromagnetism & Relativity. (3 Credits)

PHYS 416. Introduction Quantum Mechanics. (3 Credits)

PHYS 417. Quantum Mechanics II. (3 Credits)

PHYS 418. Methods Of Theoretical Physics. (3 Credits)

PHYS 419. Intro to Condensed Matter Phys. (3 Credits)

PHYS 421. Physics Demonstration II. (3 Credits)

PHYS 422. Atomic & Molecular Phyiscs. (3 Credits)

PHYS 423. Nuc & Part Pysics. (3 Credits)

PHYS 424. Senior Thesis. (2 Credits)

PHYS 430. Science Teach Middle & Second. (3 Credits)

PHYS 478. Student Teach Secondary School. (8 Credits)

PHYS 480. Special Topics. (3 Credits)

PHYS 481. Biophysics. (3 Credits)

PLSC: Plant Science (PLSC)

PLSC 140. Principles of Plant Science. (3 Credits)
An in-depth study of the fundamentals of plant science, including basic principles of plant growth, culture, development, propagation and the relationship of the broad industry of agriculture to plant development.

PLSC 250. Introd Natural Resr & Forestry. (3 Credits)
A study of the fundamental concepts of natural resource management, including forestry, forest products, conservation, wildlife, and recreation. Critical natural resource issues will be emphasized, including biophysical and socioeconomic aspects, as well as careers that address these issues. Prerequisites: PLSC 140 Principles of Plant Science; sophomore or above standing.

PLSC 341. Field Crops Production. (3 Credits)
A study of the distribution, adaptation, cultural practices, and selection of the principal field crops. Special attention will be given to the identification and habitats of cereal crops, legumes and grasses.

PLSC 352. Forage Crops And Pasture Mgmt. (3 Credits)
A study of the production and handling of leading forage crops, their relationship to the livestock industry and the maintenance of soil fertility. Special attention is given to hay and pasture management.

PLSC 353. Integrated Pest Mgmt Strategie. (3 Credits)
A study of the combined use of biological, chemical, and cultural methods utilized to keep pest populations below accepted threshold levels. Special attention is given to pesticide applications, ecological/environmental factors, residues, application equipment, and economical considerations.

PLSC 440. Plant Resistance To Insects. (2 Credits)
The study of mechanisms of plant resistance to insects' attack and the utilization of insect control by chemical and non-chemicals means. Special attention is given to factors related to the cause of resistance and methods of breeding insect restraint varieties of field and horticultural crops. Prerequisites: Junior or above standing.

PLSC 441. Plant Pathology. (4 Credits)
A study of the nature, cause and control of plant diseases. This course will concentrate on disease of field, orchard and vegetable crops. Prerequisites: PLSC 140 Principles of Plant Science; junior or above standing.

PLSC 442. Problems In Plant Science. (3 Credits)
This course is designed for advanced students to work independently on problems relating to genetics and physiology of horticulture and field crops. The problem studied must be one of modern concern to the plant science industry. Prerequisites: Junior or above standing.

PLSC 444. Genetics. (3 Credits)
An in-depth study of the fundamental principles, mechanisms, and heredity of plants and animals. Emphasis will be placed on genetic engineering and gene transfer of crops and animals.

PLSC 445. Economic Entomology. (3 Credits)
A study of the classification, structure, description, habits of the principal insects and the methods of control. Student will also become familiar with the economic benefits and importance of insects to humans. Prerequisites: BIOL 120 Principles of Modern Biology, GEC 142 Principles of Agricultural Economics and BIOL 313 General Zoology or equivalent.

PLSC 446. Plant Physiology. (4 Credits)
A study of the plant cell, solutions, and membranes in relation to the cell root systems. Emphasis will be placed on the plant cell response to the intake of water, intake of solutes, induced elements, and the loss of water. Prerequisites: PLSC 140 Principles of Plant Science, junior or above standing.

PLSC 448. Plant Breeding. (3 Credits)
Astudy of the application of genetics and simple biometric constants to the breeding of field and horticultural crops. The history and creation of plant transformation will be emphasized. Prerequisite: PLSC 444 Genetics; academic advisor's approval and junior or above standing.

PLSC 450. Introduction To Forestry. (3 Credits)
A study of the broad concept of forestry and forestry products with special interest on ecology, silviculture, reproduction, protection, measurement and other forest management practices.

PLSC 452. Urban Natural Resource Mgmt. (3 Credits)
An overview of the ecosystem services provided by urban and suburban trees and green space, as well as methods to evaluate and manage potential benefits, risks, and costs. The course will include a study of the social needs and values of urban ecosystems; urban forest resource inventories; tree and vegetation ordinances; the development, financing, and management of urban forestry programs; and community involvement, public relations, and urban forestry education programs. Prerequisite: PLSC 250 Introduction to Natural Resources and Forestry.

PLSC 454. Special Topics In Crop Science. (3 Credits)
Selected topics for advanced student dealing with current issues in crop science. Special emphasis is placed on modern crop production problems. Prerequisites: Junior or above standing.

PLSC 455. Turf Management. (3 Credits)
A study of turf grasses and their growth requirements, including the various turf operations, equipment needs, materials and work programs designed for the efficient maintenance of turf as related to specific uses.

POLI: Political Science (POLI)

POLI 102. State And Local Government. (3 Credits)
A study of the structure, operations, and functions of the state and local institutions of government.

POLI 150. United States Government. (3 Credits)
An introductory course in the study of the American political system.

POLI 201. Political Philosophy. (3 Credits)
A study of the development of political thought from the Greek period through the Middle Ages.

POLI 202. Contemporary Political Thought. (3 Credits)
A study of political thought from the end of the Middle Ages to the present.

POLI 203. Govt & Politics In Russia. (3 Credits)
A study of the theory, organization, and administrative processes in the Russian political system.

POLI 204. Modern Africa. (3 Credits)
A political and historical analysis of the problems of nation-states on the African continent, from 1945 to the present.

POLI 205. Govt & Politics Develop Countr. (3 Credits)
A study of the political and economic problems of underdeveloped countries in the Third World.

POLI 206. Govt & Politics In China. (3 Credits)
A study of the political ideologies, institutions, and decision-making processes in the People's Republic of China.

POLI 207. International Relations. (3 Credits)
A study of the political, social, and economic dynamics of the present international system.

POLI 208. International Law. (3 Credits)
A study of the origin, character, and principles of law that determine the duties and rights of nations in their relations.

POLI 209. Public Administration. (3 Credits)
A study of the principles of public administration; structure, organization, and management in modern government with emphasis on the bureaucratic role in public policy formation.

POLI 210. Comparative Government. (3 Credits)
A comparative analysis of nation-states within the contemporary international system.

POLI 211. Introduction to Social Justice. (3 Credits)
An introductory course that examines the historic, ideological, and cultural patterns of social justice practice. Special emphasis is on contemporary justice realities in order to understand the dynamics of oppression, linking competing theories of social justice to hierarchies of power grounded in race, ethnicity, nationality, gender identities and class to strategies for social transformation and change.

POLI 301. The Scope & Methods Of Poli Sc. (3 Credits)
Inquiry into the methodology, epistemology, and techniques of the discipline of political science.

POLI 302. The Techniques Political Analy. (3 Credits)
A study of the research methodologies and techniques used in the study of political problems. Prerequisite: POLI 301.

POLI 303. Political Parties & Pressure G. (3 Credits)
A study of political parties and interest groups and their impact on public policy.

POLI 304. American Constitutional Law. (3 Credits)
A study of judicial interpretation, the nature of judicial review, selected leading decisions of the United States Supreme Court and their impact on the basic principles of government.

POLI 305. Seminar In Black Politics. (3 Credits)
A study of the political impact of African-Americans in local, state, and national policy issues.

POLI 306. Seminar In Urban Problems. (3 Credits)
A study of the political, social, and economic problems affecting metropolitan communities.

POLI 307. American Foreign Policy. (3 Credits)
A study of the formation, implementation, and implications of American foreign policy.

POLI 308. Polimetrics I. (3 Credits)
A study of statistical approaches in political science research, with emphasis on survey research and data analysis using the SPSS statistical analysis program. Prerequisites: GEMA 112 Basic Mathematics; GEMA 113 Basic Mathematics; STAT 210 Elementary Statistics I.

POLI 309. Polimetrics II. (3 Credits)
A study of statistical approaches in political science research. Advance data analysis techniques, including univariate, bivariate, and multivariate analysis, and the testing of hypotheses. Prerequisites: POLI 308 Polimetrics I.

POLI 310. Political Science Internship. (6 Credits)
Students provided with the opportunity to experience the workings of government, through placement in internships with various legislators, and public and private agencies. Prerequisite: Minimum sophomore status, or approval of Department Chairperson.

POLI 311. Theoretical App in Soc Justice. (3 Credits)
This course will present a wide array of theoretical approaches to social justice. These theoretical foundations will encompass historic theory, social psychology, sociological theory, liberation, theology, and philosophical foundations of metaphysics and epistemology. Pre-requisite: POLI 211.

POLI 315. The Civil Rights Movement. (3 Credits)
A study of the political, social, and economic dimensions of the civil rights movement from 1954 to the present.

POLI 400. Seminar In Local Politics. (3 Credits)
A study of the dynamics of local politics. Seminar format that would include assigned readings, field research, lecture, and discussion.

POLI 403. Senior Thesis. (3 Credits)
Execution of senior thesis research design, computer-based data analysis, and production of first draft of the senior thesis. Prerequisites: POLI 301 The Scope and Methods of Political Science; POLI 302 The Techniques of Political Analysis.

POLI 404. Senior Seminar. (3 Credits)
Production of final draft of senior thesis complete with faculty suggested revisions. Presentation and defense of thesis must be concluded by deadline date for submission of senior grades. Prerequisite: POLI 403 Senior Thesis.

POLI 408. Independent Study. (3 Credits)
Opportunity to work on community issues, policy issues, or independent research. Work is supervised by assigned faculty member. Prerequisite: Approval of Department Chairperson.

POLI 409. Constitutional & Civil Liberti. (3 Credits)
A study of the role of the Constitution and the function of the courts in defining and safeguarding civil rights and civil liberties.

POLI 410. Presidential Policy-Making. (3 Credits)
A study of the President's role in formulating public policy through interaction with domestic and foreign political actors.

POLI 412. Political Economy Southen Afri. (3 Credits)
A study of the political and economic forces which shape the politics of nation-states in southern Africa.

POLI 413. Politics Multina'L Corp 3rd Wr. (3 Credits)
A study of the impact of multinational corporations on the politics of nation-states in the Third World.

POLI 414. Marxist Political Philosopy. (3 Credits)
A study of the nature of the state, politics, social development, and class struggle from the writings of Karl Marx and Frederick Engels.

PSYC: Psychology (PSYC)

PSYC 101. Introduction to Psychology. (3 Credits)
A general education course designed to give students an understanding of the scientific approach to the study of human behavior and to develop an appreciation for the breadth and variety of psychological approaches.

PSYC 110. Introduction to Psychology I. (3 Credits)
A basic course in psychology for majors, serving as the foundation for subsequent courses. The course is designed to give students an understanding of the scientific approach to the study of human behavior and to help students develop an appreciation for the breadth and variety of psychological theories. Required of all psychology majors.

PSYC 111. Introduction to Psychology II. (3 Credits)
A basic course in psychology, serving as the foundation for subsequent courses on specialized topics. Required of all psychology majors.

PSYC 117. Psychology Of Early Childhood. (3 Credits)
A course designed to emphasize personality development of young children at the pre-school and primary levels. Prerequisite: Psychology 212.

PSYC 210. Adolescent Psychology. (3 Credits)
Characteristics of behavior during the adolescent phase of development; personal social adjustments of the individual between childhood and adulthood.

PSYC 212. Human Growth & Development. (3 Credits)
A course designed primarily for students preparing to teach in elementary and secondary schools. It aids students in developing fundamental understanding of the patterns and sequence of development from conception through the adolescent period. Students are required to observe children under guidance and to apply methods of child study.

PSYC 213. Quantitative Methods in Psych. (3 Credits)
A general introductory course to the study of methods and techniques of research in psychology with emphasis upon research design and statistical concepts. Some automatic data processing experience is also provided. Pre-requisite: STAT 210.

PSYC 214. Social Psychology. (3 Credits)
An introduction to the current concepts and theories that attempt to explain the behavior of the individual in society. Major topics include culture and personality, social roles, leadership, prejudice and propaganda. Review and analysis of current concepts and experimentation in the field. Prerequisites: PSYC 110 or PSYC 111.

PSYC 215. Research Methods in Psychology. (3 Credits)
The course involves the design of psychological research involving the appropriate techniques of control and statistical data analyses. Must be taken concurrently with PSYC 215 laboratory. Pre-requisite: PSYC 213 Co-requisite: PSYC 215.

PSYC 215L. Research Methods in Psych Lab. (1 Credit)
The course laboratory will provide academic laboratory exercises related to the design, control, and statistical analysis techniques in various areas of research methodology in the field of Psychology. It focuses on human performance and laboratory procedures and equipment used to measure this performance. Must be taken concurrently with PSYC 215 lecture. Pre-requisite: PSYC 213 Co-Requisite: PSYC 215 Lecture.

PSYC 216. Developmental Psychology. (3 Credits)
This is a course that aims to develop a comprehensive theoretical base in developmental psychology. Complex processes of human development throughout the life span will be analyzed in systematic form and the major premises of developmental theorists will be critically examined. Supplemented by required observation and participation in the Human Development and Learning Laboratory.

PSYC 305. Practicum. (2 Credits)
Supervised field experience in mental health.

PSYC 309. Experimental Psychology Lab. (1 Credit)
Experiments conducted that illustrate techniques of control and statistical analysis in various areas of psychology. Focuses on human performance and equipment and laboratory procedures used in the measuring of this performance. Must be taken concurrently with PSYC 310. Prerequisite: PSYC 315 - Quantitative Methods.

PSYC 310. Experimental Psychology. (3 Credits)
The experimental design of psychological research involving the appropriate techniques of control and statistical data analyses. Must be taken concurrently with PSYC 309. Prerequisite: PSYC 315 - Quantitative Methods.

PSYC 311. Mental Hygiene. (3 Credits)
A critical consideration of the literature on mental health and personal adjustment. Emphasis is placed on the maintenance of wholesome personal-social relations and the prevention of serious mental disturbances.

PSYC 313. Educational Psychology. (3 Credits)
Focuses on an analysis of cognitive behavior, such as attention memory, thinking, problem solving and metacognition and theories of learning. Instructional strategies in the use of cognitive behaviors to enhance learning will be discussed. The effects of psychological variables on learning will also be examined. This course has practical applications for educators, psychologists, develop mentalists, and human service workers. Prerequisite: Psychology 212 or Psychology 216.

PSYC 314. Educational Tets & Measurement. (3 Credits)
A study of the general field of tests and measurements including elementary statistics. Concerned with the selection and administration of group tests of mental ability, aptitude, interest, achievement and personality. Prerequisite: Psychology 212 or Psychology 216.

PSYC 315. Quantitative Methods In Psyc. (3 Credits)
A general introductory course to the study of methods and techniques of research in psychology with emphasis upon research design and statistical concepts. Some automatic data processing experience is also provided. Prerequisite: STAT 210.

PSYC 316. Abnormal Psychology. (3 Credits)
A study of the origins and symptoms of psychopathological behavior. This course considers psychopathology from the major theoretical perspectives. The course is supplemented by required observations at Central State Hospital. Prerequisites: Psychology 111 and 216.

PSYC 318. Applied Psychology. (3 Credits)
The application of psychological research in the solution of specific problems. Emphasis upon psychology in industry (training, human engineering, fatigue, other conditions affecting work) and in advertising (attention, motivation, imagery appeal).

PSYC 324. Problems In Psychology. (2-4 Credits)
A study of problems in psychology by intensive reading of the major periodicals and classical works in the field. Provides the student with the opportunity to pursue a research project through independent study.

PSYC 325. Personality Development. (3 Credits)
A survey of theory and research on the development of the personality. Primary emphasis is upon the factors that shape personality. Class projects involve some laboratory work with children. Prerequisites: Psychology 110 or Psychology 111 and consent of instructor.

PSYC 400. Senior Seminar. (3 Credits)
An integrative course designed to show the relationship among the separate courses pursued by the student in the undergraduate experience. The course provides an in-depth review of some of the major concepts and issues in psychology. Prerequisite: Senior status as a Psychology Major.

PSYC 401. Topics In Psychology. (3-6 Credits)
Involves a critical discussion of current theoretical and experimental issues in four areas of psychology: African-American experiences, Spiritual Experiences, Adulthood and Aging, and Selected Issues in Psychology. One topic will be offered each semester, and the course may be repeated once for credit.

PSYC 402. Introd to Black Psychology. (3 Credits)
This course provides an introduction to the theory, research, and practice relative to the study of psychosocial experience from the unique worldview framework of the history and culture of African people. Emphasis will be given to such issues as the African/African-American and European/European-American worldviews and the manner in which cross cultural systems of social reality impact the Black experience in America, theories of African/Black personality, psychological health and mental disorder, family and social relationships, community functioning and cultural infrastructure development, and the nature, function and impact of White/European supremacy domination. Prerequisites: PSYC 101 and Jr. or Sr. Standing and consent of Instructor.

PSYC 403. PSYC of Spiritual Experience. (3 Credits)
This course introduces students to the study and interpretation of spiritual experiences throughout the history of psychology, and explores what is now called Transpersonal Psychology. Historically, this subject matter has included religious and "mystical" experiences, and altered states of consciousness. Students will be exposed to the thoughts on these topics by major figures in psychology, philosophy, and theology, including Freud, James, Jung, Huxley, Wilber, Maslow, Frankl, Campbell, and Tillich.Prerequisite: Jr. or Sr. Standing and consent of Instructor.

PSYC 404. PSYC of Relationships. (3 Credits)
This course is an in-depth study of relationship science. It includes coverage of the major issues involved in attraction, the basic processes that underlie intimate relationships (such as communication and interdependency), common relationship issues (such as jealousy, betrayal, & conflict), intimacy, and relationship management & loss. This course will also introduce students to the standard methods employed in studying intimate relationships. Prerequisites: Jr. or Sr. Standing and consent of Instructor.

PSYC 405. Forensic Psychology. (3 Credits)
The topics studied by forensic psychologists vary widely. They range from the effects of drugs on behavior, to criminal behavior, juvenile delinquency, psychopathology, and profiling serial killers, just to name a few. The goal of this course is to introduce students to some representative areas of forensic psychology and to explore how forensic psychologists contribute to the legal system. Students are introduced to the methods used by forensic psychologists to explain behavior by examining a number of studies devoted to topics related to forensic psychology. Prerequisites: PSYC 101 and PSYC 316 Jr. or Sr. Standing and consent of Instructor.

PSYC 406. Obesity in Childhood. (3 Credits)
The course will introduce students to psychosocial factors that contribute to childhood obesity. Students will develop an understanding of why childhood obesity is a risk factor for chronic illnesses. The course will involve extensive use of empirical studies. Prerequisites: PSYC 216 and PSYC 310 Jr. or Sr. Standing and consent of Instructor.

PSYC 407. Introd to Health Psychology. (3 Credits)
This introduction to health psychology provides a general overview of the discipline of health psychology, including its origins, concepts and methods. A number of types of intervention efforts will be explored, including risk factor modification, secondary preventive/rehabilitative efforts for chronic illness and community/ public health interventions. Some of the major areas and topics in health psychology are explored, such as stress, chronic and acute diseases, substance use and abuse. Students will acquire skills and knowledge that should enhance their critical thinking and understanding the relationship of thought's, emotions, motivations, and actions on human health. Students will learn to apply health promotion and disease prevention theory, concepts and methods to real life situations. Prerequisites: PSYC 101 and Jr. or Sr. Standing and consent of Instructor.

PSYC 410. Introduction Psychological Tet. (4 Credits)
Focuses on supervised intellectual assessment of children and adults using such instruments as WAIS, WISC, WPPSI and Stanford-Binet. Relevant literature on the concept of intelligence and test construction is required reading. Prerequisites: PSYC 216 and department permission.

PSYC 411. Diagnostic Proced Excepion Chi. (4 Credits)
A study of psycho-diagnostic procedures useful in evaluating the abilities of exceptional children and youth. Includes how to select and administer appropriate tests of intelligence, personality, and specific disabilities, and how to utilize the findings in planning pupil experience. Prerequisite: Psychology 410.

PSYC 412. Physiological Psychology. (3 Credits)
A study of the physiological systems of the human organism as a basis for psychological reactions, with special reference to the endocrine and central nervous systems. Prerequisites: Biology 315 and 316.

PSYC 413. History & Systems Of Psycholog. (3 Credits)
The history of scientific psychology through a critical analysis of the major psychological systems, stressing the problems, methods, and contribution of each and the philosophical and physiological foundations of the discipline. Prerequisite: Senior or graduate status.

PSYC 414. Perception. (3 Credits)
The various theories of perception and the experimental research relating to them.

PSYC 415. Culture And Personality. (3 Credits)
A course designed to enhance the general education of students regardless of their majors. A cross- culture approach to the study of personality and national character by examining the value systems, institutions, culture traits and child rearing practices of diverse cultures. Prerequisite: Junior status or above.

PSYC 416. Teaching Psyc Secondard School. (3 Credits)
Focuses on methods and materials of instruction in psychology at the secondary level, with emphasis on the design of laboratory activities. The implementation of ethical principles and arrangement of major topics within psychology under the core areas. Students will explore lecture, discussion inquiry, audiovisual presentations, core history analysis, role playing, simulation, field work, demonstration, experiments, research projects as techniques for making abstract conceptions of psychology more accessible.

PSYC 417. Psyc Development Thru Primary. (3 Credits)
A course designed for teachers seeking certification in early childhood education (K-3), and for those students pursuing the master's degree in early childhood education. Aims to develop an understanding of psychological growth and personality development during the first decade of life. Not open to students having credit for Psychology 117.

PSYC 418. Psychology Of The Disadvantage. (3 Credits)
A course examining the dynamics of the behavior of disadvantaged groups. After an analysis of major historical revolutions, the focus is turned to contemporary groups who occupy disadvantaged positions in American society. Prerequisite: Upper class or graduate status.

PSYC 419. Introduction School Psychology. (3 Credits)
A course designed to acquaint the student with educational policies and procedures and the role of the school psychologist.

PSYC 420. Drugs & Behavior. (3 Credits)
A course designed to aid students in understanding the chemistry of certain drugs and their effects upon the organism as well as the psychological changes that accompany them, and to aid service providers in dealing constructively with the problem. Prerequisite: Junior status and above.

PSYC 421. Language & Cognitive Developme. (3 Credits)
An overview of recent advances in the understanding of language acquisition and cognitive development in the child. It emphasizes several major theoretical positions and associated empirical works. Prerequisite: Junior status and above.

PSYC 424. Research in Psychology I. (3 Credits)
A course designed to provide the student with the opportunity to pursue an original research project through independent study. Emphasis is placed upon planning and conducting research, analyzing and interpreting data, and communicating about research. Prerequisite: Department permission.

PSYC 429. Crisis Intervention Strategies. (3 Credits)
A course designed to provide the student with the opportunity to pursue an original research project through independent study. Emphasis is placed upon planning and conducting research, analyzing and interpreting data, and communicating about research. Prerequisite: Department permission.

PSYC 430. The Clinical Interview. (3 Credits)
A seminar designed to provide an understanding of the relationship of theory to practical experience and skill-building in the use of the interview process. Emphasis is upon employing the interview to establish and maintain support with human service recipients. Prerequisite: Consent of instructor.

RECR: Recreation (RECR)

RECR 100. Found of Recreation & Leisure. (3 Credits)
Community recreation programs, including camping, survey of agencies, activities in the recreation program, recreation as a profession, trends, and an introduction to the literature in the field.

RECR 200. Introd Therapeutic Recreation. (3 Credits)
Theoretical, philosophical, and historic foundation of therapeutic recreation; role of treatment and rehabilitation with a survey of major services and settings.

RECR 231. Industrial And Commercial Recr. (3 Credits)
Analysis of private, commercial, and industrial recreation fields, focusing on economic impact, marketing strategies, consumer protection, and career opportunities.

RECR 301. Special Topics in Recreation. (3 Credits)
This course provides opportunities for students to pursue topics of interest in Recreation beyond those accessible via the standard curriculum. The application of content to authentic situations is stressed.

RECR 321. Leisure Program Development. (3 Credits)
An examination of the principles and practices of leisure programming in terms of needs assessments, development, content, public relation, funding, facilities, leadership, and evaluation. Program methodologies in municipal, voluntary, private, religious, and commercial agencies will be examined. Prerequisite: RECR 100; or consent of instructor.

RECR 350. Leisure Service Marketing. (3 Credits)
This course involves the study of the theoretical/practical application of marketing/advertising strategies in the development/delivery of leisure services. Prerequisite: RECR 100; or consent of instructor.

RECR 351. Mgmt of Leisure Services. (3 Credits)
Problems commonly encountered in establishing and organizing leisure programs, services, playgrounds, youth centers, community centers, campus and other areas and facilities. Prerequisite: RECR 100; or consent of instructor.

RECR 352. Camp Counseling/Outdoor Leisur. (3 Credits)
Knowledge and skills of contemporary, non-competitive activities suitable for participation throughout life, e.g. camping, hiking, walking, etc. Special emphasis is placed on the tenets of outdoor cooperative living. Prerequisite: RECR 100; or consent of instructor.

RECR 353. RECR Act Leadership Method. (3 Credits)
Principles of leading, planning, and supervising a wide range of social recreational activities including parties, dances, picnics, special celebrations, and a variety of quiet games. Prerequisite: RECR 100; or consent of instructor.

RECR 354. Recreational Areas & Facilitie. (3 Credits)
Study of planning and design concepts, standards and guidelines, use continuum, grants, and planning of selected areas and facilities; parks, pools, centers, and recreation resource areas development. Major emphasis placed upon the construction, planning, layout, and maintenance of recreation areas and facilities. Prerequisite: RECR 100; or consent of instructor.

RECR 402. Directed Research in Recreatio. (3 Credits)
This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging recreation issues in the instructional program. Prerequisite: Consent of instructor.

RECR 453. Theory & Philosophy Recreation. (3 Credits)
An examination of philosophical concepts and issues of recreation and leisure with a focus upon current trends and issues in professional leisure service delivery. Play, games, work, and recreation are studied as aspects of human behavior affected by global, physical, societal, and personal concerns. Prerequisite: RECR 100; or consent of instructor.

RECR 471. Internship Seminar. (1 Credit)
This course involves observation and practice of leadership in a supervised Recreation organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth. Prerequisite: Senior standing or consent of instructor.

RECR 472. Internship. (3 Credits)
Supervised work experience under expert guidance at approved sites provided for the prospective professional in Recreation. Emphasis is on various individual and group opportunities in recreation organizations involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally. Prerequisite: Senior Standing or consent of instructor.

RUSS: Russian (RUSS)

RUSS 110. Elementary Russian I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing Russian. Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students presenting no admission credit in Russian.

RUSS 111. Elementary Russian II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing Russian. Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice. Prerequisite: RUSS 110 Elementary Russian I or its equivalent.

RUSS 212. Intermediate Russian I. (3 Credits)
Review of grammar, reading of moderately difficult prose, practice in oral Russian, and extensive work in written composition. Prerequisite: RUSS 111 Elementary Russian II or its equivalent.

RUSS 213. Intermediate Russian II. (3 Credits)
Careful study and reading of representative modern prose with continued practice in pronunciation, conversation and composition. Prerequisite: RUSS 212 Intermediate Russian I or its equivalent.

SOCI: Sociology (SOCI)

SOCI 101. Introduction To Sociology. (3 Credits)
Students are taught the fundamental concepts and principles of sociology. Emphasis is on the empirical and theoretical bases of sociology, social structure, the variety of influences and pressures that help make individuals a part of society, the nature of social research, and the use of the sociological perspective in understanding social interaction. This course is required for all sociology majors.

SOCI 102. Introduction To Anthropology. (3 Credits)
The study of evidence of human evolution, developing cultures, racial groupings and people in preliterate societies.

SOCI 120. Introd Leadership Dev Multi Cu. (3 Credits)
This course is an exploration of traditional and contemporary theories of leadership in organizations. Topics include models of leadership styles and techniques, organizational change, motivating personnel, decision-making and problem solving, ethics, interpersonal relationships, conflict resolution in work place, and power. Given the enormous cultural diversity within organizations, it is essential that leaders take more deliberate approach to sourcing and developing talent across socioeconomic class, religion, academic field, and other backgrounds. In addition, this course will prepare the students on how to become better critical thinkers and utilize emotional intelliegence in orchestrating leadership pattern.

SOCI 201. Social Problems. (3 Credits)
A survey course that deals with the problems that characterize United States society. Focus is on understanding the social forces, movements, policies, and changes in identification of and response to social problems of the society, and the theories that attempt to explain these phenomena.

SOCI 208. Soci African Amer Exp. (3 Credits)
An examination of African Americans in the United States as a social group. Focus is on the socio- historical developments and current trends in the experiences of African Americans with equal attention given to developmental experience on the continent of Africa prior to colonization, the transportation of Africans to the "New World," enslavement, and experiences up to the 21st century. Prerequisite: SOCI 101.

SOCI 210. Sociology of the HBCU. (3 Credits)
This course will provide an in-depth exploration of the ways in which the socio-cultural, political, economic, and intellectual movements inspired the need for and establishment of the HBCU's during different epochs in American culture. Through this exploration, students will analyze the ways in which socio-historic phenomena, such as enslavement, segregation, exclusion, Jim Crow, the civil rights movement, and the quest for self-identity, influenced the need for higher education in the HBCU.

SOCI 214. Social Psychology. (3 Credits)
An introduction to the concepts and theories that attempt to explain the behavior of the individual in society. Major topics include culture and personality, social roles, leadership, prejudice and propaganda. Review and analysis of current concepts and experimentation in the field are also included.

SOCI 221. Authentic Leadership. (3 Credits)
This course will prepare students to become leaders of organizations as they embark on parts of personal leadership development. Authentic Leadership requires personal curiosity and reflection from students, enabling them to think critically and develop personal opennes through sharing in class discussions, leadership development groups and one-on-one sessions with class instructor. Leaderhoip development concepts created and used in the course will be continuously applicable for students and useful for the rest of their lives as they strive to be authentic leaders.

SOCI 270. Contemporary Protest Movements. (3 Credits)

SOCI 301. Leadership Emot'l Intell Membe. (3 Credits)
This course will enable students to understand and develop the skills needed to foster emotionally intelligent leadership. Students will broadan their horizons in leadership by leadership by learning their strengths and limitations. Students will explore strategies to build emotional intelligence into strength to improve leadership performance in organizations.

SOCI 302. Marriage & Family. (3 Credits)
This course focuses on the family as a social institution, its development, functions and change in the United States and other societies. Changing values, gender roles, marital choice, socialization, and the effects of contemporary social change on the family, as we know it is studied. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 304. Ethnic And Race Relations. (3 Credits)
A study of the status of the various racial, religious, and ethnic minority groups in American society. Focus is on the forces relevant to establishment and maintenance of patterns domination and subordination between racial and ethnic groups. Critical analysis is made of discrimination, segregation, exploitation, hostility, and feelings of cleavage. American race and ethnic relations will be compared with those in other major societies. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 305. Org'l Politics & Influence. (3 Credits)
This course will examine the tools and techniques for identifying and effectively interacting with organizational and political changes. Topics will include negotiations in politically-charged environments, organizational politics, and influencing processes. Pre-requisite: SOCI/CJUS 120.

SOCI 311. Social Movements & Social Chan. (3 Credits)
The study of the effects of collective behavior on social structure. The factors and processes of social change are studied from the position of various theorists and theories of contemporary society. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 314. Sociology Of Religion. (3 Credits)
The study of religion in terms of belief systems, practices, and its functioning as a social institution. Major theoretical perspectives on religion in its function as an agent of social change, in maintaining the social status quo, and in the lives of individuals and societies are emphasized. The major world religions are surveyed from sociological perspectives. Prerequisite: SOCI 101.

SOCI 317. Methods Soc Research & Stat. (3 Credits)
The logic, design and use of social research. Major emphasis is on social research techniques and procedures, the relationship between theory and research, and use of quantitative data analysis techniques. The structure and use of qualitative research techniques are also examined. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 318. Sociological Theory. (3 Credits)
The study of the works of major theorists whose works constitute the foundation of the discipline of sociology. The social impact of the major theoretical perspectives in contemporary sociology and the relationship of theory to research are included. Prerequisites: SOCI 101 and 6 additional hours of sociology courses.

SOCI 320. Black Social Thought. (3 Credits)

SOCI 325. Sociology Health and Illness. (3 Credits)
This course examines the social contexts of health, illness, and medical care. It gives prominence to the bebates and contrasting perspectives which characterize the field of medical sociology. Topics include the social, environmental, and occupational factors in health and illness, the politics surrounding health care and the patient's perspectives on illness. Prerequisite: SOCI 101.

SOCI 333. SOCI Hip Hop & the Media. (3 Credits)
This course is designed to analyze and critique the social, political, cultural, economic, and historic roots of the media industry from a sociological perspective. It frames the media as disseminating information, ideas, and promoting forms of "entertainment" that ultimately shape public perception and social interaction. The main focus will be on the history of hip hop and the manner in which it has influenced the various forms of media as defined above. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 344. Rural Sociology. (3 Credits)
This course introduces students to rural social structures and institutions in American society. It emphasizes the differences and the similarities in rural and urban communities, leisure and recreation, family life believe systems and social problems. Prerequisite: SOCI 101.

SOCI 352. Urban Issues. (3 Credits)
The factors and forces that result in development and change of and within urban environments are studied. Emphasis is on critical analysis of the types and sources of issues that characterize urban life and urban areas in the United States. Policies and group efforts aimed at addressing these issues will also be examined. Prerequisite: SOCI 101.

SOCI 355. Rights Law Legal Issues Activi. (3 Credits)
This course explores the historic and contemporary constitutional amendments, laws, policies, programs, and legal issues that serve to both promote and deter activism and social movement.

SOCI 356. Population Issues. (3 Credits)
The determinants and consequences of trends in population size and composition, distribution through fertility, mortality, and migration are examined. Theoretical perspectives on population growth and change and the consequences for nations as well as for individuals are also studied. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 362. Juvenile Delinquency. (3 Credits)
Development and change of general values, attitudes, and social policy related to children. Parenting practices, the nature and extent of juvenile delinquency, theories of childhood, delinquency and the delinquent are studied, with special emphasis on the juvenile justice system in the USA. Prerequisite: SOCI 101.

SOCI 365. Socio for Developing Societies. (3 Credits)
This course is an examination of the social institutional structure of developing societies in Africa, Asia, the Middle East and Latin America. It includes a discussion and analysis of systems and social life as well as the impact of western and other cultural influences on social change these societies. Prerequisite: SOCI 101.

SOCI 370. African American Women Society. (3 Credits)
This course will examine the political, economic and social roles of African American women in the United States. Special emphasis is placed on such topics as the myths and realities of gender identity for African American women, family life and the challenges posed by black feminism, work patterns, organizational activities, and cultural production. Through these means it will explore the interrelationship between race, ethnicity, class, and gender. Prerequisite: SOCI 101 - Introduction to Sociology.

SOCI 377. Sociology of Law. (3 Credits)
Sociology of law is an exploration of the fundamental concepts of law, basic legal procedure and practicue. It provides a general knowledge and affords the opportunity for a sociological critique and analysis of the way that law impacts society, how laws develop, and legal issues allowing stuents to utilize sociological theory in the analysis of law and legal issues. This course concentrates on strengthening and improving the art of logic and reasoning, improving skill in argumentation and debate, and case law research. Prerequisites: SOCI 101, 201, and 318.

SOCI 378. Urban Injustice. (3 Credits)
This course provides an overview of the social, political, economic, health, racial, and environmental issues that have an effect on urban and inner city communities and people. This course is a praxis course that allows students to apply knowledge gained in introductory level sociology coursework to understanding issues of urban injustice. Prerequisites: SOCI 101, 201.

SOCI 401. Effect Leadership Conflict Res. (3 Credits)
This course will analyze the sources of interpersonal conflict between leaders in organizations. Topics include models of organizatiional conflict, strategies for identifying and resolving conflict, theories of organizational change, implementation of change, and patterns of communication between individuals and groups in the workplace.

SOCI 402. Leadership Deve Practicum. (3 Credits)
This course provides an opportunity for students to integrate academic coursework with practical leadership experience. Students will be expected to engage in some type of leadership activity, which may be in a formal office in a student organization or more formal/informal types of community leadership.

SOCI 411. Comparative Social Institution. (3 Credits)
The effects of industrialization, urbanization and population dynamics on the structure and functions of social institutions are studied. Major theories of social structure and the linkages between institutions are included. Special emphasis is placed on the economic, political and religious institutions and their ideologies as casual influences in the lives of individuals and in societies. Prerequisites: 9 hours of sociology, including SOCI 318 - Sociological Theory.

SOCI 413. Social Stratification. (3 Credits)
The study of the development, maintenance and change of institutionalized patterns of differential access to wealth, status, and power within the United States. Major social theories that attempt to explain the existence, constancy, and change of social inequality are emphasized. Prerequisite: 9 hours of sociology, including SOCI 318 - Sociological Theory.

SOCI 414. Sociology of Work. (3 Credits)
A survey course that provides intensive study of the occupational structure, occupations, labor force composition and participation, and work settings. Attention will be given to the linkages between government, business, and employee organizations. Theories that attempt to account for the structure and change of and within the occupational structure and the effects of these phenomena for individuals and groups will also be examined. Prerequisites: Nine (9) semester hours of sociology.

SOCI 419. Applied Research Methods. (3 Credits)
An advanced-level research methods course that is designed to give students practical experience in applying core concepts acquired in SOCI 317 (Methods of Social Research) in order to execute developed proposals and conduct social research. Prerequisite: SOCI 317.

SOCI 420. Senior Seminar. (3 Credits)
This course provides the experiences necessary for students to integrate and synthesize the knowledge and skills gained through successful completion of the sociology program of study. Readings, discussion, and written papers incorporating both quantitative and qualitative research methods on selected problems and issues in sociology are required. Topics include the various subdivisions within sociology with particular emphasis on the relationship of theory and research, social structure and social change, and the work of African American sociologists.

SOCI 422. Gerontology. (3 Credits)
The study and analysis of the social aspects and problems of aging and the aged in American society. Focus is on the effects of a growing population of senior citizens on the institutions of the society, individual response to aging and the aged, social policy, and services for older adults.

SOCI 430. Indepdendent Study. (1-6 Credits)
Provides the student an opportunity to explore “in-depth” an area which the student encountered in a previous course or an area which is not part of the curriculum in Sociology. May be repeated for credit. Prerequisite: Approval of the Department Chair.

SOCI 455. Special Topics in Sociology. (3 Credits)
This course is a Sociology Elective that will focus on a special topic and/or current specific interests, trends, ideological shifts, research, and publications that relate to the field and discipline of Sociology. May include Study Abroad. Prerequisite: Junior or Senior Level.

SOSC: Soil Science (SOSC)

SOSC 242. Soil Science. (4 Credits)
An introduction to principles of soil science: Introduces fundamental physical, chemical and biological properties of soils, their formation, classification, distribution, productivity, and conservation. It reinforces class lectures with field trips and laboratory exercises. Prerequisite: CHEM 151.

SOSC 344. Soil Management & Conservation. (3 Credits)
This course will emphasize soil resources of the United States and methods and plans for soil conservation, including control of erosion, the effects of climatic factors, vegetation, soil properties and other management practices on soil conservation and fertility maintenance. Prerequisites: SOSC 242 and CHEM 151.

SOSC 345. Soil Fertility and Fertilizers. (3 Credits)
Provides an assessment of soil fertility and the alteration of fertility by use of fertilizers, lime, manure, and cropping systems. The role of colloids in ion fixation and exchange is addressed. Calculations for cation exchange capacity; fertilizer, lime, and manure applications in the field are emphasized. The history, technology and use of fertilizers and their importance to the abatement of world famine and malnutrition are discussed. Prerequisites: SOSC 242 Principles of Soil Science and CHEM 151 General Chemistry.

SOSC 347. Soil Classification. (3 Credits)
An overview of soil taxonomy; how soils are grouped and organized based on their properties. Descriptions of pedons in the field, their formation, distribution, classification, and use are described. Prerequisites: SOSC 242 and CHEM 151.

SOSC 450. Problems In Soil Science. (3 Credits)
Individual study or research on soil or land-use problems. Study of local, regional, national, and world problems related to soils, remedies and reuse after reclamation. Prerequisites: SOSC 347; junior and above standing.

SOSC 455. World Soil Resources. (3 Credits)
A study of properties of soils, world soil geography, classification, present and potential productivity of soils in various continents, and factors influencing their utilization. Prerequisites: SOSC 347 Soil Classification, junior and above standing.

SOWK: Social Work (SOWK)

SOWK 210. Introd Generalist SOWK Practic. (3 Credits)
This course introduces students to the profession of social work and the settings in which it is practiced. Emphasis is focused on describing the social work profession and its history, including the educational requirements, values, the National Association of Social Work Code of Ethics, multi-sized systems of practice, career opportunities, licensure requirements, the generalist social work perspective, human diversity, the generalist planned change model and many other major concepts used throughout the curriculum. This course includes 25 hours of volunteer experience that occurs independently of class hours. Prerequisites: None.

SOWK 211. Honorable Fit:MIL Code Conduct. (3 Credits)
Students learn how a service member or veteran may struggle to maintain a positive religious or spiritual mindset, after negative active duty service experiences. Students explore how challenging beliefs can hinder the emotional and behavioral stability of a person. Students learn skills for intervening in a variety of practice settings to assist service members and veterans with spiritual fitness.

SOWK 212. Fr Bootcamp to Home Expl Vet B. (3 Credits)
Students are introduced to an assortment of veteran education, medical and employment benefits. A transitioning veteran may not know the benefits that they are capable of receiving. Students learn how to inform and guide a veteran to assist with the veteran's new future life planning.

SOWK 260. Hist SOWK Policy-1600 Present. (3 Credits)
The development of social welfare systems in Western society and diverse cultures is analyzed, with emphasis on issues of economic oppression, social oppression, human rights, and restorative justice. Prerequisites: None.

SOWK 313. Honor Grief:Loss Mourn Respt. (3 Credits)
Students are introduced to a variety of exposures of grief. The significant daily and life altering impact of a veteran's grief from traumatic experiences are examined. Students learn beginning skills for interceding in diverse practice settings with the veteran grieving population.

SOWK 314. Family Vow: Acknowl Fam Stress. (3 Credits)
Students are introduced to the marital and family stressors of a service member or veteran. The diminished family structure expanding from poor stress management to physical violence are examined. Students learn the initial skills for intervening in an array of direct practice settings with service members and veterans.

SOWK 315. Social Work Research I. (3 Credits)
This course is designed to provide social work students with a basic understanding of social work research and the connection between research, theory, and practice. Students are introduced to the basic research concepts and research process; including research design, sampling, instrument construction, data collection and qualitative/quantitative analysis, and report writing. Prerequisites: SOWK 210, SOWK 260 and STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major Co-requisites: SOWK 318, SOWK 320, SOWK 330 and SOWK 370.

SOWK 318. Writing for SOWK Profession. (3 Credits)
This course students to the study of various forms of written and verbal communication pertinent to social work practice. It is designed as a discipline-specific junior writing course. This course offers students opportunities to practice and master skills in various types of writing, to peer critique the writing of colleagues and to revise their own writing after peer and faculty review. Prerequisites: Junior or senior standing. (Sophomore standing with permission of Department Chair) Co-requisites: SOWK 315, SOWK 320, SOWK 330 and SOWK 370.

SOWK 320. Human Behavior/Soc Environ I. (3 Credits)
This course takes a social systems approach to presenting, unifying, and integrating concepts and knowledge from a bio-psychosocial-spiritual perspective about human behavior. This course explores development from pregnancy and infancy through early childhood with attention on how individuals, families, organizations, and communities are shaped by life events. This course includes applications to professional practice from the social work literature and to service-learning experiences in a social service setting. Prerequisites: SOWK 210, SOWK 260 and STAT 210 with a minimum grade of C or better; majors only and junior standing; or permission of the Department Chair; acceptance as social work major Co-requisites: SOWK 315, SOWK 318, SOWK 330 and SOWK 370.

SOWK 321. Human Behavior/Soc Environ II. (3 Credits)
This course takes a social systems approach to presenting, unifying, and integrating concepts and knowledge from a bio-psychosocial-spiritual perspective about human behavior. This course explores development from middle childhood through late adulthood with attention on how individuals, families, organizations, and communities are shaped by life events. This course includes applications to professional practice from the social work literature and to service-learning experiences in a social service setting. Prerequisites: SOWK 320 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major Co-requisites: SOWK 340, SOWK 375 and SOWK 399.

SOWK 330. Diversity/Cultural Compet SOWK. (3 Credits)
This course is designed to present concepts and theories for generalist practitioners to assess clients from cultural-general and cultural-specific perspectives, and it provides students with a positive perception of cultural diversity. The most important elements of cultural diversity, understanding and awareness is addressed and examined. The overall goal is to examine the challenges and benefits of diversity and strengthen the possibilities of living and working together in a multicultural society. Prerequisites: SOWK 210 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major Co-requisites: SOWK 315, SOWK 318, SOWK 320 and SOWK 370.

SOWK 340. Social Welfare Policy/Services. (3 Credits)
This course introduces students to a framework for the analysis of social problems and services, and focuses upon the variables that shape human service delivery systems. Application of analytical skills to a social policy is a required component of the course. This course is writing intensive. Prerequisites: SOWK 210 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major Co-requisites: SOWK 321, SOWK 375 and SOWK 399.

SOWK 370. Generalist Practice (micro) I. (3 Credits)
This course is designed to develop beginning professional social work skills, knowledge, and values. Provides an introduction to the generalist approach, systems theory, and planned change process as utilized in work with individuals, families, groups, organizations, and communities. Students acquire skills in: use of self in the helping role; interviewing techniques; client assessments, intervention strategies, evaluation of outcomes; and integration of these skills with knowledge of diverse lifestyles and racial, ethnic, and cultural patterns. This course stresses work with individuals and includes a minimum of two (2) hours a week practicing fundamental interpersonal skills required for effective social work practice, which includes use of video equipment, role-playing exercises, various methods of practicing culturally sensitive generalist social work. Prerequisites: SOWK 210 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major Co-requisites: SOWK 315, SOWK 318, SOWK 320 and SOWK 330.

SOWK 375. Generalist Practics (mezzo) II. (3 Credits)
This course continues the development of knowledge, skills, and values for beginning generalist social work practice. Work with groups and families are stressed as well as integration of experiences from concurrent junior field placement. Prerequisites: SOWK 370 with a minimum grade of C or better; majors only and juniors standing; acceptance as social work major Co-requisites: SOWK 321, SOWK 340, and SOWK 399.

SOWK 395. Topics in Social Work. (3 Credits)
Selected special topics in social work, which may include controversial issues; domestic violence, spirituality and social work; child welfare, health and mental health issues; substance abuse; social work and the law; gerontology. The topics will reflect current trends in the field of social work. The content may be repeated for credit with different topics with the consent of the department. Prerequisites: Majors only and juniors standing; acceptance as social work major Co-requisites: None.

SOWK 399. Field Instruction I & Seminar. (3 Credits)
In the junior field experience the student is introduced to the realm of social work practice by allowing him/her to shadow a social worker in a variety of practice roles and by participating in various activities that are planned to meet the learning objectives. Through this experience, students learn how to integrate practice behavior with social work knowledge, values and skills. Upon successful completion of the junior year, the student will have attained a beginning understanding of, and integration with the Council of Social Work Education (Educational Policy Accreditation Standards – EPAS) core competencies. Junior year students are in field work two days a week (160 clock hours) during their second semester. This course also includes a weekly seminar to integrate theory to generalist social work practice. Prerequisites: SOWK 315, SOWK 318, SOWK 320, SOWK 330 & SOWK 370 with a minimum of grade of C or better, majors only and junior standing; acceptance as social work major Co-requisites: SOWK 321, SOWK 340 and SOWK 375.

SOWK 416. Right Hnd ResilenceTrau/Coping. (3 Credits)
Students are introduced to a variety of traumas within the service member and veteran community. Students analyzes how the traumatic experiences are impactful with the service members, veterans and their families. Students commence to assist with learned resources and techniques of this population.

SOWK 417. Boots on Ground Mental Hlth. (3 Credits)
Students are introduced to an assortment of mental health traumas of service members and veterans. The mental health stability of a service member or veteran can be compromised due to exposure of singular or multiple traumatic events. Students learn strategies and resources to assist service members and veterans to strengthen their mental health firmness.

SOWK 475. Generalist Prac (macro) III. (3 Credits)
This course focuses on social work methods for practice with diverse communities and organizations, with an emphasis on the advancement of social justice. The dominant theme of the course addresses how professional social workers practice within these systems and the strategies, tactics, and methods they employ to advance social justice. Students explore basic content pertaining to the values and ethics of macro social work practice, the roles and methods practitioners use in various situations in which organizational practice and community practice and where social action occurs. Students will complete the course with an expanded awareness of organizational practice and community practice and social action and they will establish an initial framework for themselves that will ground their work in generalist practice. This course integrates concurrent field experience, all areas of the social work curriculum, and continued professional growth. Prerequisites: SOWK 375 with a minimum grade of C or better, majors only and senior standing. Social Work Major, completion of all required courses (general education and the professional foundation curriculum) and a cumulative 2.5 grade point average Co-requisites: SOWK 490.

SOWK 476. Child Welfare & Socal Work Pra. (3 Credits)
This course prepares students for practice in public or private child welfare agencies with children and families who have experienced abuse or neglect. The course is designed to study the theoretical and programmatic aspect of child welfare practice, with particular attention to child welfare practice in Virginia. Consistent with the University's mission course content facilities knowledge and skill development for practice with diverse families, especially poor, oppressed, racial and ethnic minorities, gay and lesbian, and other at-risk urban children and families. Content includes practice with individuals, families, comminities and larger systems with which children and families interact.

SOWK 477. Child Welfare and SOWK Policy. (3 Credits)
This course focuses on selected public policies that support the basic needs of families as well as policies that drive the child welfare system and govern the juvenile and adult criminal justice systems, the educational systems and the various emotional and mental health systems. Students will learn about the cultural, historical and political aspects of the policies through lectures, videos. Power Point presentation, role plays and other student-centered activities.

SOWK 490. Prof Field Prac & Seminar. (3 Credits)
This course provides a 240 clock-hour (minimum) advanced supervised field practicum in selected social work and human service agencies. In addition to the hours spent in the agency, a weekly seminar is held for the purpose of integrating theoretical and experiential information, processing personal experiences, providing assignments relevant to agency work, discussing the nature of agency services, and reviewing student's goals and competencies/practice behaviors. Social Work majors must earn a grade of C or higher. Prerequisites: Social Work Major, completion of all required courses (general education and the professional foundation curriculum) and a cumulative 2.5 grade point average Co-requisite: SOWK 475.

SOWK 495. Adv Topics in Social Work. (3 Credits)
This course focuses on selected topics in controversial issues and social work practices that reflect current trends in the field of social work. This course may also provide an interdisciplinary study abroad experience for students to better understand social service planning and delivery in other countries. Students will learn about the cultural, historical and political aspects of the host country through lectures, field trips and student centered activities. The course may be repeated for credit with different topics with the consent of the department. Prerequisites: Majors only and senior standing Co-requisites: SOWK 498, SOWK 499.

SOWK 498. Social Work Senior Seminar. (3 Credits)
This capstone course is the final required course in the social work program curriculum, which emphasizes professional writing skills, ethics, and legal dilemmas for professional generalist social work practice. It is designed as an opportunity for integration of previous learning and assimilation of this learning in a way which is meaningful for each student. This course utilizes a discussion format, with inclusion of minimal lecture, student-facilitated groups, and experiential activities. As a means of individualizing the contents of this course, student will assist in the transaction of this syllabus. This course is writing intensive. Prerequisites: Majors only and senior standing Co-requisites: SOWK 499.

SOWK 499. Prof Field Prac II & Seminar. (3 Credits)
This course is the final professional level field education course in the field education sequence, and it provides a 240 clock-hour advanced educational practicum for the students through supervised experience at an approved social service agency. In addition to the hours spent in the agency, a weekly seminar is held for the purpose of integrating theoretical and experiential information, processing personal experiences, providing assignments relevant to agency work, discussing the nature of agency services, and reviewing student's goals and competencies/ practice behaviors. The goal of field placement experiences is designed to facilitate student's achieving the social work program competencies. Social Work major must earn a grade of C or higher. Prerequisites: SOWK 490, Majors only and senior standing Co-requisites: SOWK 498.

SPAN: Spanish (SPAN)

SPAN 110. Elementary Spanish I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in Spanish: Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students receiving no admission credit in Spanish.

SPAN 111. Elementary Spanish II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in Spanish: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisite: SPAN 110 Elementary Spanish I or its equivalent.

SPAN 212. Intermediate Spanish. (3 Credits)
Review of grammar, reading of moderately difficult prose, practice in oral Spanish, and extensive work in written composition. Prerequisite: SPAN 111 Elementary Spanish I or its equivalent.

SPAN 213. Intermediate Spanish II. (3 Credits)
Careful study of representative modern prose; continued practice in pronunciation and conversation. Prerequisite: SPAN 212 Intermediate Spanish or its equivalent.

SPAN 214. Professional Spanish. (3 Credits)
Designed for students wanting to further their knowledge of Spanish in the context of various professions, including, for example: medicine, dentistry, law, human resources, information technology and social services. Prerequisite: SPAN 212 Intermediate Spanish I and SPAN 213 Intermediate Spanish II.

SPAN 300. Survey Of Spanish Literature I. (3 Credits)
Survey of Spanish literature from the beginning to the Siglo de Oro. Prerequisite: SPAN 213 Intermediate Spanish II.

SPAN 301. Survey Of Spanish Literature I. (3 Credits)
Survey of Spanish literature from about 1700 to the present. Prerequisite: SPAN 213 Intermediate Spanish II or its equivalent.

SPAN 310. Spanish Composition. (3 Credits)
Careful review and application of the principles of grammar and considerable practice in writing Spanish with special stress on the acquisition of a stock of idiomatic expressions. Prerequisite: SPAN 213.

SPAN 312. Practical Spanish Phonetics. (3 Credits)
Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase with exercises in dictation and memorization. Prerequisite: SPAN 213.

SPAN 313. Spanish Conversation. (3 Credits)
Daily practice and drill in oral Spanish based principally on topics of current interest. Prerequisite: SPAN 213.

SPAN 314. Advanced Spanish Converation. (3 Credits)
Continued practice in spoken Spanish through class discussion and oral presentation of topics of current interest; designed for Spanish minors and others admitted by departmental permission. Prerequisite: SPAN 313 Spanish Conversation.

SPAN 315. Survey Latin Amer Literature I. (3 Credits)
General survey of the literature of Latin American beginning with the letters of Cortez and continuing to Ricardo Palma of Peru with emphasis on historical and social background; conducted in Spanish. Prerequisite: SPAN 313.

SPAN 316. Survey Latin Amer Literature 2. (3 Credits)
Continuation of SPAN 315 extending from Ricardo Palma to the present; conducted in Spanish. Prerequisite: SPAN 213.

SPAN 410. Drama Of The Golden Age. (3 Credits)
Review of the rise of the drama of Spain, and critical study of representative works of Lope de Vega, Calderon, Tirso de Molina, Alarcon, Moreto, and others. Prerequisite: SPAN 213.

SPAN 412. The Novel In Spanish Literatur. (3 Credits)
Examination and analysis of major Spanish novels with emphasis on the works of Cervantes, the picaresque novel, and the regional novel in Spain. Prerequisite: SPAN 213.

SPAN 413. The Generation Of 1898. (3 Credits)
A study of the works of Valle-Inclan, Azorin, Unamuno, Maextu, and others. Prerequisite: SPAN 213.

SPAN 414. Spanish Civilization. (3 Credits)
Comprehensive and systematic study of Spain and its role in world history from its origins as a nation to the transition to democracy and beyond; conducted in Spanish. Prerequisite: SPAN 310 or SPAN 313.

SPAN 415. Hispanic American Civilization. (3 Credits)
Comprehensive and systematic study of the origin and development of the Spanish Americas and their role in world history from pre-Columbian civilizations to the present; conducted in Spanish. Prerequisite: SPAN 310 or SPAN 313.

SPAN 416. Special Topics In Spanish. (3 Credits)
This course is designed to permit an in-depth study in an area of language and/or literature not available in current course offerings. Course may be repeated once upon change of topic. Prerequisite: SPAN 213 Intermediate Spanish II.

SPAN 418. Senior Seminar In Spanish. (4 Credits)
Independent readings and studies in Spanish planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographic al material. Prerequisite: Eighteen semester hours of Spanish.

SPED: Special Education (SPED)

SPED 323. Charc Excep'L Learners (Fb). (3 Credits)
This course is designed to provide students with in-depth knowledge of the theories, characteristics, etiology, and educational implications of students with exceptional learning needs. These include: related disabilities such as attention deficit disorders; specific age-span and developmental issues; cognitive functioning including intelligence, perception, neurobiology, linguistics, memory and thinking; levels of severity; multi-cultural influences; and medical aspects including medication, nutrition, genetics, and neurology. The course will describe deficits in academic, cognitive, socio-emotional behaviors; educational, technological, and medical interventions; placement options; curriculum design and current research on instructional approaches, and technology use. Prerequisite(s): Admission to Teacher Education Program.

SPED 325. Survey Ed Of Except Child (Fe). (3 Credits)
SPED 325 - SURVEY OF EXCEPTIONAL CHILDREN - 3 Semester Hours
This course provides an introduction to the philosophical, historical, and legal foundations of special education. The course highlights the characteristics of children and youth with disabilities relative to age and severity levels; medically related etiological perspectives of various disabilities; special education laws, etc. Developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning are addressed. An understanding of ethical issues and the practice of accepted standards of professional behavior is also addressed. Current regulations governing alternatives placements/ programs in schools are highlighted. Strategies to promote successful integration of students with disabilities with their non-disabled peers will be taught. The structure and organization of general education classrooms and other instructional settings representing the continuum of special education will be addressed. An overview of continuum of services, assessment procedures, curriculum planning, and instructional strategies are provided. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

SPED 328. Read/Lang Develop Except'L Lea. (3 Credits)
Through this course, the student will develop the skills required to 1) assess and develop the language and reading skills of exceptional learners from Pre K through adolescence, with emphasis given to reading, 2) distinguish between the influence of cultural differences and disability in the acquisition and development of skills, 3) develop IEPs based on appropriate use of the general education curriculum and the SOLs, 4) design, select, implement, and evaluate language and reading programs, and 5) use technology in language and reading instruction.

SPED 402. Diagnosis Of Educational Needs. (3 Credits)
This course is designed to provide an understanding and application of the foundation of assessment and evaluation related to best educational practice such as legal provisions, regulations, and guidelines regarding assessment of individuals with disabilities. The course will discuss the impact of cultural, linguistic, and other variables on assessment findings and placement decisions. Students will select, administer, score, and interpret various formal and informal individual and group instruments and summarize findings for eligibility, placement, and instructional decisions. Prerequisite(s): Admission to Teacher Education Program. STAT 210, Elementary Statistics.

SPED 403. Classroom Mgmt Ed Setting (FE). (3 Credits)
This course is designed to address the skills that contribute to an understanding and application of classroom management techniques and individual interventions, including techniques that promote emotional well- being and teach and maintain behavior conduct and skills consistent with norms standards, and rules of the educational environment. This course shall address diverse approaches based upon behavioral, cognitive, affective, social, and ecological theory and practice in a classroom setting. Prerequisite(s): Admission to Teacher Education Program.

SPED 423. Curr/Instr Excep'L Ch (Fb). (3 Credits)
This course, offered in a field-based setting, conveys knowledge of a wide range of assessment procedures for students with exceptional learning needs to assist in instruction and life-planning. These include: use of assessment procedures to identify individual instructional needs in areas including reading, receptive and expressive language, written language and mathematics; ability to interpret educational assessment results to parents, students and other professionals. This course makes use of assessment, evaluation, and other information to develop and implement individualized educational programs (IEP) and group instruction for individuals with exceptional learning needs within the continuum of services. These services include: pragmatic language and social skills; providing explicit instruction of reading and spelling in a systematic and cumulative manner based upon understanding the structure and development of the English language and its components; use of multi-sensory approaches, cognitive learning strategies, study skills, accommodations for diverse learning styles, and technology; and designing alternative ways to teach content, including adaptations and modifications of curricula, and the selection of specialized instructional materials appropriate to the needs of the student with exceptional learning needs Prerequisite(s): Admission to Teacher Education Program.

SPED 425. Transitional Education. (3 Credits)
This course is designed to prepare candidates to work with families to promote successful student transitions throughout the educational experience, including post-secondary training, employment, and independent living. This course addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy and self-determination, guardianship, and legal considerations. Prerequisite(s): Admission to Teacher Education Program.

SPED 442. Comm & Colla With Parents (Fe). (3 Credits)
This course will prepare students to acquire knowledge and skills in authentic consultation, collaboration and case management. The course will provide opportunities to discuss approaches, demonstrate methods, and utilize activities that aim at involving parents in educational and multidisciplinary conferences, working with paraprofessionals, community agencies, service providers, etc. Team approaches and collaborative work environments will be utilized. Prerequisite(s): Admission to Teacher Education Program.

SPEE: Speech (SPEE)

SPEE 214. Introduction To Public Speakin. (3 Credits)
Compositional and delivery techniques for speaking before various kinds of audiences; instruction and participation in argumentation, debate, discussions, and parliamentary procedure. Emphasis upon participation. Prerequisites: ENGL 110 Composition I.

SPEE 215. Voice And Diction. (3 Credits)
An analysis of speech patterns and organs responsible for the production of voice and speech, with special emphasis on the study and practice of the techniques of good articulation. Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II.

SPEE 313. Oral Interpretation. (3 Credits)
Experience in reading and in oral presentations to develop greater appreciation for literature and also skills in conveying meanings and moods. Individual opportunities for literary comparisons, analyses, and recordings.

STAT: Statistics (STAT)

STAT 210. Elementary Statistics I. (3 Credits)
Presentation of data, frequency distributions, descriptive statistics, elementary concepts of probability, random variables, binomial and normal distributions, sampling procedures, student's t-test, linear correlation. Interpretation of data. This course cannot be taken as a mathematics elective by mathematics majors. Prerequisites: MATH 113 or MATH 120 or MATH 131.

STAT 211. Elementary Statistics II. (3 Credits)
Sampling of attributes, comparison of several samples, one-way analysis of variance, sign test, median test, Kruskal- Wallis test and test for randomness, simple regression analysis and Statistical software.. Prerequisite: STAT 210 or equivalent.

STAT 330. Probability and Statistics I. (3 Credits)
Basic probability rules, conditional probability, independence, B ayes' theorem, discrete and continuous probability distributions, probability density functions, binomial, Poisson, hypergeometric, negative binomial, geometric and normal distributions. Prerequisite: MATH 261.

STAT 340. Probability Stat Cmptr Scienti. (3 Credits)
Introduction to the concepts of probability, random variables, estimation, hypothesis testing, regression, and analysis of variance with emphasis on application. Prerequisites: MATH 261.

STAT 380. Probability & Statistics II. (3 Credits)
Mathematical derivations, computational formulas, and applications and interpretations associated with the techniques of probability theory and elementary statistical inference will be emphasized. Moment-generating functions, basic sampling distribution theory, t and chi-square distributions, one-sample estimation and tests of hypotheses. Prerequisites: MATH 360; STAT 330 or STAT 340.

STAT 382. Introduction To Sampling Metho. (3 Credits)
Random, stratified, systematic and cluster sampling, ratio and regression estimates, estimation of sample size, sampling methods in social, economic and biological surveys, sources of error in surveys. Prerequisite: STAT 380.

STAT 385. Analysis Of Variance. (3 Credits)
Theory, methodology, and practical applications of analysis of variance (ANOVA). Topics will include: one-factor and two-factor ANOVA; multiple comparisons; two-factor and three-factor balanced factorial designs with interactions; random, fixed and mixed-effect models; contrasts and confounding; and the regression approach to ANOVA. Prerequisite: STAT 380.

STAT 410. Advanced Statistical Methods. (3 Credits)
Research applications for social sciences, natural sciences, agriculture and education. Basic probability concepts, point and interval estimates, significance test for mean and proportion, two sample inferences, linear regression, analysis of variance, nonparametric statistics. Uses of statistical software is emphasized. Prerequisite: STAT 380.

STAT 480. Probability & Statistics III. (3 Credits)
Statistical techniques for the treatment of multiple samples. Joint discrete and continuous probability distributions, conditional and marginal distributions, covariance, independent random variables, t-distribution, one sample estimation and hypothesis testing of population parameters in the two-sample case, chi-square tests, and simple linear regression and correlation. Prerequisite: STAT 380.

STAT 481. Nonparametric Statistics. (3 Credits)
Statistical applied whether the relationship between the population and sample is unknown. Wilcoxon rank-sum test, Mann-Whitney U-test, sign test, Wilcoxon signed-rank test, tests for randomness, Spearman's correlation, Kolmogorov-Smirnov statistics, Turkey's quick test, Friedman and Cochran's test, statistical software. Prerequisite: STAT 380.

STAT 482. Applied Multivariate Statistic. (3 Credits)
Multivariate methods using matrix algebra and applied statistics to analyze several correlated measurements made on each experimental unit. Multivariate normal distribution, estimation and hypothesis testing in multiple regression, Hotelling's T, one-way multivariate analysis of variance, introduction to discriminant and factor analysis, principal components and canonical correlations and statistical software. Prerequisite: STAT 410.

STAT 484. Applied Probability. (3 Credits)
Probability theory applied to the study of phenomena in engineering, management science, operations research, and the natural sciences. Markov's inequality, conditional expectation, Markov chains, Chapman-Kolmogorov equation, interarrival and waiting time distributions. Prerequisite: STAT 480.

STAT 490. Probability Theory. (3 Credits)
A rigorous development and proofs of the theory of probability. Formal probability systems, conditional probability, sequences of events, independence of events, random variables, probability density and distribution functions, joint distributions, independence of random variables, functions and transformations of random variables, fundamental limit theorems. Prerequisites: At least two 400-level statistics courses or consent of the instructor.

TAMM: Textiles/Clothing/Merch (TAMM)

TAMM 171. Textiles. (3 Credits)
This course is an introduction to the diversity of textiles arts, fiber science, and a focus on a though knowledge of textiles , their design structure and application Emphasis is placed upon processes, such as twining, plaiting, spinning, knitting, dyeing, hand-printing, and loom-weaving. In addition, this course surveys textile terminology and properties to enable students to make appropriate choices in textile selection for a product.

TAMM 172. Survey of Textile & Apparel In. (1 Credit)
In this course, students will gain a broad understanding of the Apparel and Textile industry. Topics will provide students a better understanding of industry structure from the primary level, secondary level, Core and Auxiliary level. This will provide a good foundation on which to build deeper specialist knowledge as students' progress through the TAMM program. Students will learn how to explore the business of fashion through investigation, observation and gathering of materials. Through critical analysis, students will question, discuss, and argue debate current fashion business issues and to put forward ideas and information in presentations, and written work.

TAMM 271. Clothing Construction. (3 Credits)
This course is a study in the acquisition of construction skills and techniques necessary for transforming fabrics into apparel and/or home fashions. It includes an understanding of sewing equipment supplies and materials as well as applications for specific figure types and personalities. Emphasis is also placed on construction methods, technology and appropriate applications. FACS MAJOR ONLY or Permission from Instructor/Program Coordinator.

TAMM 272. Fashion History. (3 Credits)
A fundamental course in Fashion and Costume History including identity of costume starting with the Ancient Civilization to the development Western Civilization ending in the 20th Century. It also will assist the student in describing how technology and economics influence fashion development and change.

TAMM 274. Fashion Marketing/Merchandisin. (3 Credits)
This course focuses on the integration of fashion marketing concepts and applications in the development of a merchandising plan. Students will learn about merchandise positioning, brand building, market segmentation, and market research as it relates to the fashion industry. Prerequisite(s): TAMM 172.

TAMM 371. Family Problems In Clothing. (3 Credits)
This course outlines a variety of problems identified in family clothing and presents steps in decision alternative and skill development for the varying stages in the family life cycle. Emphasis is in keeping with social, psychological and physiological as well as the economic clothing of the family.

TAMM 373. Fash Illus & Comptr Applicatio. (3 Credits)
This course provides an exploratory of the tools and techniques used to communicate Fashion. In areas such as design, branding, and merchandising effective communication is essential. Students will experience hand drawn techniques up to advanced computer software to develop presentation boards, promotion and production materials. The course format will include a lecture and studio to enhance the student learning experience through application. In addition, students will engage in the portfolio development process to create the prototype for their Senior Portfolio. Prerequisite(s): FACS 161, TAMM 172, TAMM 271.

TAMM 375. Visual Merchanding & Styling. (3 Credits)
This course is a study of presentation techniques and merchandising concepts employed to promote store image or brand strategy. Students will utilize artistic principles such as line, balance, rhythm to create effective merchandising displays and floor sets for a retail environment. Students will also explore the stylist's role in print and interactive media. Using both lecture and studio delivery, activities will include mock assignments, story boarding photo shoots, display window installations and other experiences associated with visual merchandising and stylist's responsibilities. Prerequisite(s): FACS 161, TAMM 172, TAMM 271, TAMM 272.

TAMM 376. Principles Retail Math & Buyin. (3 Credits)
This course is an introduction to retail math and buying simulation. Students will be introduced to a buying simulation where they will learn the concepts and calculations necessary for merchandise buying and assortment planning for a retail store. Students will understand the retail method of inventory, planning seasonal purchases, markups, turnover, stock to sales ration, open to buy, markdowns, and terms of sale. Prerequisites: TAMM 172, MATH 112, MATH 113.

TAMM 377. Apparel Design. (3 Credits)
in the design conceptualization process, flat pattern, and advanced level construction to design and construct a sample collection. Students will develop design ideas using croquis, draft final patterns, create mock-up and finalize using fashion fabric. Upon completion, garments will be presented for review and juried for fashion presentation. Prerequisites: TAMM 171, TAMM 172 Textiles, TAMM 271, TAMM 272, TAMM 373.

TAMM 379. Trends and Concepts. (3 Credits)
A comprehensive study of cultural and social issues that affect fashion and the emergence of trends. Students will analyze the meanings and importance of clothing and apply these concepts to contemporary society. Upon completion of the course, students will be able to complete trend analysis as well as prepare and present a Trend Forecast report based on their analyses. Prerequisite(s): FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 373.

TAMM 471. Flat Pattern Design. (3 Credits)
Fundamental principles and instructions in apparel design using the flat pattern method as a means of developing ideas effectively and efficiently. Students will master the utilization of three basic slopes, some variants as well as utilize application to the design process. Prerequisites: TAMM 374 Fashion Illustrations.

TAMM 473. Textile Design. (3 Credits)
Study and application of the elements and principles of design used to impart decorative designs on fabrics or within fabric structures. Special emphasis and techniques will be placed on a wide variety of fabrics and effects. Prerequisites: TAMM 374 Fashion Illustrations.

TAMM 474. Advanced Clothing. (3 Credits)
The course explores advanced techniques in clothing construction methods and materials. Emphasis is placed upon artistic designs as well as how scientific principles as they applied to clothing production fabric formation and clothing economics.

TAMM 475. Advanced Textiles. (3 Credits)
An essential course for TAMM majors designed to prepare and improve the decision-making processes involved in selection, use and care for a variety of textiles in the global environment and their importance to each individual. It is also an opportunity in the preparation for business entries in the textile arena. Non-TAMM majors will find the course helpful to the understanding of consumer issues and concerns relating to textiles in industry and in business. Prerequisite: One semester of Chemistry, Beginning Textiles, Environmental Sciences.

TAMM 477. Senior Sem & Professional Deve. (3 Credits)
Senior Seminar is a capstone course which involves an in-depth project undertaken by the TAMM student under the direction of the Program Coordinator and/or identified faculty. It is required to be taken during the student's Final Semester. The project is primarily concerned with the student's knowledge of the substantive content of their major field as defined by the general program of study. Students will displayed their knowledge through research project, case study, entrepreneurship / small business plan, or an approved internship/study tour project. The project is regarded as the student's culminating work and should draw upon all the student's experience and four years of study. The course will culminate with a final project paper and presentation. In addition, Students will submit a portfolio which is professionally guided and applies student skill set. Prerequisite:(s) FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 274, TAMM 373, TAMM 376, TAMM 379, TAMM 478.

TAMM 478. Apparel Product Development. (3 Credits)
This advanced level course provides TAMM students with a simulated experience in product development processes and apparel production. Building upon introductory courses, students will apply fashion terminology, construction, textile science, and retail management principles to simulate the three levels of the industry design, production & sales. Students will engage in the design process, will learn flat pattern design and advanced construction skills to address production challenges. In addition, students will utilize analytical skills to cost and source as well as analyze global market challenges. Students will synthesize design concepts, advanced production technology, the development of merchandising in the modern market, including analysis of target markets, analyze the source, cost and development of a product in that market in presentation form Prerequisite:(s) FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 274, TAMM 373, TAMM 376, TAMM 379.

TAMM 479. Fashion Promotion & Event Plan. (3 Credits)
This course examines the process of promotion and the promotion mix tools utilized by fashion companies. Students are engaged in all aspects of the planning process of an actual event (e.g. setting goals, preparing budgets, creating ad layouts, creating press kits, coordinating production, and evaluating). Further, students will plan and execute a fashion event (e.g., Fashion Show, Lecture Series, Fashion Publication, Trunk Show, and Bazaar). Prerequisite:(s) FACS 161, TAMM 172, TAMM 272, TAMM 274, TAMM 373.

VCAD: Visual Comm and Desig (VCAD)

VCAD 200. Graphic Design History. (3 Credits)
Exploration of the evolution of graphic communications from prehistoric times to the development of modern graphic design. The uses of and styles of graphic design will be covered. Art & Design Majors Only Course.

VCAD 201. Typography I. (3 Credits)
A study of typography fundamentals. History and development of lettering and type reproduction methods. Exploration of letterform aesthetics and communication value through practical design projects. For Graphic Design majors only. Prerequisites: ARTS 102 and 108.

VCAD 202. Typography II. (3 Credits)
An advanced exploration of typography. Functional and expressive type treatments and the effective implementation of type as a visual communication tool. Emphasis placed on the development of ideas and the ability to communicate them effectively. Introduction to proofreading and editing type. For Graphic Design majors only Prerequisite: VCAD 201.

VCAD 203. Graphic Design I. (3 Credits)
An introductory survey to the professional field of graphic design as related to print, multimedia, entertainment, environmental and other areas of visual communications. Emphasis on fundamental principles and skills with a broad approach to the application of techniques and concepts of the field. Prerequisite: ARTS 102 and 108.

VCAD 205. Graphic Design II. (3 Credits)
An advanced investigation of the professional field of graphic design as related to print, multimedia, entertainment, environmental and other areas of visual communications. Emphasis on the principles and skills of graphic design with a broad approach to the application of techniques and concepts of the field. Prerequisite: VCAD 203.

VCAD 206. Basic Photography. (3 Credits)
An introduction to photography, emphasizing the basic operation of a camera. Students will learn to adjust the settings for exposure, speed, and light conditions. Course includes the regular critiques of student work and discussions of photographic fundamentals. Prerequisites: ARTS 102 or permission of instructor.

VCAD 207. Digital Photography I. (3 Credits)
A digital approach to photography as a communication tool. The course emphasizes the use of the digital camera and photo-correction software and techniques. Course includes the regular critiques of student work and discussions of photographic fundamentals. Prerequisites: VCAD 206.

VCAD 300. Traditional Illustration. (3 Credits)
Emphasis on the fundamentals of rendering images while exploring various media and techniques. For Graphic Design majors only. Prerequisites: ARTS 202 and 208.

VCAD 301. Silkscreen Procedures. (3 Credits)
Introduction to the various silkscreen procedures employed in advertising art and design. Exploration of hand-cut stencils and photographic processes. Prerequisites: ARTS 202.

VCAD 302. Print Design. (3 Credits)
Introduction to the printing process. Examination of commercial printing: the presses, inks, paper, and finishing. The pre-press operations to prepare digital files will be emphasized. Prerequisites: VCAD 202 and 205.

VCAD 304. HTML. (3 Credits)
Exploration of the language and structure of HTML documents, markup techniques, and validation. Topics include text formatting, lists, tables, META tags, and CSS. Prerequisite: VCAD 202 and 205.

VCAD 305. UX/UI Design. (3 Credits)
Introduction to the planning and development of useful, aesthetically appealing interfaces and digital experiences through the effective use of navigation techniques with the creative use of graphics, sound and typography.

VCAD 307. Digital Photography II. (3 Credits)
Students will explore the creative use of digital cameras, and digital printing techniques. Imaging software will be used for editing and printing techniques. Students will learn advanced lighting, cropping, and formatting techniques. Course includes the regular critiques of student work and discussions of photographic fundamentals. Prerequisites: VCAD 207.

VCAD 310. Digital Illustration. (3 Credits)
Creating illustrations for editorial and business communications using traditional and digital media. For Graphic Design majors only. Prerequisites: VCAD 300.

VCAD 312. Print II. (3 Credits)
Designing print media using experimental formats, as well as special multi-media materials and techniques. For Graphic Design majors/minors only. Prerequisites: VCAD 302.

VCAD 314. Motion Graphics. (3 Credits)
Exploration of the effective use of animations in digital design and the graphics software used to make them.

VCAD 315. Publication Design. (3 Credits)
Analysis of professional design studio problems and processes related to publication design. Integrating cohesive design solutions, strategies, grid structures, layouts and compositions throughout multi-page formats. For Art & Design majors only. Prerequisites: VCAD 202 and 205.

VCAD 400. Editorial Illustration. (3 Credits)
Course devoted to generating commercial illustrations based on printed and digital publications with an understanding of the history of editorial illustration and its role in commercial art today. Contracts and forms, time management, client relationships and current trends are explored. Prerequisite: VCAD 310.

VCAD 401. Web Design II. (3 Credits)
Advanced work in the planning and development of useful, aesthetically appealing web sites. Students will learn the effects of browser choices and computing platforms on their design choices and should gain a critical eye for evaluating web site designs. Prerequisite: VCAD 305.

VCAD 410. Visual Narrative. (3 Credits)
Illustration-heavy course devoted to exploring the art of visual storytelling and character development. Proficiency in digital and traditional illustration required. Prerequisite: VCAD 400.

VCAD 411. Web Design III. (3 Credits)
Continuing in-depth study of web design formats and techniques to begin the development of a personal style through the creation of a series of extended web sites utilizing a variety of graphics. Prerequisite: VCAD 401.

VCAD 415. Package Design. (3 Credits)
Professional design studio processes and procedures related to packaging design. Developing brand identity and focusing on product positioning, while designing the three dimensional structure. For Art & Design majors only. Prerequisites: VCAD 202 and 205.

VCAD 416. Advertising Design. (3 Credits)
An introduction to advertising fundamentals. Development and implementation of strategic design concepts across multi-vehicle marketing materials. For Art & Design majors only. Prerequisites: VCAD 202 and 205.

VCAD 430. Portfolio (SP). (3 Credits)
Exploring the various methodologies for creating a professional portfolio and resume. For Art & Design majors only. Prerequisites: Senior status.

VCAD 450. Internship. (3-6 Credits)
Pragmatic work experience under the supervision of qualified professional practitioners. For Art & Design majors only. Prerequisites: VCAD 202 and VCAD 205.

VCAD 451. Senior Thesis Project. (3-6 Credits)
Examination of the business aspects of the commercial art world. Culminates in a formal presentation of a cohesive body of work before a departmental committee. Prerequisites: Senior status.

VCAD 489. Strategic Design. (3 Credits)
Students will be selected to work with area nonprofit clients to create and produce a wide variety of fully designed advertising and promotional materials. Students will work in teams to develop brand, marketing, and design strategies, write creative briefs, recruit teams to work with them during CreateAthononCampus (a 24 hour creative event held during Spring Break), present works to clients, and follow any deliverables through to production. Strong emphasis on leadership, team work, and a commitment to working with nonprofits. Prerequisite: Permission by Instructor.

VCAD 499. Special Topics Graphic Design. (3 Credits)
An investigation of special/current topics in graphic design of a particular interest to advanced students. Content varies with each semester. May be repeated for credit. Prerequisites: VCAD 202, 205.

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A

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- Agriculture, Bachelor of Science with a Concentration in Agriculture Education (B.S.) (p. 164)
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- Agriculture, Bachelor of Science with a Concentration in Animal Science and Pre-Veterinary Medicine (B.S.) (p. 170)
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B

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C

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- Computer Science, Minor in Computer Science (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-computer-science/computer-science-minor/)
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E

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F

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H

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- History, Bachelor of Arts with a Concentration in HBCU Studies (B.A.) (p. 287)
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I

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M

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V

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Academic Regulations and Procedures

Academic Honors

Graduating Honors

Candidates for a baccalaureate degree who have completed at least 51 percent of the credits required for their degree program at Virginia State University will qualify for honors at graduation based upon their final cumulative grade point average as listed below:

Summa Cum Laude	3.80 - 4.00
Magna Cum Laude	3.50 - 3.79
Cum Laude	3.00 - 3.49

Candidates for baccalaureate degrees who have earned forty or more hours but less than 51 percent of the credits required for their degree program at Virginia State University are recognized for academic achievement against the following standard:

With Distinction	3.20 or higher

Highest Ranking Graduate

Recognition will be given to the student with the highest cumulative grade point average among all graduating seniors who have completed at least 90 credit hours at VSU.

Academic Grades

Symbols that are used to describe academic performance.

Academic Honesty

Intellectual and scholastic freedoms are safeguarded through application of principles of academic honesty. Violations of academic honesty represent a serious breach of the Virginia State University honor code and may be considered grounds for disciplinary action.

Academic Dishonesty

Include (a) plagiarism-presentation of the written words of others as if they were one's own; (b) cheating, giving, aiding, or seeking assistance during the process of taking a test or examination. Penalties for academic dishonesty may be loss of credit for the work in question, loss of credit for the course, suspension or expulsion from the University.

Admissions

Virginia State University is committed to admit students who possess a diverse range of talents and abilities. Students who are applying for admission as freshmen are expected to have completed a college-preparatory program in high school. We are a test optional school; we will accept satisfactory scores on the Scholastic Assessment Test (SAT) or American College Test (ACT) examination. Students who were not graduated from a secondary school may be admitted on the basis of their GED test scores.

Admission Requirements

(https://www.vsu.edu/admissions/apply/freshman-apply/)
The admission requirements are as follows:

- Minimum 2.5 GPA on 4.00 scale
- Three (3) units of mathematics (Of these three, one must be Algebra I, and the second must be either Geometry or Algebra **11)**
- Four (4) units of English
- Two (2) units of Science (one of which must be a laboratory science)
- Two (2) units of Social Studies (History, Government, Civics, Geography)
- Two (2) units of Foreign Language are recommended but not required.
- SAT or ACT score, if applicable

Under exceptional circumstances, a student who does not meet a component of the entrance requirement (e.g., a student's GPA is between 2.25 - 2.49), may be admitted on a "conditional" basis for the Fall semester & VA residents only. The student will be admitted to the Trojan Summer Bridge program.

CONTINUING EDUCATION

(https://www.vsu.edu/academics/special-programs/continuing-education/)

Through the Office of Continuing Education, **non-degree-seeking** students are able to enroll in college courses up to **11** credit hours per semester, which is part-time and ***not eligible for financial aid assistance***.

Special Admissions Requirements

In addition to regular freshman and transfer admission requirements, students who desire to major in Music must also complete an on-campus audition. Students who desire to major in Art and Design may also be required to submit additional materials. Please contact these departments directly for further information.

International Students

(https://www.vsu.edu/admissions/apply/international-apply/)

Prospective students from abroad should apply for admission at least twelve months prior to the term in which they wish to enroll. Applicants must submit certified copies of official academic records, showing subjects studied, grades received, examinations taken, and degrees earned from secondary schools, colleges, and universities attended. The documents must be submitted in original form as well as official translation. Evaluated academic records/transcripts, **originals** only; copies are not accepted. We recommend SpanTran, World Education Services (WES), or another approved qualified company which can be found at www.naces.org (http://www.naces.org/).

Freshmen only must submit 2 letters of recommendation (one must be from your Guidance Counselor).

An applicant from a country where English is not the native language is required to demonstrate a proficiency in English by submitting scores from (TOEFL), IELTS, Duolingo or Cambridge. Official test scores must be sent directly from the Educational Testing Service.

An international student must provide documentation verifying resources to meet financial needs for the designated period of study at Virginia State University. This is not required to be considered for Admissions.

Readmission

(https://www.vsu.edu/admissions/apply/readmit.php)

Students who interrupt their enrollment for two or more semesters (one or more years) must apply through the Office of Admissions for readmission to the University. Readmission is to the department in which the student was enrolled at the time of separation. A change of major request must be made after readmission with academic department advisor.

Senior Citizens

There is no limit to the number of semesters in which senior citizens may enroll who are not enrolled for academic credit. However, individuals are limited to three non-credit courses each semester. Eligible senior citizens enrolled for credit may enroll as full-time students, limited only by their academic performance as to the number of credits pursued or enrolled semesters. Senior citizens are defined as persons who, before enrollment,

1. have reached sixty years of age and
2. have had their legal domicile in Virginia for one year.

Further details of the program are available from the College of Graduate Studies, Research and Outreach, 20716 Fourth Avenue, Virginia State University.

Advisement

Upon admission to the University, students will be assigned an academic advisor from the Academic Center of Excellence (ACE). Students who have not declared a major will also be advised through ACE. Non-traditional students will be advised through the Office of Outreach.

Advanced Placement Credit

VSU awards advanced standing credit (course exemption and academic credit hours) to entering students who have qualifying scores on the AP tests. Students may receive credit in any academic discipline in which an AP test is offered so long as they take the test before the end of their senior year of high school. After matriculation, students should direct questions about their AP credit to the College Dean's office under which their major field of study is organized.

AP Course	VSU Class Equivalent	General Education Credit Hours
Art: 3 / 4,5	ARTS 301 / ARTS 301+302	3 / 6
Biology: 3	BIOL 120	4
Calculus AB: 3 / 4,5	MATH 120 / MATH 260	3 / 4
Calculus BC: 3,4 / 5	MATH 260 / MATH 260+261	4 / 8
Chemistry: 3 / 4 / 5	CHEM 100 / CHEM 151+153 / CHEM 151 OR CHEM 153 + 2 ELECTIVE CR	4 / 4 / 6
Computer Science A: 3	CSCI 150+151	4
Computer Science Principles: 3	CSCI 101 + 2 ELECTIVE CR	3
Microeconomics: 3	ECON 210	3
Macroeconomics: 3	ECON 211	3

English Language & Composition: 3,4 / 5	ENGL 110 / ENGL 110+111	3 / 6
English Literature & Composition: 3,4 / 5	ENGL 110 / ENGL 110+201	3 / 6
Environmental Science: 3,4 / 5	AGRI 150	4
French: 3 / 4 / 5	FREN 210 / FREN 310 / FREN 314	3 / 3 / 3
German: 3 / 4 / 5	GERM 210 / GERM 310 / GERM 314	3 / 3 / 3
Human Geography: 3	GEOG 316	3
Music Theory: 3 / 4,5	MUSI 154 / MUSI 181+183	3 / 4
Physics 1: 3	PHYS 105	4
Physics 2: 3	PHYS 106	4
Physics C E&M: 3,4 / 5	PHYS 112 / PHYS 113	4 / 4
Physics C Mech: 3	PHYS 105	4
Psychology: 3	PSYC 101	3
Spanish Language & Culture: 3 / 4 / 5	SPAN 212 / SPAN 310 / SPAN 314	3 / 3 / 3
Spanish Literature & Culture: 3 / 4 / 5	SPAN 212 / SPAN 300 / SPAN 301	3 / 3 / 3
Statistics: 3	STAT 210	3
Studio Art 2D: 3	ARTS 199	3
Studio Art 3D: 3	ARTS 199	3
Studio Art Drawing: 3	ARTS 199	3
US Government: 3	POLI 150	3
US History: 3	HIST 122+123	6
World History: 3	HIST 114+115	6

Cambridge International Examinations Credit

The University may grant credit for Cambridge International Examinations (CIE) levels Advanced (A) and Advanced Subsidiary (AS) offered through the University of Cambridge in England. These courses and examinations are administered through registered CIE Centers in public high schools throughout the United States. A-level syllabuses and exams cover approximately two years of college-level curriculum in a subject and the AS level syllabus and exam covers the first year of the two-year A-level curriculum.

Cambridge tests passed with final grades of A, B or C will be considered for advanced standing and credit for the corresponding courses at VSU. The applicability of such credit toward the student's degree program is interpreted by the department or college in which the student seeks a degree.

**** A-Level Exam not available for this subject***

Cambridge Exam	A-Level VSU Equivalent	AS-Level VSU Equivalent	Academic Credit
Accounting	C : ACCT 200	C : ACCT 200	3
Art and Design	C : ARTS 199	C : ARTS 199	3
Biology	C : BIOL 210	C : BIOL 210	4
Business	C : COBU 101	C : COBU 101	3
Chemistry	C : CHEM 100 / B : CHEM 151 + CHEM 153 / A : CHEM 151 + CHEM 153 + 2 CR	C : CHEM 100 / B : CHEM 151 + CHEM 153 / A : CHEM 151 + CHEM 153 + 2 CR	4 / 4 / 6
Computer Science	C : CSCI 101+2 CR	C : CSCI 101+2 CR	3
Computing	C : COBU 155	C : COBU 155	3
Design Technology	C : TAMM 373	C : TAMM 373	3
Design & Textiles	C : TAMM 373	C : TAMM 373	3
Economics	C : ECON 210	C : ECON 210	3
English Language & Literature	*	C : ENGL 110	3
English Language	C : ENGL 110	C : ENGL 110	3
English Literature	C : ENGL 210	C : ENGL 210	3
French	C : TBD / B : FREN 310 / A : FREN 314	C : TBD / B : FREN 310 / A : FREN 314	3 / 3 / 3
Geography	C : GEOG 210	C : GEOG 210	3
German	C : TBD / B : GERM 310 / A : GERM 314	C : TBD / B : GERM 310 / A : GERM 314	3 / 3 / 3
History	C : HIST 115	C : HIST 115	3
Mathematics	C : MATH 260	C : MATH 260	4
Mathematics Further	C : MATH 261	C : MATH 261	4
Music	C : 3 CR	C : 3 CR	3
Physical Education	C : PHED 274	C : PHED 274	3
Physical Science	C : PHYS 100	C : PHYS 100	4
Physics	C : PHYS 105	C : PHYS 105	4
Psychology	C : PSYC 101	C : PSYC 101	3
Sociology	C : SOCI 101	C : SOCI 101	3
Spanish	C : TBD	C : TBD	3
Thinking Skills	C : PHIL 180	C : PHIL 180	3
Travel and Tourism	C : HMGT 200	C : HMGT 200	3

Federal Programs

Through federal grants, the University provides special academic, financial and counseling support services to eligible university students, and student parents, as well as, high school students, and those who have successfully completed the General Education Development, (GED).

These services are available through the University's Child Care Access Means Parents in Schools, (CCAMPIS) Educational Talent Search, Educational Opportunity Centers, Upward Bound, and Student Support Services Program. For more information about these programs, contact the specific program area or email triosss@vsu.edu.

Immunizations

Virginia State University requires a physical examination for all first-time enrollees (freshmen transfer and graduate students) as well as a health history and immunization record to be submitted to Student Health Service prior to registration for classes. Any student who cannot produce an up-to-date immunization record must be reimmunized at his/

her expense. Registration cannot be completed until the Student Health Service Health Evaluation Form is completed.

Insurance

Health and accident insurance is strongly encouraged for full-time students. Students who have no coverage, may enroll in the University Plan. Students who wish to supplement their existing coverage, may enroll in the University-sponsored insurance plan. The plan is honored worldwide and is valid twenty-four (24) hours a day.

To inquire further, please contact Health Services (https://www.vsu.edu/healthservices/).

The International Baccalaureate

Students must designate the Virginia State University Registrar as a recipient of the scores, and scores must be sent directly from the testing agency. Credit is awarded consistent with state and University policies and the sourcing agencies' guidelines. VSU offers possible credit for scores of 4, 5, 6, or 7 on most higher-level (HL) IB examinations and on select standard-level (SL) examinations in accordance with the pre-approved equivalencies for qualifying IB examination scores. After matriculation, students should direct questions about their IB credit to the College Dean's office in which their major field of study is organized.

IB Course	Minimum Score	VSU Equivalent	Credit Hours Earned
Social Anthropology	4 (HL) / 5 (SL)	SOCI 102 / SOCI 102	3 / 3
Art	4 (HL) / 5 (SL)	ARTS 199 / ARTS 199	3 / 3
Biology	5 (HL) /4 (SL)	BIOL 120 & 121 / BIOL 120 & 121	8 / 8
Business & Management	4 (HL) / 5 (SL)	COBU 101 / COBU 101	3 / 3
Dance	4 (HL) / 5 (SL)	DANC 100 / DANC 100	3 / 3
Design Technology	4 (HL) / 5 (SL)	TAMM 373 / TAMM 373	3 / 3
Environmental Systems & Societies	5 (SL)	AGRI 150	4
Geography	4 (HL) / 5 (SL)	GEOG 210 / GEOG 210	3 / 3
Information Technology and Global Society	4 (HL) / 5 (SL)	MISY 350 / MISY 350	3 / 3
Chemistry	4 (HL) / 5 (HL) / 6 (HL) / 5 (SL) / 6 (SL) / 7 (SL)	CHEM 100 / CHEM 151&153 / CHEM 151&153 + 2 ELECTIVE CR OR CHEM 100 / CHEM 151&153 / CHEM 151&153 + 2 ELECTIVE CR	4 / 4 / 6 / 4 / 4 / 6
Physics	4 (HL) / 5 (SL)	CSCI 101 +2 ELECTIVE CR / CSCI 101 +2 ELECTIVE CR	3 / 3
Computer Science	4 (HL) / 5 (SL)	MATH 120 & 121 / MATH 120 & 121	6 / 6
Mathematics	4 (HL) / 5 (SL)	ECON 210 / ECON 210	3 / 3
Economics	4 (HL) / 5 (SL)	PHIL 140 / PHIL 140	3 / 3
Philosophy	4 (HL) / 5 (SL)	HLTH 210	3
Sports, Exercise, and Health Science	5 (SL)	HIST 114 & 115 / HIST 114 & 115	6 / 6
World History	4 (HL) / 5 (SL)	MUSI 199 / MUSI 199	3 / 3
Music	4 (HL) / 5 (SL)	PSYC 101 / PSYC 101	3 / 3
Psychology	4 (HL) / 5 (SL)	DRAM 215 / DRAM 215	3 / 3
Theatre Arts	4 (HL) / 5 (SL)	ENGL 110 / ENGL 110	3 / 3
English (Language & Literature)	4 (HL) / 5 (SL)	ENGL 201 / ENGL 201	3 / 3
English Literature	4 (HL) / 5 (SL)	3 ELECTIVE CREDITS	3
English (Literature & Performance)	5 (SL)	FREN 212 / FREN 310 / FREN 314 / FREN 212 / FREN 310 / FREN 314	3 / 3 / 3 / 3 / 3 / 3
French	4 (HL) / 5 (HL) / 6-7 (HL) / 5 (SL) / 6 (SL) / 7 (SL)	GERM 212 / GERM 310 / GERM 314 / GERM 212 / GERM 310 / GERM 314	3 / 3 / 3 / 3 / 3 / 3
German	4 (HL) / 5 (HL) / 6-7 (HL) / 5 (SL) / 6 (SL) / 7 (SL)	SPAN 212 / SPAN 310 / SPAN 314 / SPAN 212 / SPAN 310 / SPAN 314	3 / 3 / 3 / 3 / 3 / 3
Spanish	4 (HL) / 5 (HL) / 6-7 (HL) / 5 (SL) / 6 (SL) / 7 (SL)		

Tuition, Fees, and Financial Obligations

Tuition and Fee Charges

Payment of tuition, fees, and other charges owed to Virginia State University is the responsibility of the student. Failure to pay tuition and fees could result in administrative withdrawal from the university. The university will hold transcripts and block registration for students who fail to pay fees, fines, damages. Collection agencies also may be used by the university to collect unpaid fees or fines.

In-State Tuition Eligibility

All applicants who desire to qualify for in-state tuition rates under Section 23-7.4 of the Code of Virginia, must complete the domicile eligibility form which may be obtained from the Office of Admissions.

Form more information, contact the Office of Admissions (https://www.vsu.edu/admissions/va-residency/).

University Libraries

Located in the center of campus, Johnston Memorial Library houses primary and secondary materials needed to support the academic and research programs of the University. It provides a full complement of research and information services to the University community. The Library contains approximately 280,200 monographs, approximately 1,200 periodicals and newspapers, 704,983 microform pieces, 81,153 audiovisual pieces including government publication and musical scores.

The Library participates in a statewide electronic resource sharing consortium, the Virtual Library of Virginia (VIVA). The Library provides local and remote access to 180 databases, over 8,800 full text journals and newspapers, nearly 10,000 full text works of poetry and verse drama, and over 300,000 additional full text materials, including statistical reports and pamphlets. In- house and remote access to the book and serial collections is provided by the VTLS Online Public Access Catalog (OPAC) with special services for the visually impaired. The library management systems have been in operation since 1989 and supports cataloging, serials, circulation, reserved materials and provides access to the online public access catalog.

The Instructional Materials Lab houses videos, laserdisc, audiotapes and other media. A wheelchair accessible multimedia workstation is available for use.

The Library has seating capacity for 600 students and shelving capacity for approximately 300,000 books. Facilities include exhibit areas, conference and study rooms, and individual study carrels. Selected study rooms are equipped for computer access. The Library also has two Internet search labs and a bibliographic instruction lab with over 50 computers for research use.

Full reference service is available to the entire University community. The Reference Department provides interlibrary loan services through cooperative lending agreements. The Special Collections Department, with a full-time archivist, contains historical documents, memorabilia, and artifacts, which are available to both the campus community and other researchers. The Library has a separate Instructional Materials Laboratory, containing films, slides cassettes, CD ROMs, laser disks, and videos which faculty and students can use for presentations. A full multimedia workstation is also available for wheelchair accessibility. In addition, the Library has a Kurzweil machine and large print software for the visually impaired.

The Library is a selective depository for United States and Virginia government publications. The collection of more than 197,079 federal and state documents offers a wealth of information.

Johnston Memorial Library is handicapped accessible. Contact Johnston Memorial Library (https://library.vsu.edu/) for more information.

Withdrawals and General Counseling

The staffs of ACE cannot excuse absences; but it does provide absentee notification to instructors for any student encountering an emergency that requires an absence of 3 or more days. Students wishing to discontinue studies at the University will start the withdrawal process at ACE with counselors who are understanding and will help students through the withdrawal process while ensuring that all possible options are considered for remaining at VSU.

For services, please contact:

ACE at Virginia State University (https://www.vsu.edu/ace/)
P.O. Box 9034
Petersburg, Virginia 23806
Phone: (804) 524-6755

General Education Program

General Education Program Overview

The Virginia State University (VSU) General Education Program is founded on the principles of academic excellence and personal growth and comprises the core curriculum for all baccalaureate degrees offered by the institution. Driven by the University's Mission and Principles, the program endeavors to develop engaged, enlightened, productive citizens in a changing world.

The liberal arts emphasis of VSU's General Education Program is designed to foster dispositions that value lifelong learning, personal responsibility, integrity, creative expression, and the ethic of service.

General Education Program Provisions, Requirements, and Courses

The General Education (GE) course framework represents a balanced menu of courses designed to enhance core skill sets, including synthesis and analysis of information; problem solving through structures, organizations and systems; understanding of global/cultural and historical contexts; research; and effective communication skills. Students must satisfy the University's assessment requirements to document their acquisition of these core skill sets and their level of achievement of the University's GE student learning outcomes.

Provisions and Requirements

1. The General Education program requires the successful completion of 33 semester hours in the following areas:
    a. English (Composition) - 6 semester hours
    b. History - 3 semester hours
    c. Humanities - 3 semester hours
    d. Global Studies - 3 semester hours
    e. Literature - 3 semester hours
    f. Health/Wellness - 2 semester hours
    g. Mathematics - 6 semester hours
    h. Social Science - 3 semester hours
    i. Natural Science and Lab - 4 semester hours
2. Students may use one course simultaneously to satisfy a requirement for general education and their major discipline; however

students may not use one course to satisfy more than one general education course requirement.

3. The minimum grade required for successful completion of English 110/112 and English 111/113 (Composition I and II) is "C."
4. Departments (majors) may choose courses from the limited menus or allow students to choose.

ENGLISH

Code	Title	Credit Hours
ENGLISH - 6 semester hours required from the courses listed below (Minimum grade of C is required)		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
ENGL 112	Honors Composition I	3
ENGL 113	Honors Composition II	3

GLOBAL STUDIES

Code	Title	Credit Hours
GLOBAL STUDIES - 3 semester hours required from the courses listed below (Minimum grade of C is required)		
AGRI 295	Contemporary Global Studies	3
ARTS 301	World Art Survey I	3
ARTS 302	World Art Survey II	3
ARTS 405	Survey Of African Art	3
ECON 451	International Economics	3
ENGL 314	Readings Multi-Culture Literat	3
ENGL 315	African Literature	3
ENGL 322	Post-Colonial Literature	3
ENGL 411	Readings African Lit & Culture	3
ENGL 412	Caribbean Literature	3
ENGL 326	Mythology	3
PHIL 326	Mythology	3
FREN 110	Elementary French I	3
FREN 111	Elementary French II	3
FREN 212	Intermediate French I	3
FREN 213	Intermediate French II	3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
GEOG 210	World Geography	3
GERM 110	Elementary German I	3
GERM 111	Elementary German II	3
GERM 212	Intermediate German I	3
GERM 213	Intermediate German Ii	3
IDUP 270	Introduction To Africana Stud	3
MUSI 286	Music History II	3
POLI 207	International Relations	3
POLI 210	Comparative Government	3
SPAN 110	Elementary Spanish I	3
SPAN 111	Elementary Spanish II	3
SPAN 212	Intermediate Spanish	3
SPAN 213	Intermediate Spanish II	3
Total Credit Hours		**93**

HISTORY

Code	Title	Credit Hours
HISTORY - 3 semester hours required from the courses listed below		
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
HIST 240	African American Hist. to 1865	3
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	3
HIST 245	HBCU History	3
HIST 274	History of Africa to 1800	3
HIST 275	History of Africa Since 1800	3

HUMANITIES

Code	Title	Credit Hours
HUMANITIES - 3 semester hours required from the courses listed below		
ARTS 199	Art Appreciation	3
ARTS 200	Art Crafts	3
DANC 100	Foundations of Dance	3
DANC 251	Hist Dance & Black Experience	3
DRAM 199	Drama Appreciation	3
ENGL 201	Introduction To Literature	3
ENGL 202	Intro African American Lit	3
ENGL 210	English Literature I	3
ENGL 211	English Literature II	3
ENGL 212	American Literature I	3
ENGL 213	American Literature Ii	3
ENGL 214	World Literature I	3
ENGL 215	World Literature II	3
FREN 110	Elementary French I	3
FREN 111	Elementary French II	3
FREN 212	Intermediate French I	3
FREN 213	Intermediate French II	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
MUSI 198	Jazz Appreciaton	3
MUSI 199	Music Appreciation	3
MUSI 200	Blacks in American Music	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
PHIL 220	Introduction To Logic	3
PHIL 275	Ethics	3
PHIL 290	Business Ethics	3

LITERATURE

Code	Title	Credit Hours
Literature - 3 semester hours are required from the courses listed below		
ENGL 201	Introduction To Literature (Course is designed for most students.)	3
ENGL 202	Intro African American Lit (Course is designed for most students.)	3
ENGL 210	English Literature I (Course is intended for students with a strong background in literature.)	3
ENGL 211	English Literature II (Course is intended for students with a strong background in literature.)	3
ENGL 212	American Literature I (Course is intended for students with a strong background in literature.)	3
ENGL 213	American Literature Ii (Course is intended for students with a strong background in literature.)	3
ENGL 214	World Literature I (Course is intended for students with a strong background in literature.)	3
ENGL 215	World Literature II (Course is intended for students with a strong background in literature.)	3

MATHEMATICS

Code	Title	Credit Hours
Mathematics - 6 semester hours required from the courses listed below		
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
MATH 122	Finite Mathematics	3
MATH 130	Number And Operations	3
MATH 131	Algebra And Functions	3
MATH 150	Precalculus	4
MATH 260	Calculus I	4
MATH 261	Calculus II	4
PHIL 220	Introduction To Logic	3
STAT 210	Elementary Statistics I	3

Code	Title	Credit Hours
Science - 4 semester hours required from the courses listed below *To meet the General Education requirement in Science a student must successfully complete one course with associated labs (four semester hours) or the appropriate science courses to satisfy the approved curriculum in the student's major. This requirement can be satisfied by completing one two-semester hour course or two one-semester hour courses.*		
AGRI 100	General Earth Science	1-4
AGRI 150	Intro Environmental Science	4
BIOL 116	Biological Science	4
BIOL 120	Principles Of Biology I	1-4
BIOL 121	Principles Of Biology II (Required for all Biology majors)	1-4
CHEM 100	Chemistry in Society	1-4
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
CHEM 152	General Chemistry II	3
CHEM 154	General Chemistry II Laborator	1
CHEM 161	Chemistry I	3
CHEM 163	Chemistry Laboratory I	1
CHEM 162	Chemistry II	3
CHEM 164	Chemistry Laboratory II	1
DIET 101	Nutrition:Contemp Health Issue	3
PHYS 100	Physical Science	1-4
PHYS 105	Introduction to Physics I	1-3
PHYS 106	Introduction to Physics II	1-3
PHYS 112	General Physics I	1-4
PHYS 113	General Physics II	1-4

Social Science

Code	Title	Credit Hours
Social Science - 3 semester hours required from the courses listed below		
CJUS 116	Intro To Criminal Justice	3
ECON 100	Basic Economics	3
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
FACS 201	Consumer Economics	3
POLI 150	United States Government	3
POLI 202	Contemporary Political Thought	3
PSYC 101	Introduction to Psychology	3
PSYC 212	Human Growth & Development	3
SOCI 101	Introduction To Sociology	3
SOCI 102	Introduction To Anthropology	3

Wellness/Health

Code	Title	Credit Hours
Wellness/Health - 2 semester hours required from the courses listed below *This requirement can be satisfied by completing one two-semester hours course or two one-semester hour courses*		
HPER 160	Team Sports/Wellness	1
HPER 165	Personal Fitness	1
HPER 166	Beginning Swimming/Wellness	1
HPER 169	Gymnastics Wellness	1
HPER 170	Health And Wellness	2
HPER 171	Lifetime Sports/Wellness	1

Institution-Level Student Learning Outcomes (ISLOs)

Based upon the ***University's Mission and Principles***, the following ILSLOs comprise the foundation for the General Education Program courses:

I. Written Communication Skills

DEFINITION: Written communication is defined as the ability to develop, convey, and exchange ideas in writing, as appropriate to a given context and audience.
After completing the General Education Program requirements, students will be able to:

1. **Order** sentences and paragraphs to communicate central points with logical connections and minimal grammar and punctuation errors.
2. **Express** ideas through the written word appropriate to a specific audience, purpose, rhetorical situation, and genre.
3. **Write** adhering to discipline-specific attribution standards, including in-text citation and reference.
4. **Articulate** ideas using logical support, including informed opinions and facts, and their interpretations to develop the students' ideas, avoiding fallacies, biased language, and inappropriate tone.

II. Critical Thinking

DEFINITION: Critical thinking is the ability to use information, ideas, and arguments from relevant perspectives to make sense of complex issues and solve problems. Critical thinking also includes locating, evaluating, interpreting, and combining information to reach well-reasoned conclusions or solutions.

After completing the General Education Program requirements, students will be able to:

1. **Recognize** connections and relationships among ideas, data, and information.
2. **Identify** assumptions by evaluating conflicting narratives and interpretations.
3. **Demonstrate** proficiency in problem-solving strategies and skills by determining a process and solutions to a real-world problem.
4. **Construct** arguments based on logical analysis of evidence and sound reasoning.
5. **Evaluate** their ideas and the ideas of others, including identifying biases and fallacies, both logical and rhetorical.

III. Scientific Literacy

DEFINITION: Scientific Literacy is the ability to analyze and apply basic scientific principles and methods of scientific research and inquiry to make informed decisions and engage with issues related to the natural, physical, and social world.

After completing the General Education Program requirements, students will be able to:

1. **Identify** the credibility and reliability of scientific sources by distinguishing among peer-reviewed articles, popular media, and pseudoscience.
2. **Compare** different scientific methods of analysis and investigate their use in evaluating empiric information.
3. **Discuss** the ethical, legal, economic, social, cultural, and environmental implications of scientific research and practices.
4. **Apply** scientific reasoning skills to analyze and solve problems, interpret scientific data, draw conclusions, and make evidence-based decisions.

IV. Quantitative Reasoning

DEFINITION: Quantitative Reasoning is the ability to manipulate, analyze, and/or evaluate numbers and numerical data and use results to support conclusions. It may involve calculation and/or analysis and interpretation of quantitative information derived from existing databases or systematic observations.

After completing the General Education Program requirements, students will be able to:

1. **Identify** quantitative information encountered in daily life or within the discipline to make informed decisions.
2. **Explain** numerical information orally or through written communication.
3. **Interpret** equations, graphs, diagrams, tables, figures, and/or words to draw relevant conclusions and make predictions.
4. **Use** technological tools to create graphs, tables, figures, and equations from numerical information.
5. **Calculate** basic mathematical operations in problem-solving, such as arithmetic, algebra, and basic statistics.

V. Global Cultural Literacy

DEFINITION: Global Cultural Literacy is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably", AAC&U.

After completing the General Education Program requirements, students will be able to:

1. **Explain** the impact of culture on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes.
2. **Discuss** diverse perspectives on an ethical issue that has global implications.
3. **Analyze** relationships or connections between a cultural product or practice and the perspective of the society that produced it.
4. **Develop** a project within the global community that engages cultures other than their own.

VI. Civic Engagement

DEFINITION: Civic engagement is defined as an array of knowledge, abilities, values, attitudes, and behaviors that in combination, allow individuals to contribute to the civic life of their communities. It may include, among other things, exploration of one's role and responsibilities in society; knowledge of and ability to engage with political systems and processes; and/or course-based or extra-curricular efforts to identify and address issues of public or community concern, particularly as they address the African-American community.

After completing the General Education Program requirements, students will be able to:

1. **Describe** political systems and how they function.
2. **Articulate** their own civic identity and how one participates as an informed citizen in a democratic society.
3. **Propose** potential solutions to civic, social, environmental, historical, or economic challenges to meet community needs.

4. **Evaluate** the impacts of political or corporate policies on individuals, communities, and the environment.

General Education Program Provisions, Requirements, and Courses

General Education Program Provisions, Requirements, and Courses

The General Education (GE) course framework represents a balanced menu of courses designed to enhance core skill sets, including synthesis and analysis of information; problem solving through structures, organizations and systems; understanding of global/cultural and historical contexts; research; and effective communication skills. Students must satisfy the University's assessment requirements to document their acquisition of these core skill sets and their level of achievement of the University's GE student learning outcomes.

Provisions and Requirements

1. The General Education program requires the successful completion of 33 semester hours in the following areas:
   a. English (Composition) - 6 semester hours
   b. History - 3 semester hours
   c. Humanities - 3 semester hours
   d. Global Studies - 3 semester hours
   e. Literature - 3 semester hours
   f. Health/Wellness - 2 semester hours
   g. Mathematics - 6 semester hours
   h. Social Science - 3 semester hours
   i. Natural Science and Lab - 4 semester hours
2. Students may use one course simultaneously to satisfy a requirement for general education and their major discipline; however students may not use one course to satisfy more than one general education course requirement.
3. The minimum grade required for successful completion of English 110/112 and English 111/113 (Composition I and II) is "C."
4. Departments (majors) may choose courses from the limited menus or allow students to choose.

ENGLISH

Code	Title	Credit Hours
ENGLISH - 6 semester hours required (Minimum grade of C is required)		
GE English Electives (p. 146)		

GLOBAL STUDIES

Code	Title	Credit Hours
GLOBAL STUDIES - 3 semester hours required (Minimum grade of C is required)		
GE Global Studies Electives (p. 146)		

HISTORY

Code	Title	Credit Hours
HISTORY - 3 semester hours required		
GE History Electives (p. 146)		

HUMANITIES

Code	Title	Credit Hours
HUMANITIES - 3 semester hours required		
GE Humanities Electives (p. 146)		

LITERATURE

Code	Title	Credit Hours
Literature - 3 semester hours are required		
GE Literature Electives (p. 147)		

MATHEMATICS

Code	Title	Credit Hours
Mathematics - 6 semester hours required		
GE Mathematics Electives (p. 147)		

Science

Code	Title	Credit Hours
Science - 4 semester hours to include a lab required (Minimum grade of C is required)		
GE Science Electives (p. 147)		

SOCIAL SCIENCE

Code	Title	Credit Hours
Social Science - 3 semester hours required from the courses listed below		
GE Social Science Electives (p. 147)		

Wellness/Health

Code	Title	Credit Hours
Wellness/Health - 2 semester hours required		
GE Wellness/Health Electives (p. 147)		

Learning Outcomes

Institution-Level Student Learning Outcomes (ISLOs)

Based upon the ***University's Mission and Principles***, the following ILSLOs comprise the foundation for the General Education Program courses:

I. Written Communication Skills

DEFINITION: Written communication is defined as the ability to develop, convey, and exchange ideas in writing, as appropriate to a given context and audience.
After completing the General Education Program requirements, students will be able to:

1. **Order** sentences and paragraphs to communicate central points with logical connections and minimal grammar and punctuation errors.
2. **Express** ideas through the written word appropriate to a specific audience, purpose, rhetorical situation, and genre.
3. **Write** adhering to discipline-specific attribution standards, including in-text citation and reference.
4. **Articulate** ideas using logical support, including informed opinions and facts, and their interpretations to develop the students' ideas, avoiding fallacies, biased language, and inappropriate tone.

II. Critical Thinking

DEFINITION: Critical thinking is the ability to use information, ideas, and arguments from relevant perspectives to make sense of complex issues and solve problems. Critical thinking also includes locating, evaluating, interpreting, and combining information to reach well-reasoned conclusions or solutions.

After completing the General Education Program requirements, students will be able to:

1. **Recognize** connections and relationships among ideas, data, and information.
2. **Identify** assumptions by evaluating conflicting narratives and interpretations.
3. **Demonstrate** proficiency in problem-solving strategies and skills by determining a process and solutions to a real-world problem.
4. **Construct** arguments based on logical analysis of evidence and sound reasoning.
5. **Evaluate** their ideas and the ideas of others, including identifying biases and fallacies, both logical and rhetorical.

III. Scientific Literacy

DEFINITION: Scientific Literacy is the ability to analyze and apply basic scientific principles and methods of scientific research and inquiry to make informed decisions and engage with issues related to the natural, physical, and social world.

After completing the General Education Program requirements, students will be able to:

1. **Identify** the credibility and reliability of scientific sources by distinguishing among peer-reviewed articles, popular media, and pseudoscience.
2. **Compare** different scientific methods of analysis and investigate their use in evaluating empiric information.
3. **Discuss** the ethical, legal, economic, social, cultural, and environmental implications of scientific research and practices.
4. **Apply** scientific reasoning skills to analyze and solve problems, interpret scientific data, draw conclusions, and make evidence-based decisions.

IV. Quantitative Reasoning

DEFINITION: Quantitative Reasoning is the ability to manipulate, analyze, and/or evaluate numbers and numerical data and use results to support conclusions. It may involve calculation and/or analysis and interpretation of quantitative information derived from existing databases or systematic observations.

After completing the General Education Program requirements, students will be able to:

1. **Identify** quantitative information encountered in daily life or within the discipline to make informed decisions.
2. **Explain** numerical information orally or through written communication.
3. **Interpret** equations, graphs, diagrams, tables, figures, and/or words to draw relevant conclusions and make predictions.
4. **Use** technological tools to create graphs, tables, figures, and equations from numerical information.
5. **Calculate** basic mathematical operations in problem-solving, such as arithmetic, algebra, and basic statistics.

V. Global Cultural Literacy

DEFINITION: Global Cultural Literacy is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably", AAC&U.

After completing the General Education Program requirements, students will be able to:

1. **Explain** the impact of culture on one's worldview and behavior, including assumptions, biases, prejudices, and stereotypes.
2. **Discuss** diverse perspectives on an ethical issue that has global implications.
3. **Analyze** relationships or connections between a cultural product or practice and the perspective of the society that produced it.
4. **Develop** a project within the global community that engages cultures other than their own.

VI. Civic Engagement

DEFINITION: Civic engagement is defined as an array of knowledge, abilities, values, attitudes, and behaviors that in combination, allow individuals to contribute to the civic life of their communities. It may include, among other things, exploration of one's role and responsibilities in society; knowledge of and ability to engage with political systems and processes; and/or course-based or extra-curricular efforts to identify and address issues of public or community concern, particularly as they address the African-American community.

After completing the General Education Program requirements, students will be able to:

1. **Describe** political systems and how they function.
2. **Articulate** their own civic identity and how one participates as an informed citizen in a democratic society.
3. **Propose** potential solutions to civic, social, environmental, historical, or economic challenges to meet community needs.

4. **Evaluate** the impacts of political or corporate policies on individuals, communities, and the environment.

Special Academic Programs

Special Programs

Virginia State University offers a range of distinctive academic programs designed to support student success, promote academic innovation, and provide flexible pathways toward degree completion. These special programs serve a variety of student populations, including adult learners, high-achieving scholars, high school students seeking early college credit, distance learners, and military-affiliated individuals.

The following programs are housed under Special Programs:

- Bachelor of Individualized Studies
- Distance Education and Professional Services
- Dual Enrollment at VSU
- Honors Program
- Veterans and Military Affairs

These initiatives reflect the University's commitment to academic excellence, accessibility, and personalized education. Students are encouraged to explore these opportunities to enhance their academic journey and achieve their educational and professional goals.

Bachelor of Individualized Studies Degree

The Bachelor of Individualized Studies (BIS) degree program is a unique and flexible program designed for students who have a strong desire to create a personalized academic plan. This individualized program allows students to tailor their curriculum to their specific interests, combining courses from various disciplines to create a personalized and well-rounded education. With the guidance of advisors, students can explore diverse areas of study that develop a deep understanding of their chosen fields, increase career readiness and employability. The program encourages critical thinking, career readiness, creativity, and independent learning, preparing students for a wide range of career opportunities or further academic pursuits.

In completing the degree, the following minimum requirements must be met:

General Education

Students must complete 33 credit hours in required General Education courses.

Academic Pathways

Each student must select an academic pathway for individualized study and complete a minimum of 30 semester credit hours in discipline-specific courses, plus an additional six semester credit hours from INDS-A 499 Senior Capstone in Individualized Studies (see course description for specific requirements) and INDS 302 Individualized Studies Careers Seminar. Courses in the individualized academic pathway must be upper-level courses.

Electives

Students may earn up to 51 hours of elective credit subject to the additional course credit requirements listed below. Ideally, these electives should complement the individualized academic pathways.

Additional requirements in completing the above 120 semester hours include:

Residency

A **minimum** of 30 semester credit hours must be earned from coursework at VSU. The General Education Curriculum courses and the 30 semester credit hours earned on the academic pathways satisfy this requirement. Competency-based credit or credit for prior learning will not satisfy this requirement.

Course Level

A **minimum** of 40 semester credit hours must be earned from upper-level courses. These include courses taken in the individualized academic pathways, elective credit, transfer credit, and credit approved by the prior learning portfolio.

maximum credit

A **maximum** of 30 semester credit hours may be awarded for Military Occupational Specialties (MOS) as recommended by ACE.

Methods of Earning Credit

In addition to taking resident coursework at Virginia State University, official award of credit may also be accomplished through the following processes:

Transfer credit: Includes credit earned from a course with a grade of "C" or better taken at another accredited two or four-year institution.

Credit by Examination: Includes a comprehensive examination designed to allow the student to demonstrate mastery of established course outcomes. The special comprehensive examination will be administered by Virginia State University faculty in the department from which course credit is sought.

Credit for Prior Learning: Includes a comprehensive assessment of the students' acquired knowledge, skills, and abilities, as demonstrated through the development of a professional portfolio. Interested students must align their prior learning with courses in the current University Catalog and enroll in INDS 301 for development of the portfolio. Evaluation of the portfolio may be undertaken by university approved internal or external reviewers and any credit awarded through portfolio review may be used only in the BIS degree. An administrative fee is charged for each portfolio at the time of registration. Credit awarded by Virginia State University will be identified on the student's transcript as credit for prior learning.

Credit for Military Occupational Specialties and Education: Includes credit awarded for education and for occupational specialties. Active duty and retired service personnel must submit documentation of military education/training via an official Joint Services Military Transcript. Academic credit is based on the recommendations for the American Council on Education (ACE), as found in the Guide to the Evaluation of Educational Experiences in the Armed Services.

Course Modality Credit: Students may earn credit for courses taken at another accredited university in face to face, hybrid, or fully online modalities.

General Education (33 credit hours)

Code	Title	Credit Hours
GE English Electives (p. 146)		6
GE History Electives (p. 146)		3
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
GE Literature Electives (p. 147)		3
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
GE Mathematics Electives (p. 147)		6
GE Science Electives (p. 147)		4
Total Credit Hours		**33**

Academic Pathways (36 credit hours)

Code	Title	Credit Hours
Agriculture Sustainability		
Allied Health and Natural Science		
Behavioral and Social Sciences		
Computer Science		
Creative Arts and Technology		
Cybersecurity and Information Assurance		
Dance and Theatre		
Data Analytics and Business Intelligence		
Digital Media and Communication		
Healthcare Administration and Public Health		
Hospitality Management		
Humanities and Entrepreneurship		
Logistics Information Technology		
Military Science		
Renewable Energy and Environmental Sustainability		
Supply Chain and Logistics Management		
Teaching and Learning Education		
Urban Agriculture and Food Systems		

Students must complete 30 credit hours from the approved pathway and 6 additional courses from:

Code	Title	Credit Hours
INDS 499	Senior Research Project	3
INDS 302	Individual Studies Career Sem	3

Code	Title	Credit Hours
General Education Courses		**33**
Academic Pathways		**30**
Seminar Courses		**6**
INDS 302	Individual Studies Career Sem	
INDS 499	Senior Research Project	
Electives		**51**
Total Credit Hours		**120**

Dual Enrollment at Virginia State University

Dual Enrollment Program at Virginia State University

The online dual enrollment program at Virginia State University offers high school students a unique, transformative opportunity to jump-start their postsecondary journey. Our commitment to innovation, inclusion, and academic excellence allows us to equip students with the knowledge, skills, and confidence to make informed decisions about their future.

Our dual enrollment students have access to accelerated online course pathways that allow them to:

- **earn** degree major-aligned, career-focused college credits and credentials;
- **explore** emerging careers; and
- **develop** globally sustainable leadership skills.

The program's extended student support and comprehensive outreach services pave the way for students to design their postsecondary journey, whether that is the transition to college, the workforce, or both.

Additionally, our Concurrent Enrollment model of dual enrollment provides high school students the opportunity to take Virginia State University courses that are taught by their university credentialed high school teacher at their high school.

For additional information on our dual enrollment program, email us at dualenrollment@vsu.edu.

Honors Program

Honors Program

The Honors Program is designed to meet the unique educational needs of Virginia State University's academically talented and highly motivated undergraduate students. The primary goal of the Honors Program is to create and maintain a stimulating, supportive environment in which young scholars may engage in a wide range of challenging intellectual and creative pursuits. The program encourages the participation of all departments, fosters innovation and experimentation in undergraduate education, and supports University-wide cultural enrichment.

Major features of the Honors Program include the following:

- Honors Study
- Honors Lecture Series
- Leadership Forum
- Undergraduate Research
- Cultural Enrichment Activities
- Graduate School Partnerships

The University provides honors sections of regular university courses in the general education program; these courses encourage creativity, critical thinking, problem solving and deeper intellectual inquiry. The honors curricula provide increased opportunities for presidential and

provost scholars to cultivate habits of critical thinking, communication, creative expression and independent thought through smaller classes taught by selected faculty. The honors courses reflect instructional strategies which include more use of primary sources, more fully developed theoretical background, and some integration of interdisciplinary perspectives. The honors courses utilize more creative learning methodologies such as greater emphasis on discussion, writing, research and active extracurricular learning experiences.

The Honors Program is open to high school graduates, transfer students, and continuing students. In addition to applying and being admitted to the University, students who aspire to participate in the Honors Program are invited to file a separate application to the Honors Council, Box 9207, Virginia State University, Petersburg, Virginia 23806. Each applicant must meet criteria established by the Honors Council, including an excellent combination of grade-point-average, SAT/ACT scores, artistic/creative performances and portfolios, record of leadership experiences, and letters of recommendation.

Veterans and Military Affairs

Veterans Affairs and Military Personnel

VSU encourages veterans and active-duty military to apply for admission as either full-time or part-time students. Information on educational benefits available to veterans may be obtained from the Veterans Affairs Advisor, Academic Support Services, and VSU. Veterans and active-duty military who have one or more years of military duty will be granted credit for basic military training, based on the recommendations of the American Council on Education (ACE).

Guide to the Evaluation of Educational Experiences in the Armed Services
This credit will satisfy the University General Educational 'Wellness and Health: requirement. In additional, all traditional undergraduate degree programs at VSU may accept additional ACE recommended credit, as appropriate to their curriculum requirements, up to a total of eighteen (18) semester hours. The eighteen-hour limit does not apply to this B.I.S. degree.

Service personnel on active duty and veterans of the U.S. Armed Forces who intend to study under the Federal Acts should consult the Veterans Affairs Counselor, who is associated with the Office of Student Affairs.

Click to see the **Veterans Affairs Payment Policy (http://catalog.vsu.edu/undergraduate/university/policy-statements/#veteransaffairspaymentpolicytext)**.

Veterans desiring advanced pay should register with the Veterans Counselor at least 60 days prior to the beginning of the semester. Veterans studying under Public Law 87-815 should receive clearance from the Veterans Counselor to register. The Veterans Administration pays the cost of tuition, fees, books, and supplies.

Virginia State University has been approved under the provisions of Public Law 550, Public Law 634, and Public Law 89-358. Veterans eligible under Public Law 550 receive a monthly allowance paid directly to them while in attendance at the University. It is intended to cover the costs of fees, books, and basic living expenses. Individuals who are children of deceased veterans are eligible for certain educational benefits under Public Law 634.

Veterans with more than 180 days of active duty, any part of which occurred on or after February 1, 1955, are eligible for one month of college, vocational, or similar education for each month or fraction of a month on active duty. A veteran who wishes to receive the benefits of Public Law 550 and Public Law 89-358 should contact the Office of Veterans Affairs to initiate paperwork for benefits.

College of Agriculture

Dean
Dr. Jewel H. Bronaugh
Location
L. Douglas Wilder Building, Room 202A
Contact Information
(804) 524-6961 | jbronaugh@vsu.edu

Overview of the College of Agriculture

Virginia State University's College of Agriculture is one of the country's leading 1890 colleges of agriculture, natural resources, food, and life sciences. Our academic programs offer a comprehensive array of majors and concentrations that prepare our students to become leaders in the fields of nutrition, food science, apparel design and retail, child care, restaurant and hotel management, agriculture and more.

As part of VSU's land-grant mission, the College of Agriculture also houses the Virginia Cooperative Extension program and an Agricultural Research Station, each which provide valuable resources to Virginia residents, while also providing practical, hands-on internship and work study opportunities for our students.

Our Transformational Commitments

- Agricultural Innovation, Integration, & Sustainability
- Student Success, Experiential Learning & Workforce Development
- Integrated Well-Being of Youth, Family and Community

The College of Agriculture is comprised of the following units:

- Department of Agriculture
- Department of Family and Consumer Science
- Department of Hospitality Management
- Agricultural Research Station
- Cooperative Extension
- Randolph Farm

Our Mission

In keeping with Virginia State University's mission, the College of Agriculture's mission is to improve the educational and socio-economic well-being of students, families, and communities - focusing on excellence through integrated instruction, research and extension programs.

In accordance with the University's mission, The Departments of Agriculture, Family and Consumer Science and Hospitality Management are committed to assuring that each student reaches her/his full potential and excels in society.

Objectives of the College

It is the primary objective of the College to prepare students to enter professional careers in both public and private sectors or to continue their education beyond the baccalaureate level in professional or

graduate school. The specific objectives of various units of the College are:

- To prepare students for employment in a multitude of agriculture, family, hospitality and business-related occupations, and for advanced studies in graduate schools.
- To prepare students for employment in public and private agencies.
- To facilitate application of innovative technologies through agricultural research for solutions to diverse problems relative to sustainable production of economically competitive agricultural commodities.
- To provide individuals, groups and organizations access to information and programs about innovative human and technological systems through Cooperative Extension.
- To support activities of Agricultural Research, Cooperative Extension, and the College's degree programs through facilities at the Randolph Farm.

Objectives of Degree Programs

- Facilitate growth and development of each student throughout his/her life span;
- Provide students with experiential leaning opportunities related to their field of study;
- Prepare students to be highly qualified for employment;
- Prepare teachers in the field of Agriculture and Family and Consumer Science;
- Prepare students to enter advanced study in Agriculture, Family and Consumer Science and Hospitality Management in graduate schools of their choice; and
- Prepare dietetic practitioners to become Registered Dieticians (RD).

Other Pertinent College Information

Together, the Departments of Agriculture, Family and Consumer Science and Hospitality Management, Agricultural Research, Cooperative Extension, and Randolph Farm fulfill the land-grant mission of the University. Degree programs offered within the three academic departments are described in the section that follows.

Department of Agriculture

Chairperson: Danielle Andrews-Brown (Interim)
Location: 103 Owens Hall
Contact Information: (804) 524-1238 | dabrown@vsu.edu

Department Overview

The Department of Agriculture offers programs leading to the **Bachelor of Science degree in Agriculture** with the following areas of focus: **Agricultural Business and Economics**, **Agricultural Education (Teacher Education Endorsement/Licensure and Non-Licensure)**, **Animal Science**, **Pre-Veterinary Medicine**, **Environmental Science**, and **Plant and Soil Sciences**. We also offer a minor in **Agribusiness Management** and an **International Agriculture certificate**.

Mission Statement

In accordance with the Virginia State University's mission, the Department of Agriculture is committed to servicing the Commonwealth of Virginia, the nation and the global community by generating and disseminating knowledge about food, agriculture and environmental sciences, and ensuring that each student reaches their full potential and excels in society. The Department is also committed to the establishment and maintenance of an appropriate environment for the development and dissemination of knowledge through quality instruction, research, experiential learning, and community service.

Degree Highlight Information

The Department of Agriculture is proud to support student success through a variety of scholarships, scholars' programs, and student organizations. Scholarship opportunities include university-wide awards such as the *Presidential and Provost* Scholarships, as well as agriculture-specific funding like the *Food and AgriScience Scholarship*, *Agriculture Alumni Scholarship*, *J.R. Thomas Camp Scholarship*, *Chesterfield Farm Bureau Scholarship*, *Dinwiddie Farm Bureau Scholarship*, and the *USDA 1890 National Scholarship*.

In addition, students may benefit from competitive scholars' programs such as the *USDA 1890 Scholars Program* and the *USDA NRCS Pathways Program*, which provide both financial assistance and career development support. To enhance the student experience beyond the classroom, the department also offers active engagement in student-led organizations, including the *VSU Chapter of Minorities in Agriculture*, *Natural Resources and Related Sciences* (MANRRS), the *Pre-Vet Club, the Horticulture Club*, *Men of Agriculture*, and *Ladies in Agriculture*. These groups foster leadership, professional networking, and a strong sense of community within the agricultural sciences.

Department Goals

The Department of Agriculture aims to:

- Provide students with hands-on educational experiences and knowledge in the different and most recent developments in food, agriculture and environmental sciences.
- Provide students with quality preparation for employment in various fields of food, agriculture and environmental science related occupations in the changing global market.
- Provide advice, guidance and quality preparation for students to pursue advanced training in any nationally reputable professional or academic program.
- Empower students to be leaders and change makers who are capable of contributing meaningfully to the development of their communities.
- Provide students with training in International Agricultural Development and Engagement.

Program Listings

Bachelor of Science (B.S.) in Agriculture

Agricultural Business and Economics Concentration
Focuses on the analysis and problem-solving skills required for the production, distribution, and consumption of agricultural goods, as well as the management of services and natural resources. Key areas of emphasis within the curriculum include public policy, financial management, farm management, non-farming agribusiness management, and marketing. The program prepares students for advanced studies in agribusiness and agricultural economics, entrepreneurial opportunities in farm businesses, and employment in the private sector, including the banking industry. Additionally, it offers pathways for careers in government agencies such as the U.S. Department of Agriculture.

Agricultural Education Concentration (Teacher Education Endorsement/ Licensure)
Prepares individuals to serve effectively as secondary school teachers of agriculture, extension agents, and in positions with agriculturally related agencies and industries. Students preparing to teach will meet criteria established by the Center for the Undergraduate Professional Education Programs in the College of Education.

Agricultural Education Concentration (Non-Licensure)
Equips individuals to pursue careers in agricultural leadership, communications, training and development, community outreach, and various roles within agriculturally related agencies and industries that do not require teacher licensure. The program emphasizes the development of knowledge and skills in agricultural sciences, educational program planning, leadership, and community engagement, equipping graduates to effectively educate, advocate, and lead in both formal and non-formal agricultural education settings.

Animal Science Concentration
Designed for students who plan to transition directly into the workforce or pursue advanced degrees, such as a Master's or Ph.D., in Animal Science or related fields. This concentration provides a strong foundation in animal biology, nutrition, reproduction, genetics, and physiology. Graduates are well-prepared for careers in academia, research, government agencies, and the animal science industry, including livestock production, biotechnology, and agricultural policy.

Pre-Veterinary Medicine Concentration
Tailored for students intending to apply to veterinary school. It emphasizes coursework required for admission to Doctor of Veterinary Medicine (DVM) programs, including advanced studies in biology, chemistry, and animal health. This concentration also prepares students for careers in veterinary medicine, biomedical research, government regulatory services, and animal health industries.

Environmental Science Concentration
Offers a multidisciplinary exploration of the dynamic physical world in which humans coexist with other living organisms. The program emphasizes ecological principles, sustainability, and methods for studying and conserving biodiversity, natural resources, and environmental quality to support resilient human and natural systems.

Plant and Soil Sciences Concentration
Focuses on the science and management of agronomic crops for large-scale food and fiber production. Students study soil science in depth—from its physical and chemical properties to sustainable practices for soil and crop management. The program also covers production of crops for human and animal consumption and the cultivation of ornamental crops (such as trees, shrubs, and flowering plants) that support ecosystems and enhance quality of life.

Agribusiness Management Minor
Provides students from other majors with a complementary understanding of agribusiness fundamentals and decision-making tools.

International Agriculture Certificate
An 18-credit program preparing students for international roles in USDA-FAS and related agencies. Students gain knowledge in food production, safe food systems, ecosystem preservation, and global food security solutions.

Major(s)

- Agriculture, Bachelor of Science with a Concentration in Agriculture Business and Economics (B.S.) (p. 161)
- Agriculture, Bachelor of Science with a Concentration in Agriculture Business and Economics with an International Agriculture Certificate ((p. 163)B.S.) (p. 163)
- Agriculture, Bachelor of Science with a Concentration in Agriculture Education (B.S.) (p. 164)
- Agriculture, Bachelor of Science with a Concentration in Agriculture Education with an International Agriculture Certificate (B.S.) (p. 167)
- Agriculture, Bachelor of Science with a Concentration in Animal Science (B.S.) (p. 168)
- Agriculture, Bachelor of Science with a Concentration in Animal Science with an International Agriculture Certificate (B.S.) (p. 169)
- Agriculture, Bachelor of Science with a Concentration in Animal Science Pre-Veterinary Medicine (B.S.) (p. 170)
- Agriculture, Bachelor of Science with a Concentration in Animal Science Pre-Veterinary Medicine with an International Agriculture Certificate (B.S.) (p. 172)
- Agriculture, Bachelor of Science with a Concentration in Environmental Science (B.S.) (p. 173)
- Agriculture, Bachelor of Science with a Concentration in Environmental Science with an International Agriculture Certificate (B.S.) (p. 174)
- Agriculture, Bachelor of Science with a Concentration in Plant and Soil Science (B.S.) (p. 175)
- Agriculture, Bachelor of Science with a Concentration in Plant and Soil Science with an International Agriculture Certificate (B.S.) (p. 177)

AGRICULTURE
Course Descriptions

NOTE: All core courses for majors: Students majoring in all concentrations in Agriculture are required to earn a final grade of C or higher in all courses offered in the Department (AGEC, AGRI, AGME, ANSC, HORT, PLSC and SOSC) for courses to count towards their major curriculum requirements for graduation.

AGRI 100 GENERAL EARTH SCIENCE - 3 semester hours

A survey course in earth science designed for non-science majors.

AGRI 100 GENERAL EARTH SCIENCE LABORATORY - 1 semester hour
Corequisite: AGRI 100

AGRI 140 INTRODUCTION TO SUSTAINABLE AGRICULTURE AND SOCIETY - 3 semester hours
Sustainable agriculture integrates three main goals–environmental health, economic profitability, and social and economic equity. A variety of philosophies, policies and practices have contributed to these goals. Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, this course emphasizes the importance of stewardship of both natural and human resources with specific focus on agriculture and society in general.

AGRI 200 FOUNDATIONS IN INTERNATIONAL AGRICULTURE – 3 semester hours
The course aims to provide instruction in assisted preparation for the Foreign Service Exam, and instruction on how to be successful during the assessment phase of the FAS/APIHS-IS workforce process. The course will offer fundamentals on how to become an International Agriculture Diplomat, and information on the emerging Global Biosecurity and Food Security issues that influence safety of the food supply in the United States. **Course offered online during Summer Session Only**

AGRI 295 CONTEMPORARY GLOBAL STUDIES (AND GLOBAL SEMINAR PROGRAM) 3 semester hours
This course is designed to introduce global issues on food security and its relationship to sustainable development. It is a multidisciplinary course to explore interrelationships between food, population, the environment, and socio-economic development through a case study/ discussion approach. It also examines the psychological implications of food security and sustainable development issues and their psychological impact.

AGRI 301 Global Field Experience in International Agriculture - 3 semester hours

This course aims to prepare Globally Competent Students to address the needs of the Foreign Agriculture Service (FAS) and Animal Plant and Health Inspection Service International (APIHS-

IS). Students will conduct specific research projects addressing Animal Food Security and Biosecurity and participate in a travel abroad field practicum.

AGRI 341 RESEARCH METHODS IN AGRICULTURE - 3 semester hours
This course aims to train students in fundamental principles and practices related to research in agricultural sciences; literature search; preparation and review of scientific publications; preparation and presentations of scientific seminars; and preparation of resume/thesis/ dissertation. Topics related to Ethics in Research and Reporting would also be discussed.
Prerequisites: Completion of core agriculture courses, and STAT 210

AGRI 400 INTERNSHIP - 3 semester hours
Assignment of students to an Agricultural Science or related agency in their junior year for practical on- the-job experience. This assignment involves career counseling, ethics in the work place, cooperating with others, and following the instructions of supervisors.

AGRI 401 INDEPENDENT STUDY - 3 semester hours
An opportunity for students to work independently on Agricultural Science related issues and problems under the guidance of a single professor.
Prerequisite: Academic advisor's approval; junior or above standing

AGRI 444 GENETICS - 3 semester hours

An in-depth study of the fundamental principles, mechanisms, and heredity of plants and animals.

Emphasis will be placed on genetic engineering and gene transfer of crops and animals.

AGRI 444 GENETICS Laboratory - 1 semester hour

An in-depth study of the fundamental principles, mechanisms, and heredity of plants and animals. An in-depth study of the fundamental principles, mechanisms, and heredity of Animals and

Plants. Laboratory emphasis will be placed on engineering and gene transfer of Animals and

Plants.

Co-Requisite: For ANSC-Pre Vet Majors only

AGRICULTURE BUSINESS AND ECONOMICS

AGEC 142 PRINCIPLES OF AGRICULTURAL ECONOMICS I - 3 semester hours
The fundamental principles of economics as applied to the agriculture economy. The syllabus will highlight the agricultural development of the U.S.A. The syllabus will also develop the concept of economics as a social science, as well as the fundamental principles explaining the behavior of major economic units such as the consumer and farm-firm; price determination in general; the concept of elasticity; and the characteristics of various market structures such as perfect competition, monopoly, and oligopoly. Students will be introduced to the application of economic principles to international trade, environmental management and agricultural policy.

AGEC 143 PRINCIPLES OF AGRICULTURAL ECONOMICS II - 3 semester hours
Fundamental principles of economics as applied to the agriculture economy. Particular attention is paid to factors determining the level of income and employment; the analysis of the impact of monetary and fiscal policy on the food and fiber sector.

AGEC 300 INTERNATIONAL AGRIBUSINESS MANAGEMENT – 3 semester hours
Provides students with detailed insight into concepts, principles and strategies to manage an international agribusiness enterprise, to include the following topics: management and marketing, finance and purchasing, imports and exports, transportation and supply-chain strategies, cross-border business cultures and practices, customer service-related issues, and strategies to minimize risk exposure.
Prerequisites: AGEC 142 and 143; or ECON 210 and ECON 211

AGEC 340 AGRIBUSINESS ENTREPRENEURSHIP - 3 semester hours
A course for all majors that will focus on the importance of business to the food and agricultural sector in a global economy. The course

will explore the mechanics of developing a business plan, and applying the principles of marketing, management and finance. The course provides students with hands-on activities, and works through steps to identify and develop sustainable businesses. The fundamentals of conceptualizing, starting, developing and managing new ventures with a global perspective are covered. The course also emphasizes the entrepreneur's role as a leader, decision maker and risk bearer. Emphasis is on market analysis and competition and in developing agribusiness competitive strategies. Students will develop a comprehensive business plan.
Prerequisite: AGEC 142 or ECON 210

AGEC 342 COOPERATIVE MARKETING - 3 semester hours
The survey of cooperative activities with emphasis on agricultural marketing cooperatives; types of cooperatives; methods of organization and operation; principles; legal and tax aspects; cooperative finance; economic possibilities and limitations of cooperation.
Prerequisites: AGEC 142 Principles of Agricultural Economics I, sophomore or above standing

AGEC 344 FINANCIAL MANAGEMENT IN AGRICULTURE I - 3 semester hours
Introduces the principles of financial management with special application to the farm-firm decision making. Student will be grounded in the fundamentals of financial analysis, planning and control using three basic financial statements- balance sheet, income statement, and cash flow budget. Other major areas of concern will include capital structure, liquidity and risk management. The essentials for the assessment of agricultural business performance will include profitability, risk and liquidity management.
Prerequisites: AGEC 142 and 143, ACCT 200 and STAT 210

AGEC 346 FARM BUSINESS MANAGEMENT - 3 semester hours
Business and economic principles applied to decision making in the management of the farm business. Emphasis will be placed on cash flow, partial, enterprise, and whole farm budgeting information systems for farm accounting, analysis, and control. Obtaining and managing land, capital and labor resources. Also focuses on alternatives for farm business organization.
Prerequisites: ECON 310 and AGEC 344

AGEC 347 LAND ECONOMICS - 3 semester hours
Focus of the course is on the principles of land utilization emphasizing problems of land management, land tenure, factors affecting the value of farm land, land classification and changes in land utilization. The course investigates the role of public policy in land ownership and use.
Prerequisite: ECON 310

AGEC 441 MANAGEMENT OF AGRI-BUSINESS FIRMS - 3 semester hours

Focuses on principles of production, marketing, financial and human resource management and their application to the operation and management of firms serving agriculture. This course is intended to increase students' ability to apply basic economic concepts to decision making in the agri-business firm. Problem solving involving quantitative and conceptual analyses of production and investment decisions, pricing strategies, technological change, and the management of risk.
Prerequisites: AGEC 344, ECON 310, STAT 210

AGEC 443 FINANCIAL MANAGEMENT IN AGRICULTURE II - 3 semester hours
Financial analysis of the farm firm; factors affecting firm growth; capital budgeting techniques; investment analysis; financial aspects of leasing; legal aspects of lending; financial intermediation and major financial institutions for agriculture; credit scoring; loan pricing; and asset-liability management by agricultural lending institutions; public policies affecting agricultural credit markets; risk management strategies in agriculture; farm insurance; farm real estate appraisal, international dimensions of agricultural finance.
Prerequisites: ECON 310, ECON 320, STAT 210, AGEC 344, AGEC 346

AGEC 444 AGRICULTURE POLICY - 3 semester hours
An examination of the process of public policy making for the Food, Agriculture and Natural Resources sector of the economy. Particular attention is paid to the rationale for public policy intervention in agriculture as well as the mechanisms used to intervene; instability and stabilization of agriculture prices and income; government policy choices and implementation.
Prerequisites: ECON 310, ECON 320, POLI 150

AGEC 445 ADVANCE FARM MANAGEMENT - 3 semester hours
Management techniques of planning, implementation and control as applied to farm businesses. Techniques of decision- making in agriculture. Accounting control concepts and decision theory as used to manage agriculture enterprises.
Prerequisites: AGEC 346

AGEC 447 AGRICULTURE MARKETING - 3 semester hours
The study of the structure and function of the food marketing system, demand, supply and market price determination; marketing margins; product quality and grading; markets over space. Markets over time; storage, price discovery and risk management. Market structure, performance and efficiency in agricultural markets. Marketing institutions; cooperatives and agricultural policy.
Prerequisites: ECON 310, AGEC 344

AGEC 448 INTRODUCTION TO COMMODITY MARKETING - 3 semester hours
Fundamental of managing agricultural risks through the futures and options markets. The mechanics of trading in the futures market. The principles of fundamental and technical analysis.
Prerequisites: ECON 310, AGEC 344

AGRICULTURAL EDUCATION

AGRI 240 LEADERSHIP AND ORGANIZATIONAL MANAGEMENT - 3 semester hours
Focuses on the foundational theories and practices of leadership. Emphasizes the application of theoretical concepts to real-life leadership situations. Examines the impacts of organizational history and structure on today's leadership challenges. Attention is given to workplace scenarios and issues, to enable students to explore a vision for continuous improvement as future leaders. Students will observe, practice and develop leadership skills necessary to succeed as advisors or managers of organizations. A practicum will be used in conjunction with this course for observation of groups and group leaders. Organization and functions of youth organizations (4-H, FFA and other youth and adult groups) are also examined.

AGRI 342 METHODS OF TEACHING AGRICULTURE - 3 semester hours

Prepares students to organize and provide instruction to all types of agriculturally oriented groups. A practicum is used to provide an opportunity for the student to observe methods of teaching by experienced teachers.

Prerequisite: Academic advisor's approval; junior or above standing

AGRI 343 PRINCIPLES AND PRACTICES OF AGRICULTURAL EDUCATION -3 semester hours
Students will develop an insight into the history and philosophy of a program of agricultural education program in secondary schools. Special emphasis will be given to planning, conducting and managing a department. A practicum will be used to observe teachers in as they perform management tasks involved in operating a successful educational program for youth and adults.
Prerequisites: Academic advisor's approval; junior or above standing

AGRI 402 STUDENT TEACHING IN AGRICULTURE – 3 semester hours
This course is designed to provide supervision on the content area for pre-service secondary agriculture candidates.
Prerequisite: Department approval
Co-requisite: EDUC 401, EDUC 402

AGRI 441 ORGANIZED INSTRUCTION IN AGRICULTURAL EDUCATION -3 semester hours
Evaluation of instructional proceedings, planning programs of instruction, and evaluation of instructional outcomes.
Prerequisite: Junior Standing, Academic Advisor's approval

AGRI 446 PRINCIPLES OF COOPERATIVE EXTENSION - 3 semester hours
A study of the philosophy, history and development of the Cooperative Extension Service. In addition, attention is given to leadership training, and instructional methods and techniques. Each student will be required to complete a practicum with a selected extension agent.
Prerequisites: AGRI 140, AGEC 342; sophomore or above standing

AGRICULTURAL MECHANIZATION

AGME 140 AGRICULTURAL MECHANICS – Variable 2-3 semester hours

Emphasis on organization and management of the Agricultural Mechanics laboratory. The

selection, care and use of supplies, tools and equipment to plan and make practical application of mechanical skills in the area of welding, woodworking (hand and power) soldering, pipe, fitting, painting, sketching, drawing and plan reading. The 3 semester hours course will consist of additional workshop lab series.

AGME 242 INTRODUCTION TO AGRICULTURAL ENGINEERING - 3 semester hours
A study of the basic engineering principles in the areas of agricultural power and machinery, rural electrification, agricultural structures, and soil and water management.
Prerequisites: MATH 120, 121 sophomore or above standing

AGME 346 AGRICULTURAL POWER MACHINERY - 3 semester hours
A study of the construction, operation, adjustment and management of agricultural implements and power machinery. Primary emphasis is on tractor and machinery management.
Prerequisites: AGME 242

AGME 442 ADVANCED AGRICULTURAL MECHANICS - 3 semester hours
Emphasis on organization and management of the agricultural mechanics laboratory, selection, care, and use of power equipment in construction and repair jobs. Special emphasis is placed on developing skills in areas where the student is deficient.
Prerequisites: AGME 140, AGME 242

AGME 444 ELECTRICITY IN AGRICULTURE - 3 semester hours
A study of the practical application of electricity in the home and in the agricultural industry with emphasis on planning the wiring systems, selection, operation and maintenance of electrical equipment.
Prerequisites: AGME 242

AGME 445 INTERNAL COMBUSTION ENGINES - 3 semesters hours
A study of internal combustion engines to include principles of designing, operating, rating, testing, overhauling, and the application for agricultural uses. Primary emphasis is on the basic operation of air cooled engines.
Prerequisites: AGME 242, AGME 346

AGME 446 ADVANCED AGRICULTURAL POWER MACHINERY - 3 semester hours
A study of construction, operation, and adjustment of agricultural implements, and power machinery.
Prerequisites: AGME 346

AGME 447 ADVANCED INTERNAL COMBUSTION ENGINES - 3 semester hour

A study of multi-cylinder internal combustion engines, including designing, operating, testing,

repairing, overhauling, and the application of agricultural uses.

Prerequisites: AGME 445

ANIMAL SCIENCE AND PRE-VETERINARY MEDICINE

ANSC 140 PRINCIPLES OF ANIMAL SCIENCE - 3 semester hours
Gives an overview of the biological principles applicable to the animal sciences. Concentrates mainly on reproduction, genetics, nutrition, lactation, and other facets of the animal industries.

ANSC 241 LIVESTOCK FARM PRACTICES - 3 semester hours
Supervised farm practices in feeding, handling, and managing farm animals.
Prerequisites: ANSC 140

ANSC 242 PRINCIPLES OF POULTRY PRODUCTION - 3 semester hours
Principles and practices underlying the reproduction and growth of the domestic fowl. Includes the study of breeds, varieties and types of poultry.

ANSC 246 INTRODUCTION TO EQUINE SCIENCE - 3 semester hours
A study of the fundamental principles of equine science to include: Horse terminology, impact of horses on society, history, breeds, management, genetics, reproduction, health, nutrition, behavior, riding, and the business aspects of horse industry.

ANSC 343 SWINE PRODUCTION - 3 semester hours
Feeding and management practices used in purebred and commercial swine production
Prerequisite: ANSC 242

ANSC 344 BEEF CATTLE PRODUCTION - 3 semester hours
Methods of producing, managing, and marketing commercial and purebred cattle.
Prerequisites: ANSC 140

ANSC 345 VETERINARY ANATOMY AND PHYSIOLOGY - 3 semester hours
A consideration of gross anatomy and physiological functions of animals as a background for the studies in nutrition, reproduction and diseases.
Prerequisites: ANSC 140, BIOL 241

ANSC 346 PHYSIOLOGY OF REPRODUCTION - 3 semester hours
Study of reproductive processes with special emphasis upon reproduction efficiency of domestic animals.
Prerequisite: ANSC 345; junior or above standing

ANSC 348 FARM DAIRYING - 3 semester hours
Teaches the basic principles of dairy management, current knowledge in the many areas of dairy science and present day practices of successful dairy persons.
Prerequisites: BIOL 120, ANSC 140

ANSC 349 VETERINARY HYGIENE - 3 semester hours
Predisposition, causes and symptoms of infections, parasitic and nutritional diseases with emphasis on prevention and control through management and sanitation.
Prerequisites: BIOL 120, ANSC 140

ANSC 350 SMALL RUMINANT MANAGEMENT - 3 semester hours
Principles and practices of production, management, and marketing of small ruminants (ex. sheep, goats). The role of genetics, nutrition, reproduction and animal health will also be emphasized.
Prerequisite: ANSC 140, junior or above standing

ANSC 351 FEEDS AND FEEDING - 3 semester hours
Basic nutritional principles, composition and value of feeds and the formulation of rations for farm animals.
Prerequisites: BIOL 120, ANSC 140

ANSC 441 ANIMAL NUTRITION - 3 semester hours
Course matter focuses on nutrients and their digestion, metabolism, biological role and the principles of animal nutrition.
Prerequisites: BIOL 120, ANSC 140

ANSC 446 SPECIAL TOPICS - 3 semester hours
Presentation and discussion of papers on animal industry subjects.
Prerequisites BIOL 120, ANSC 140

ANSC 447 SPECIAL PROBLEMS - 3 semester hours
Lectures and assignments relating to industry problems in breeding, nutrition, diseases, market products, and management of farm animals.
Prerequisites: BIOL 120, ANSC 140

ANSC 448 ADVANCED LIVESTOCK PRODUCTION - 3 semester hours
A study of economic, nutritional and managerial factors affecting the operation of livestock enterprises.
Field trips required.
Prerequisites: BIOL 120, ANSC 140

ANSC 449 SEMINAR - 3 semester hours
Research and presentation of important literature related to the animal sciences. Areas of economic importance to the agricultural community will be emphasized.
Prerequisites: BIOL 120, ANSC 140

HORTICULTURE

HORT 340 LANDSCAPE DESIGN - 3 semester hours
Study of the principles of landscape as applied to schools, home grounds and public areas; the use of common plant material; practices in simple designs and drawings.

HORT 350 VEGETABLE PRODUCTION - 3 semester hours
A study of commercial vegetable production with special emphasis on sustainable approaches to produce, harvest and market different vegetable crops. Students are taught hands-on techniques for vegetable production and harvesting.
Prerequisite: A 100-level science course with a grade of C or higher.

HORT 351 FRUIT PRODUCTION - 3 semester hours
A study of the principles and practices underlying deciduous large fruit production--apples, pears, plums, peaches, cherries, and nuts--with special reference to temperature, moisture, nutrition, fruit seeding and pruning.

HORT 352 PLANT MATERIALS I - 3 semester hours
A study and identify perennials, biennials and annuals for ornamental planting and planting plans. Special emphasis will be on the flower and leaf as a means of identification.

HORT 353 PLANT MATERIALS II - 3 semester hours
A study and identification of trees, shrubs and vines for general ornamental planting. Planting plans, sketches and written reports required. Tree and shrub identification will be emphasized.

HORT 440 THEORY OF LANDSCAPE DESIGN - 3 semester hours
Economic and aesthetic theory of design, taste, character historic styles and composition; natural elements in design; planting design. Students will be required to use various theories in planting designs.

HORT 444 COMMERCIAL FLORAL ARRANGEMENT - 3 semester hours
Essentials of flower arrangement, the commercial flower shop; sources of supplies and sales. Emphasis will be on techniques, fundamental skills and methods used when creating modern commercial designs.

HORT 446 GREENHOUSE CROPS AND MANAGEMENT - 3 semester hours
Principles of greenhouse operation, propagation, ventilation, heating, watering, fumigation, soil sterilization and potting. Emphasis will be placed on practical application of several management procedures.

HORT 448 PROBLEMS IN LANDSCAPE - 3 semester hours
Investigations in landscape gardening by advanced students. Conferences and reports are required. Landscape designs and landscape plans will be a part of this course. Investigations must be modern problems of the landscape industry.

HORT 449 PLANT PROPAGATION AND NURSERY PRACTICES - 3 semester hours
Methods of propagating plants, nursery organization and techniques. Emphasis will be placed on a complete up-to-date coverage of all phases of plant propagation from a theoretical and an applied aspect.

HORT 450 PROBLEMS IN HORTICULTURE - 3 semester hours
Investigations in horticultural problems by advanced students. Conferences and reports are required. Investigations by students must be modern concerns of the horticultural industry.

PLANT SCIENCE

PLSC 140 PRINCIPLES OF PLANT SCIENCE - 3 semester hours
An in-depth study of the fundamentals of plant science, including basic principles of plant growth, culture, development, propagation and the relationship of the broad industry of agriculture to plant development.

PLSC 250 INTRODUCTION TO NATURAL RESOURCES AND FORESTRY - 3 semester hours
A study of the fundamental concepts of natural resource management, including forestry, forest products, conservation, wildlife, and recreation. Critical natural resource issues will be emphasized, including biophysical and socioeconomic aspects, as well as careers that address these issues. **Prerequisites: PLSC 140**

PLSC 341 FIELD CROPS PRODUCTION - 3 semester hours
A study of the distribution, adaptation, cultural practices, and selection of the principal field crops. Special attention will be given to the identification and habitats of cereal crops, legumes and grasses.

PLSC 345 ARBORICULTURE – 3 semester hours
A study of the selection, planting, and care of trees. Special emphasis will be given to application in urban settings, such as the establishment and management of street trees and landscaped areas, and the many benefits that trees provide. The course will describe current management approaches utilized to maintain and protect existing trees. Students will develop theoretical and practical knowledge, allowing them to work on all aspects of tree care to diagnose and remedy major pests, diseases, and tree disorders to promote plant health.
Prerequisite: PLSC 140 or equivalent

PLSC 352 FORAGE CROPS AND PASTURE MANAGEMENT - 3 semester hours
A study of the production and handling of leading forage crops, their relationship to the livestock industry and the maintenance of soil fertility. Special attention is given to hay and pasture management.

PLSC 353 INTEGRATED PEST MANAGEMENT STRATEGIES - 3 semester hours
A study of the combined use of biological, chemical, and cultural methods utilized to keep pest populations below accepted threshold levels. Special attention is given to pesticide applications, ecological/ environmental factors, residues, application equipment, and economical considerations. **Prerequisites: PLSC 140**

PLSC 440 PLANT RESISTANCE TO INSECTS - 3 semester hours
The study of mechanisms of plant resistance to insects' attack and the utilization of insect control by chemical and non-chemical means. Special attention is given to factors related to the cause of resistance and methods of breeding insect restraint varieties of field and horticultural crops.
Prerequisites: Junior or above standing

PLSC 441 PLANT PATHOLOGY - 4 semester hours
A study of the nature, cause and control of plant diseases. This course will concentrate on disease of field, orchard and vegetable crops.
Prerequisites: PLSC 140

PLSC 442 PROBLEMS IN PLANT SCIENCE - 3 semester hours
This course is designed for advanced students to work independently on problems relating to genetics and physiology of horticulture and field crops. The problem studied must be one of modern concern to the plant science industry.
Prerequisites: Junior or above standing

PLSC 445 ECONOMIC ENTOMOLOGY

A study of the classification, structure, description, habits of the principal insects and the methods of control. Student will also become familiar with the economic benefits and importance of insects to humans.
Prerequisites: BIOL 120, AGEC 142

PLSC 446 PLANT PHYSIOLOGY - 4 semester hours
A study of the plant cell, solutions, and membranes in relation to the cell root systems. Emphasis will be placed on the plant cell response to the intake of water, intake of solutes, induced elements, and the loss of water.

Prerequisites: PLSC 140, junior or above standing

PLSC 448 PLANT BREEDING - 3 semester hours
A study of the application of genetics and simple biometric constants to the breeding of field and horticultural crops. The history and creation of plant transformation will be emphasized.
Prerequisite: AGRI 444 Genetics; academic advisor's approval and junior or above standing

PLSC 452 URBAN NATURAL RESOURCE MANAGEMENT - 3 semester hours
An overview of the ecosystem services provided by urban and suburban trees and green space, as well as methods to evaluate and manage potential benefits, risks, and costs. The course will include a study of the social needs and values of urban ecosystems; urban forest resource inventories; tree and vegetation ordinances; the development, financing, and management of urban forestry programs; and community involvement, public relations, and urban forestry education programs.
Prerequisite: PLSC 250

PLSC 454 SPECIAL TOPICS IN CROP SCIENCE - 3 semester hours

Selected topics for advanced student dealing with current issues in crop science. Special emphasis is placed on modern crop production problems.
Prerequisites: Junior or above standing

PLSC 455 TURF MANAGEMENT - 3 semester hours
A study of turf grasses and their growth requirements, including the various turf operations, equipment needs, materials and work programs designed for the efficient maintenance of turf as related to specific uses

SOIL SCIENCE

SOSC 242 SOIL SCIENCE - 4 semester hours
An introduction to principles of soil science: Introduces fundamental physical, chemical and biological properties of soils, their formation, classification, distribution, productivity, and conservation. It reinforces class lectures with field trips and laboratory exercises.
Prerequisite: CHEM 151

SOSC 344 SOIL MANAGEMENT AND CONSERVATION - 3 semester hours
This course will emphasize soil resources of the United States and methods and plans for soil conservation, including control of erosion, the effects of climatic factors, vegetation, soil properties and other management practices on soil conservation and fertility maintenance.
Prerequisites: SOSC 242 and CHEM 151

SOSC 345 SOIL FERTILITY AND FERTILIZERS - 4 semester hours
Provides an assessment of soil fertility and the alteration of fertility by use of fertilizers, lime, manure, and cropping systems. The role of colloids in ion fixation and exchange is addressed. Calculations for cation exchange capacity; fertilizer, lime, and manure applications in the field are emphasized. The history, technology and use of fertilizers and their importance to the abatement of world famine and malnutrition are discussed.
Prerequisites: SOSC 242 and CHEM 151

SOSC 347 SOIL CLASSIFICATION - 3 semester hours
An overview of soil taxonomy; how soils are grouped and organized based on their properties. Descriptions of pedons in the field, their formation, distribution, classification, and use are described.
Prerequisites: SOSC 242 and CHEM 151

SOSC 450 PROBLEMS IN SOIL SCIENCE - 3 semester hours
Individual study or research on soil or land-use problems. Study of local, regional, national, and world problems related to soils, remedies and reuse after reclamation.
Prerequisites: SOSC 347; junior and above standing

SOSC 455 WORLD SOIL RESOURCES - 3 semester hours
A study of properties of soils, world soil geography, classification, present and potential productivity of soils in various continents, and factors influencing their utilization.
Prerequisites: SOSC 347; junior and above standing

ENVIRONMENTAL SCIENCE

AGRI 150 INTRODUCTION TO ENVIRONMENTAL SCIENCE - 4 semester hours
Introduces the principles and basic facts of the natural environment. The course will focus on land forms, vegetation and soils, air and water pollution, water quality monitoring, acid rain, the greenhouse effect, biodiversity, sustainability, and global change. Emphasis is placed on the application of basic science to the understanding and mitigation of current environmental problems. Course format demonstrates how the environment works and how the human use of resources perturbs the environment, citizen action for past, present, and future decisions. A laboratory is taken in conjunction and provides hands on laboratory exercises related to selected lecture topics.

AGRI 280 PRINCIPLES OF GEOGRAPHIC INFORMATION SYSTEMS - 3 semester hours
The course is designed to introduce students to the fundamental Principles of Geographic Information Systems (GIS). The course provides students with a general view of the applications of GIS in a host of disciplines, an exposure to geographic data structures, and an understanding of computerized spatial display and analysis. Special emphasis will be placed on natural resource management, including agriculture and environment. The course is recommended for juniors and seniors from any discipline and will involve instruction, discussion on assigned topics, hands-on activities using GIS software programs, and field trips.

AGRI 290 INTRODUCTION TO REMOTE SENSING - 3 semester hours
The course will introduce students to the fundamental concepts and applications of remote sensing in the areas of agriculture, biological, computer, political, and social sciences, and engineering. To complement classroom instruction, there will be extensive hands-on exercises based on computer software dedicated to remote sensing and integrating it in GIS. Field trips will be organized to visit governmental agencies or institutions where remote sensing is being done.
Prerequisites: AGRI 280 Principles of Geographic Information System

AGRI 350 CLIMATE CHANGE AND ADAPTATION SCIENCES - 3 semester hours
This course explores the science of climate change through evidence for changes in global atmospheric circulation, water, heat, and heat transfer, air/sea interactions, global water cycle, ocean temperature, sea level and acidity due to global warming changes. Students will learn how the climate system works; what factors cause climate to change across different time scales and how those factors interact; how climate has changed in the past; how scientists use models, observations and theory to make predictions about future climate; and the possible consequences of climate change for our planet. Finally, the course looks at the connection between human activity and the current warming trend and considers some of the potential social, economic and environmental consequences of climate change.

Agriculture, Bachelor of Science with a Concentration in Agriculture Business and Economics (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3

MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGEC 142	Principles Agric Economics I	3
AGEC 143	Principles Agric Economics II	3
AGRI 140	Introd Sustain Agric & Society	3
BIOL 120	Principles Of Biology I (AND LAB)	4
HPER 170	Health And Wellness	2
AGRI 150	Intro Environmental Science	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
	Credit Hours	**34**
Sophomore Year		
ACCT 201	Introductory Accounting I	3
ACCT 202	Introductory Accounting II	3
ECON 210	Principles Of Microeconomics	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
GE History Electives (p. 146)		3
ENGL 201 or ENGL 214	Introduction To Literature or World Literature I	3
SPEE 214	Introduction To Public Speakin	3
STAT 210	Elementary Statistics I	3
AQSC 201	Introduction To Aquaculture	3
	Credit Hours	**31**
Junior Year		
ECON 310	Microeconomics	3
ECON 320	Macroeconomics	3
COBU 260	Business Statistics	3
AGEC 344	Financial Mgmt In Agric I	3
AGRI 280	Prin Geographic Info Systems	3
SOSC 242	Soil Science	4
GE Global Studies Electives (p. 146)		3
AGEC 346	Farm Business Management	3
AGME 242	Intro Agric Engineering	3
COBU 170	Legal, Ethical & Digital Envir	3
	Credit Hours	**31**
Senior Year		
AGEC 447	Agriculture Marketing	3
AGEC 443	Financial Mgmt in Agric II	3
AGRI 341	Research Methods In Agricultur	3
AGRI 401	Independent Study	3
GE Humanities Electives (p. 146)		3
AGEC 441	Management Agri-Busi Firms	3
AGEC 444	Agriculture Policy	3
Agriculture Elective		3
	Credit Hours	**24**
	Total Credit Hours	**120**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Code	Title	Credit Hours
AGEC 143	Principles Agric Economics II	3
AGRI 150	Intro Environmental Science	4
COBU 201 or ACCT 201	Introductory Accounting I Introductory Accounting I	3
COBU 202 or ACCT 202	Introductory Accounting II Introductory Accounting II	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
STAT 210	Elementary Statistics I	3
AQSC 201	Introduction To Aquaculture	3
ECON 310	Microeconomics	3
ECON 320	Macroeconomics	3
COBU 260 or ECON 330	Business Statistics Econometrics	3
AGEC 344	Financial Mgmt In Agric I	3
AGEC 344	Financial Mgmt In Agric I	3
COBU 170	Legal, Ethical & Digital Envir	3
AGEC 346	Farm Business Management	3

AGME 242	Intro Agric Engineering	3
AGEC 447	Agriculture Marketing	3
or MKTG 300	Principles Of Marketing	
AGEC 443	Financial Mgmt in Agric II	3
AGRI 341	Research Methods In Agricultur	3
AGEC 441	Management Agri-Busi Firms	3
or MGMT 444	Entrepreneurship Small Bus Mgm	
AGEC 444	Agriculture Policy	3
Total Credit Hours		**62**

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested Agriculture Electives		
AGRI 400	Internship	3
AGEC 300	International Agribusiness Mgm	3
AGEC 340	Agribusiness Enterpreneurship	3
ANSC 350	Small Ruminant Management	3
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3
ANSC 344	Beef Cattle Production This course has an associated LAB of "0" credit hours	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 341	Field Crops Production	3

Code	Title	Credit Hours
Suggested Humanities Electives		
HIST 122	U.S. History to 1865	3
or HIST 123	U.S. History After 1865	
PHIL 180	Critical Thinking	3
PHIL 290	Business Ethics	3
GE Literature Electives (p. 147)		3
Any Language Course		3

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, ENGL 111, MATH 120 and MATH 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		59
Electives		6
Total Credit Hours		**120**

Agriculture, Bachelor of Science with a Concentration in Business and Economics with an International Agriculture Certificate (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGEC 142	Principles Agric Economics I	3
AGEC 143	Principles Agric Economics II	3
AGRI 140	Introd Sustain Agric & Society	3
BIOL 120	Principles Of Biology I (AND LAB)	4
HPER 170	Health And Wellness	2
AGRI 150	Intro Environmental Science	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
	Credit Hours	**34**
Sophomore Year		
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
ECON 210	Principles Of Microeconomics	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
ENGL 201 or ENGL 214	Introduction To Literature or World Literature I	3
Foreign Language (ARAB, FREN, SPAN)		3
STAT 210	Elementary Statistics I	3
AGRI 280	Prin Geographic Info Systems	3
AQSC 201	Introduction To Aquaculture	3
	Credit Hours	**31**
Junior Year		
ECON 310	Microeconomics	3
ECON 320	Macroeconomics	3
COBU 260	Business Statistics	3
AGEC 344	Financial Mgmt In Agric I	3
SOSC 242	Soil Science	4
GE Global Studies Electives (p. 146)		3
AGEC 346	Farm Business Management	3
AGME 242	Intro Agric Engineering	3
Foreign Language (ARAB, FREN, SPAN)		3
	Credit Hours	**28**
Senior Year		
AGEC 447	Agriculture Marketing	3
AGEC 443	Financial Mgmt in Agric II	3
AGRI 341	Research Methods In Agricultur	3
AGRI 200	Foundation in Internat'l Agric (or AGRI Elective)	3
GE Humanities		3
AGEC 441	Management Agri-Busi Firms	3
AGEC 444	Agriculture Policy	3
AGRI 301	Global Field Exp Interna'l Ag (or AGRI Elective)	3
AGRI 401	Independent Study	3
	Credit Hours	**27**
	Total Credit Hours	**120**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet the requirements for graduation.

Code	Title	Credit Hours
Foreign Language (ARAB/FREN/SPAN)		3
AGRI 200	Foundation in Internat'l Agric	3
AGRI 295	Contemporary Global Studies	3
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 400	Internship	3
AGRI 401	Independent Study	3
ANSC 242	Princple Of Poultry Production	3
ANSC 344	Beef Cattle Production	3
ANSC 350	Small Ruminant Management	3
ANSC 449	Seminar	3
AQSC 201	Introduction To Aquaculture	3
PHIL 180	Critical Thinking	3
PHIL 290	Business Ethics	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 341	Field Crops Production	3

AGRI 200, 301 courses are offered online during the summer session(s) only.

Code	Title	Credit Hours
Core Courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses:		**6**
ARAB Beginning I and II or Intermediate I and II		
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202	Global Studies Abroad: Topic	3
or GLST 302	Global Studies Abroad: Topic	
or GLST 402	Global Studies Abroad: Topic	
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3
Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Note: B.S. Courses and INTL AGRI Certificate meets the requirements for Peace Corps Prep Program Certificate

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet requirements for graduation.

Code	Title	Credit Hours
Foreign Language (ARAB/FREN/SPAN)		3
AGRI 200	Foundation in Internat'l Agric	3
AGRI 295	Contemporary Global Studies	3
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 400	Internship	3
AGRI 401	Independent Study	3
ANSC 242	Princple Of Poultry Production	3
ANSC 344	Beef Cattle Production	3
ANSC 350	Small Ruminant Management	3
ANSC 449	Seminar	3
AQSC 201	Introduction To Aquaculture	3
PHIL 180	Critical Thinking	3
PHIL 290	Business Ethics	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 341	Field Crops Production	3

AGRI 200, 301 courses are offered online during the summer session(s) only.

Agriculture, Bachelor of Science with a Concentration in Agriculture Education (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society	3
AGEC 142	Principles Agric Economics I	3
AGRI 150	Intro Environmental Science	4
BIOL 120	Principles Of Biology I (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
	Credit Hours	**31**
Sophomore Year		
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
SOSC 242	Soil Science	4
IDST 200	Digital Media Teacher Educatio	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
SPEE 214	Introduction To Public Speakin	3
AGME 242	Intro Agric Engineering	3
PHIL 180	Critical Thinking	3
	Credit Hours	**32**
Junior Year		
AGME 140	Agricultural Mechanics	2-3
AGRI 342	Methods Of Teaching Agric	3
HIST 114	World History to 1500	3
AGED 240	Leadership & Org'l Management	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
PSYC 212	Human Growth & Development	3
AGRI 343	Priniciples/Practices Agri Ed	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 427	Reading In The Subject Area	3

AGRI 295	Contemporary Global Studies	3
	Credit Hours	**31-32**
Senior Year		
EDUC 401	Student Teaching Seminar	3
AGRI 402	Stud Teaching In Agriculture	3
EDUC 402	Student Teaching FE	9
GE Humanities Electives (p. 146)		3
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Restricted Elective	AGRI Course	3
	Credit Hours	**27**
	Total Credit Hours	**121-122**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet the requirements for graduation.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science	3
PLSC 140	Principles of Plant Science	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Code	Title	Credit Hours
AGRI 150	Intro Environmental Science	4
IDST 200	Digital Media Teacher Educatio	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
AGME 242	Intro Agric Engineering	3
PHIL 180	Critical Thinking	3
AGME 140	Agricultural Mechanics	2-3
AGRI 342	Methods Of Teaching Agric	3
or AGED 401	Methods of Teaching Agricultur	
AGED 240	Leadership & Org'l Management	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
AGED 343	Program Plan in Sec Agri Educa	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 427	Reading In The Subject Area	3
EDUC 401	Student Teaching Seminar	3
AGRI 402	Stud Teaching In Agriculture	3
or AGED 402	Seminar in Agricultural Educ	
EDUC 402	Student Teaching FE	9
Total Credit Hours		**60-61**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested Agriculture Electives		
AGEC 143	Principles Agric Economics II	3
AGEC 300	International Agribusiness Mgm	3
AGEC 340	Agribusiness Enterpreneurship	3
AGEC 344	Financial Mgmt In Agric I	3
AGEC 346	Farm Business Management	3
AGEC 441	Management Agri-Busi Firms	3
AGEC 443	Financial Mgmt in Agric II	3
AGEC 447	Agriculture Marketing	3
ANSC 242	Princple Of Poultry Production	3
ANSC 246	Intro To Equine Science	3
ANSC 343	Swine Production	3
ANSC 344	Beef Cattle Production	3
ANSC 348	Dairy Farming	3
ANSC 351	Feeds And Feeding	3
AGRI 400	Internship	3
HORT 449	Plant Propagation & Nursery Pr	3
PLSC 341	Field Crops Production	3
PLSC 352	Forage Crops And Pasture Mgmt	3
PLSC 353	Integrated Pest Mgmt Strategie	3
SOSC 345	Soil Fertility and Fertilizers	3
SOSC 347	Soil Classification	3

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, ENGL 111, MATH 120 and MATH 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		60
Electives		6
Total Credit Hours		**121**

Agriculture, Bachelor of Science with a Concentration in Agriculture Education - Non-Licensure (B.S.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society	3
AGEC 142	Principles Agric Economics I	3
AGRI 150	Intro Environmental Science	4
BIOL 120	Principles Of Biology I (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
	Credit Hours	**31**
Sophomore Year		
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
SOSC 242	Soil Science	4
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
AGRI 295	Contemporary Global Studies	3
AGRI 280	Prin Geographic Info Systems	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
SPEE 214	Introduction To Public Speakin	3
AGED 240	Leadership & Org'l Management	3
AGME 242	Intro Agric Engineering	3
SOCI 101	Introduction To Sociology	3
	Credit Hours	**32**
Junior Year		
AGRI 250	Climate Change & Adapt Science	3
AGRI 342	Methods Of Teaching Agric	3
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
PHIL 180	Critical Thinking	3
Restricted Elective	AGRI Education Course	3
Restricted Elective	AGRI Education Course	3
AGRI 343	Priniciples/Practices Agri Ed	3
STAT 210	Elementary Statistics I	3
Restricted Elective	AGRI Education Course	3
Restricted Elective	AGRI Education Course	3
	Credit Hours	**30**
Senior Year		
PSYC 212	Human Growth & Development	3
AGRI 400	Internship	3
AGRI 446	Principles of Cooperative Ext	3
AGRI 401	Independent Study	3
Restricted Elective	AGRI Education Course	3
AGRI 341	Research Methods In Agricultur	3
AGRI 441	Organized Instruction	3
Restricted Elective	AGRI Education Course	3
Restricted Elective	AGRI Course	3
	Credit Hours	**27**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Code	Title	Credit Hours
AGRI 150	Intro Environmental Science	4
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
AGED 240	Leadership & Org'l Management AGRI 240	3
AGME 242	Intro Agric Engineering	3
AGRI 250	Climate Change & Adapt Science	3
AGRI 342 or AGRI 401	Methods Of Teaching Agric Independent Study	3

PHIL 180	Critical Thinking	3
AGRI 343	Priniciples/Practices Agri Ed	3
STAT 210	Elementary Statistics I	3
PSYC 212	Human Growth & Development	3
AGRI 400	Internship	3
AGRI 446	Principles of Cooperative Ext	3
AGRI 341	Research Methods In Agricultur	3
AGRI 441	Organized Instruction	3
Total Credit Hours		**44**

Code	Title	Credit Hours
Restricted Electives	Any 200-level and above AGEC, AGED, AGME, AGRI, ANSC, AQSC, HORT, PLSC, SOSC Courses	21
Unrestricted Electives		0
Total Credit Hours		**21**

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		44
Electives		21
Total Credit Hours		**120**

Agriculture, Bachelor of Science with a Concentration in Agriculture Education with an International Agriculture Certificate (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGEC 142	Principles Agric Economics I	3
AGRI 150	Intro Environmental Science	4
AGRI 140	Introd Sustain Agric & Society	3
BIOL 120	Principles Of Biology I (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
	Credit Hours	**31**
Sophomore Year		
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
IDST 200	Digital Media Teacher Educatio	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
Foreign Language (ARAB/FREN/SPAN)		3
Humanities Elective (ARAB/FREN/SPAN)		3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
AGME 242	Intro Agric Engineering	3
SOSC 242	Soil Science	4
PHIL 180	Critical Thinking	3
	Credit Hours	**35**
Junior Year		
AGME 140	Agricultural Mechanics	2
EDUC 315	Data Driven Instructional Desi	3
EDUC 427	Reading In The Subject Area	3
AGRI 200	Foundation in Internat'l Agric	3
POLI 150	United States Government	3
PSYC 212	Human Growth & Development	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 424	Culturally Responsive Pedagogy	2
	Credit Hours	**22**
Senior Year		
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 341	Research Methods In Agricultur	3
AGRI 295	Contemporary Global Studies	3
	Credit Hours	**21**
	Total Credit Hours	**109**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet the requirements for graduation.

Code	Title	Credit Hours
AGRI 200	Foundation in Internat'l Agric	3
AGRI 280	Prin Geographic Info Systems	3
AGRI 295	Contemporary Global Studies	3
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 341	Research Methods In Agricultur	3
AGRI 400	Internship	3
AGRI 401	Independent Study	3
ANSC 350	Small Ruminant Management	3
ANSC 449	Seminar	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 341	Field Crops Production	3

AGRI 200, 301 courses are offered online during the summer session only.

Code	Title	Credit Hours
Core courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses		**3**
ARAB Beginning I and II or Intermediate I and II		6
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202 or GLST 302 or GLST 402	Global Studies Abroad: Topic Global Studies Abroad: Topic Global Studies Abroad: Topic	3
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3

Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Note: B.S. Courses and INTL AGRI Certificate meets the requirements for Peace Corps Prep Program Certificate

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet requirements for graduation.

Agriculture, Bachelor of Science with a Concentration in Animal Science (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
PSYC 101 or SOCI 101	Introduction to Psychology or Introduction To Sociology	3
HIST 114 or HIST 122	World History to 1500 or U.S. History to 1865	3
	Credit Hours	**34**
Sophomore Year		
ANSC 242	Princple Of Poultry Production	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SPEE 214	Introduction To Public Speakin	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGRI 295	Contemporary Global Studies	3
AGME 242	Intro Agric Engineering	3
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**33**
Junior Year		
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
SOSC 242	Soil Science	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
ANSC 344	Beef Cattle Production	3
ANSC 345	Veterinary Anatmy & Physiology	3
ANSC 349	Vet Medicine Term & Hygiene	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
ANSC Elective		3
ANSC Elective		3
	Credit Hours	**30**
Senior Year		
ANSC 346	Physiology Of Reproduction	3
AGRI 444	Genetics	3
ANSC 441	Animal Nutrition	3
BIOL 313	General Zoology	3
BIOL 313	General Zoology (LAB)	1
AGRI 401	Independent Study	3
ANSC 448	Adv Livetock Production	3
ANSC Elective		3
Suggested Elective		3
	Credit Hours	**25**
	Total Credit Hours	**122**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Code	Title	Credit Hours
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3

CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241 & 241	Introduction To Microbiology and Introduction To Microbiology (LAB)	4
AGME 242	Intro Agric Engineering	3
PHYS 105 & 105	Introduction to Physics I and Introduction to Physics I (LAB)	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
ANSC 344	Beef Cattle Production This course has an associated LAB of "0" credit hours	3
ANSC 345	Veterinary Anatmy & Physiology	3
ANSC 346	Physiology Of Reproduction This course has an associated LAB of "0" credit hours	3
ANSC 349	Vet Medicine Term & Hygiene This course has an associated LAB of "0" credit hours	3
AGRI 444 or BIOL 320	Genetics Principles Of Genetics	3
ANSC 441	Animal Nutrition	3
BIOL 313 & 313	General Zoology and General Zoology (LAB)	4
ANSC 448	Adv Livetock Production This course has an associated LAB of "0" credit hours	3
Total Credit Hours		**55**

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested ANSC Electives		
ANSC 246	Intro To Equine Science	3
ANSC 343	Swine Production	3
ANSC 348	Dairy Farming	3
ANSC 350	Small Ruminant Management	3
ANSC 351	Feeds And Feeding	3
ANSC 446	Special Topics	1-4

Code	Title	Credit Hours
Suggested Open Electives		
AGRI 400	Internship	3
ANSC 449	Seminar	1-3

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		56
Electives		9
Total Credit Hours		**120**

Agriculture, Bachelor of Science with a Concentration in Animal Science with an International Agriculture Certificate (B.S.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
BIOL 120	Principles Of Biology I (AND LAB)	4
AGRI 140	Introd Sustain Agric & Society	3
PSYC 101 or SOCI 101	Introduction to Psychology or Introduction To Sociology	3
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
	Credit Hours	**31**
Sophomore Year		
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I This course has an associated LAB of "0" credit hours	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
Foreign Language (ARAB, FREN, SPAN)		3
AGRI 280	Prin Geographic Info Systems	3
CHEM 152	General Chemistry II	3
CHEM 154	General Chemistry II Laborator	1
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3
AGRI 295	Contemporary Global Studies	3
AGME 242	Intro Agric Engineering	3
	Credit Hours	**33**
Junior Year		
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
SOSC 242	Soil Science This course has an associated LAB of "0" credit hours	4
CHEM 305	Organic Chemistry I	3
CHEM 307	Organic Chemistry Lab I	1
ANSC 349	Vet Medicine Term & Hygiene This course has an associated LAB of "0" credit hours	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
ANSC 344	Beef Cattle Production This course has an associated LAB of "0" credit hours	3
ANSC 346	Physiology Of Reproduction This course has an associated LAB of "0" credit hours	3
AGRI 200	Foundation in Internat'l Agric	3
ANSC 449	Seminar	3
	Credit Hours	**30**

Senior Year		
ANSC 345	Veterinary Anatmy & Physiology This course has an associated LAB of "0" credit hours	3
ANSC 441	Animal Nutrition	3
BIOL 313	General Zoology	3
BIOL 313	General Zoology (LAB)	1
AGRI 401	Independent Study	3
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 444	Genetics	3
ANSC 448	Adv Livetock Production This course has an associated LAB of "0" credit hours	3
AGRI 341	Research Methods In Agricultur	3
Foreign Language (ARAB, FREN, SPAN)		3
	Credit Hours	**28**
	Total Credit Hours	**122**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet requirements for graduation.

Code	Title	Credit Hours
ANSC 246	Intro To Equine Science	3
ANSC 343	Swine Production	3
ANSC 348	Dairy Farming	3
ANSC 350	Small Ruminant Management	3
ANSC 351	Feeds And Feeding	3
ANSC 446	Special Topics	3
or AGRI 341	Research Methods In Agricultur	
or AGRI 200	Foundation in Internat'l Agric	

Code	Title	Credit Hours
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 400	Internship	3
AGRI 401	Independent Study	3
ANSC 449	Seminar	3

AGRI 200, 301 courses are offered online during the summer sessions only.

Code	Title	Credit Hours
Core courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses:		**3**
ARAB Beginning I and II or Intermediate I and II		
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202	Global Studies Abroad: Topic	3
or GLST 302	Global Studies Abroad: Topic	
or GLST 402	Global Studies Abroad: Topic	
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3
Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Note: B.S. courses and INT AGRI Certificate meets the requirements for Peace Corps Prep Program Certificate

Agriculture, Bachelor of Science with a Concentration in Animal Science and Pre-Veterinary Medicine (B.S.)

Freshman Year		**Credit Hours**
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
GE Social Science Electives (p. 147)		3
	Credit Hours	**31**
Sophomore Year		
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3
SPEE 214	Introduction To Public Speakin	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
GE History Electives (p. 146)		3
AGRI 295	Contemporary Global Studies	3
GE Literature Electives (p. 147)		3
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**32**
Junior Year		
ANSC 345	Veterinary Anatmy & Physiology This course has an associated LAB of "0" credit hours	3
SOSC 242	Soil Science	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
ANSC 346	Physiology Of Reproduction This course has an associated LAB of "0" credit hours	3
	Credit Hours	**30**
Senior Year		
ANSC 349	Vet Medicine Term & Hygiene	3
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
BIOL 313	General Zoology	3

BIOL 313	General Zoology (LAB)	1
AGRI 401	Independent Study	3
ANSC 441	Animal Nutrition	3
BIOL 320 or AGRI 444	Principles Of Genetics or Genetics	3
BIOL 320	Principles Of Genetics (LAB)	1
BIOL 415	Vertebrate Histology	3
BIOL 415	Vertebrate Histology	1
ANSC Elective		3
	Credit Hours	**28**
	Total Credit Hours	**121**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Code	Title	Credit Hours
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
ANSC 345	Veterinary Anatmy & Physiology	3
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
ANSC 346	Physiology Of Reproduction This course has an associated LAB of "0" credit hours	3
ANSC 349	Vet Medicine Term & Hygiene This course has an associated LAB of "0" credit hours	3
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
BIOL 320 or AGRI 444	Principles Of Genetics Genetics	3
ANSC 441	Animal Nutrition	3
BIOL 313	General Zoology	3
BIOL 313	General Zoology (LAB)	1
BIOL 415	Vertebrate Histology	3
BIOL 415	Vertebrate Histology (LAB)	1
Total Credit Hours		**62**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested ANSC Electives		
ANSC 246	Intro To Equine Science	3
ANSC 344	Beef Cattle Production	3
ANSC 350	Small Ruminant Management	3
ANSC 446	Special Topics	3
ANSC 447	Special Problems	3
ANSC 448	Adv Livetock Production	3
Suggested Restricted Electives		
AGRI 400	Internship	3
ANSC 449	Seminar	3
AGRI 401	Independent Study	3
MATH 260	Calculus I	4
STAT 210	Elementary Statistics I	3

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		63
Electives		3
Total Credit Hours		**121**

Agriculture, Bachelor of Science with a Concentration in Animal Science and Pre-Veterinary Medicine with an International Agriculture Certificate (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
GE Social Science Electives (p. 147)		3
	Credit Hours	**32**
Sophomore Year		
AGEC 142	Principles Agric Economics I	3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
HPER 170	Health And Wellness	2
AGRI 280	Prin Geographic Info Systems	3
ANSC 242	Princple Of Poultry Production This course has an associated LAB of "0" credit hours	3
CHEM 152	General Chemistry II	3
CHEM 154	General Chemistry II Laborator	1
PSYC 101	Introduction to Psychology	3
Foreign Language (ARAB, FREN, SPAN)		6
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
	Credit Hours	**32**
Junior Year		
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
SOSC 242	Soil Science	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
ANSC 349	Vet Medicine Term & Hygiene This course has an associated LAB of "0" credit hours	3
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II (LAB)	1
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
ENGL 201 or ENGL 214	Introduction To Literature or World Literature I	3
ANSC 346	Physiology Of Reproduction This course has an associated LAB of "0" credit hours	3
	Credit Hours	**29**
Senior Year		
ANSC 345	Veterinary Anatmy & Physiology This course has an associated LAB of "0" credit hours	3
BIOL 313	General Zoology	3
BIOL 313	General Zoology (LAB)	1
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
AGRI 200	Foundation in Internat'l Agric	3
BIOL 415	Vertebrate Histology	3
BIOL 415	Vertebrate Histology (LAB)	1
AGRI 444	Genetics	4
ANSC 441	Animal Nutrition	3
AGRI 301	Global Field Exp Interna'l Ag (or Restricted Elective)	3
	Credit Hours	**28**
	Total Credit Hours	**121**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet requirements for graduation.

Code	Title	Credit Hours
AGRI 295	Contemporary Global Studies	3
AGRI 341	Research Methods In Agricultur	3
ANSC 246	Intro To Equine Science	3
ANSC 344	Beef Cattle Production	3
ANSC 350	Small Ruminant Management	3
ANSC 351	Feeds And Feeding	3
ANSC 446	Special Topics	3
ANSC 447	Special Problems	3
ANSC 448	Adv Livetock Production	3

Code	Title	Credit Hours
AGRI 200	Foundation in Internat'l Agric	3
AGRI 301	Global Field Exp Interna'l Ag	3
AGRI 341	Research Methods In Agricultur	3
AGRI 400	Internship	3
AGRI 401	Independent Study	3
ANSC 449	Seminar	3
MATH 212	Business Calculus	3
STAT 210	Elementary Statistics I	3

AGRI 200, 301 courses are offered online during the summer sessions only.

Code	Title	Credit Hours
Core courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses:		**6**

ARAB Beginning I and II or Intermediate I and II		
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202	Global Studies Abroad: Topic	3
or GLST 302	Global Studies Abroad: Topic	
or GLST 402	Global Studies Abroad: Topic	
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3
Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Note: B.S. courses and INTL AGRI Certificate meets the requirements for Peace Corps Prep Program Certificate.

Agriculture, Bachelor of Science with a concentration in Environmental Science (B.S.)

Freshman Year		**Credit Hours**
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society This course has an associated LAB of "0" credit hours	3
GE History Electives (p. 146)		3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
HPER 170	Health And Wellness	2
	Credit Hours	**31**
Sophomore Year		
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
AGRI 150	Intro Environmental Science (AND LAB)	4
SPEE 214	Introduction To Public Speakin	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGRI 295	Contemporary Global Studies	3
AGME 242	Intro Agric Engineering	3
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**34**
Junior Year		
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
SOSC 242	Soil Science This course has an associated LAB of "0" credit hours	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
STAT 210	Elementary Statistics I	3
GE Literature Electives (p. 147)		3
ECON 210	Principles Of Microeconomics	3
AGRI 341	Research Methods In Agricultur	3
SOSC 345	Soil Fertility and Fertilizers	3
Scientific Elective		3
	Credit Hours	**30**
Senior Year		
BIOL 324	Ecology	3
BIOL 324	Ecology (LAB)	1
Policy Elective	Any 200-level and above POLI Course or AGEC 444	3
AQSC 404	Limnology	3
AGRI 444 or BIOL 320	Genetics or Principles Of Genetics	3
AGRI 401	Independent Study	3
Soil Science Elective		3
Policy Elective		3
Scientific Elective		3
	Credit Hours	**25**
	Total Credit Hours	**120**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
BIOL 121	Principles Of Biology II (AND LAB)	4
AGRI 150	Intro Environmental Science	4
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGME 242	Intro Agric Engineering	3
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
STAT 210	Elementary Statistics I	3
AGRI 341	Research Methods In Agricultur	3
SOSC 345	Soil Fertility and Fertilizers	3
BIOL 324	Ecology	3
BIOL 324	Ecology (LAB)	1
AQSC 404	Limnology	3
or BIOL 404	Limnology & Oceanography	
Policy Course	Determined by Academic Advisor	3
AGRI 444	Genetics	1-4
or BIOL 320	Principles Of Genetics	
Total Credit Hours		**51-54**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested Soil Science Electives		
SOSC 347	Soil Classification	3
SOSC 450	Problems In Soil Science	3
SOSC 455	World Soil Resources	3
Suggested Policy Electives		
AGEC 444	Agriculture Policy	3
AGEC 347	Land Economics	3
Suggested Scientific Electives		
AGRI 290	Intro To Remote Sensing	3
AGRI 250	Climate Change & Adapt Science	3
AGRI 400	Internship	3
AQSC 201	Introduction To Aquaculture	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 353	Integrated Pest Mgmt Strategie	3
Selected BIOL and CHEM courses		

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		53
Electives		12
Total Credit Hours		**120**

Agriculture, Bachelor of Science with a Concentration in Environmental Science with an International Agriculture Certificate (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
AGRI 150	Intro Environmental Science	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
	Credit Hours	**33**
Sophomore Year		
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
POLI 150	United States Government	3
AGEC 142	Principles Agric Economics I	3
Foreign Language (ARAB/FREN/SPAN)		3
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
HPER 170	Health And Wellness	2
AGME 242	Intro Agric Engineering	3
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**33**
Junior Year		
ECON 210	Principles Of Microeconomics	3
SOSC 242	Soil Science	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
AGRI 200	Foundation in Internat'l Agric	3
STAT 210	Elementary Statistics I	3

AGRI 341	Research Methods In Agricultur	3
Foreign Language (ARAB/FREN/SPAN)		3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
SOSC 345	Soil Fertility and Fertilizers	3
	Credit Hours	**29**
Senior Year		
BIOL 324	Ecology	3
BIOL 324	Ecology (LAB)	1
AGRI 400 or AGRI 401	Internship or Independent Study	3
SOSC Elective		3
PLSC 353	Integrated Pest Mgmt Strategie	3
AGRI 444	Genetics	3
AGEC/PADM Policy Elective		6
AGRI 301	Global Field Exp Interna'l Ag	3
	Credit Hours	**25**
	Total Credit Hours	**120**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet requirements for graduation.

Code	Title	Credit Hours
AGRI 200	Foundation in Internat'l Agric	3
AGRI 250	Climate Change & Adapt Science	3
AGRI 290	Intro To Remote Sensing	3
AGRI 301	Global Field Exp Interna'l Ag	3
ANSC 350	Small Ruminant Management	3
ANSC 449	Seminar	3
AQSC 404	Limnology	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 353	Integrated Pest Mgmt Strategie	3
PLSC 452	Urban Natural Resource Mgmt	3

AGRI 200, 301 courses offered online during the summer sessions only.

Code	Title	Credit Hours
SOSC 347	Soil Classification	3
SOSC 450	Problems In Soil Science	3
SOSC 455	World Soil Resources	3

Code	Title	Credit Hours
AGEC 444	Agriculture Policy	3
Policy Course	Determined by Academic Advisor	3

Code	Title	Credit Hours
Core courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses:		**6**
ARAB Beginning I and II or Intermediate I and II		
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202	Global Studies Abroad: Topic	3
or GLST 302	Global Studies Abroad: Topic	
or GLST 402	Global Studies Abroad: Topic	
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3
Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Agriculture, Bachelor of Science with a Concentration in Plant and Soil Science (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
GE History Electives (p. 146)		3
AGRI 140	Introd Sustain Agric & Society	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
	Credit Hours	**32**
Sophomore Year		
HPER 170	Health And Wellness	2
SPEE 214	Introduction To Public Speakin	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGRI 295	Contemporary Global Studies	3
AGME 242	Intro Agric Engineering	3
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**33**
Junior Year		
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
PLSC 250	Introd Natural Resr & Forestry	3
SOSC 347	Soil Classification	3
GE Literature Electives (p. 147)		3
ECON 210	Principles Of Microeconomics	3
STAT 210	Elementary Statistics I	3
AGRI 341	Research Methods In Agricultur	3
SOSC 345	Soil Fertility and Fertilizers	3
	Credit Hours	**29**
Senior Year		
PLSC 341	Field Crops Production	3
PLSC 352	Forage Crops And Pasture Mgmt	3
HORT 449	Plant Propagation & Nursery Pr	3

AGRI 444 or BIOL 320	Genetics or Principles Of Genetics	3
PLSC 353	Integrated Pest Mgmt Strategie	3
AGRI 401	Independent Study	3
SOSC 450	Problems In Soil Science	3
Restricted Elective	Scientific Course	3
Restricted Elective	Plant Science or Soil Science Course	3
	Credit Hours	**27**
	Total Credit Hours	**121**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 111, MATH 120, and 121 to meet the requirements for graduation.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
AGRI 140	Introd Sustain Agric & Society	3
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
AGEC 142	Principles Agric Economics I	3
SOSC 242	Soil Science	4
AGRI 280	Prin Geographic Info Systems	3
AGRI 401	Independent Study	3
Total Credit Hours		**22**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
BIOL 121	Principles Of Biology II (AND LAB)	4
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
AGME 242	Intro Agric Engineering	3
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
PLSC 250	Introd Natural Resr & Forestry	3
SOSC 347	Soil Classification	3
STAT 210	Elementary Statistics I	3
AGRI 341	Research Methods In Agricultur	3
SOSC 345	Soil Fertility and Fertilizers	3
PLSC 341	Field Crops Production	3
PLSC 352	Forage Crops And Pasture Mgmt	3
HORT 449	Plant Propagation & Nursery Pr	3
AGRI 444 or BIOL 320	Genetics Principles Of Genetics	3
PLSC 353	Integrated Pest Mgmt Strategie	3
Total Credit Hours		**57**

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Students are encouraged to choose from the following course lists to satisfy the restricted electives.

Code	Title	Credit Hours
Suggested Scientific Electives		
AGRI 290	Intro To Remote Sensing	3
AGRI 250	Climate Change & Adapt Science	3
AGRI 400	Internship	3
AQSC 201	Introduction To Aquaculture	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 353	Integrated Pest Mgmt Strategie	3
Selected BIOL and CHEM courses		
Suggested Soil Science Electives		
SOSC 347	Soil Classification	3
SOSC 450	Problems In Soil Science	3
SOSC 455	World Soil Resources	3
Suggested Policy Electives		
AGEC 444	Agriculture Policy	3
AGEC 347	Land Economics	3

Students must earn a C or better in all AGRI Department offered Courses, ENGL 110, 111, MATH 120, 121 to meet requirements for graduation.

All Substitutions must be approved by the Academic Advisor and Department Chair.

Code	Title	Credit Hours
General Education		33
Core Requirements		22
Major/Concentration Requirements		57
Electives		9
Total Credit Hours		**121**

Agriculture, Bachelor of Science with a Concentration in Plant and Soil Science with an International Agriculture Certificate (B.S.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
AGRI 140	Introd Sustain Agric & Society	3
PLSC 140	Principles of Plant Science This course has an associated LAB of "0" credit hours	3
BIOL 120	Principles Of Biology I (AND LAB)	4
BIOL 121	Principles Of Biology II (AND LAB)	4
ANSC 140	Principles Of Animal Science This course has an associated LAB of "0" credit hours	3
GE Social Science Electives (p. 147)		3
	Credit Hours	**32**
Sophomore Year		
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
AGEC 142	Principles Agric Economics I	3
AGME 242	Intro Agric Engineering	3
HPER 170	Health And Wellness	2
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	3
BIOL 241	Introduction To Microbiology (LAB)	1
Foreign Language (ARAB/FREN/SPAN)		3
AGRI 280	Prin Geographic Info Systems	3
	Credit Hours	**30**
Junior Year		
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
ECON 210	Principles Of Microeconomics	3
SOSC 242	Soil Science	4
Foreign Language (ARAB/FREN/SPAN)		3
STAT 210	Elementary Statistics I	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
SOSC 345	Soil Fertility and Fertilizers	3
SOSC 347	Soil Classification	3
PLSC 353	Integrated Pest Mgmt Strategie	3
PLSC Elective		3
	Credit Hours	**32**
Senior Year		
PLSC 341	Field Crops Production	3
PLSC 352	Forage Crops And Pasture Mgmt	3
HORT 449	Plant Propagation & Nursery Pr	3
AGRI 200	Foundation in Internat'l Agric	3
AGRI 401 or AGRI 401	Independent Study or Independent Study	3
AGRI 341	Research Methods In Agricultur	3
SOSC 450	Problems In Soil Science	3
AGRI 444 or BIOL 320	Genetics or Principles Of Genetics	3
AGRI 301	Global Field Exp Interna'l Ag	3
	Credit Hours	**27**
	Total Credit Hours	**121**

Students must earn a C or better in all AGRI Department offered courses, ENGL 110, 110, MATH 120, and 121 to meet the requirements for graduation.

Code	Title	Credit Hours
AGRI 200	Foundation in Internat'l Agric	3
AGRI 301	Global Field Exp Interna'l Ag	3
ANSC 350	Small Ruminant Management	3
ANSC 449	Seminar	3
HORT 350	Vegetable Production	3
HORT 446	Greenhouse Crops & Management	3
PLSC 250	Introd Natural Resr & Forestry	3
PLSC 452	Urban Natural Resource Mgmt	3
PLSC 454	Special Topics In Crop Science	3
SOSC 455	World Soil Resources	3

AGRI 200, 301 courses offered during the summer sessions only. Substitutions must be approved by the College Dean and Department Chair.

Code	Title	Credit Hours
Core Courses:		
AGRI 200	Foundation in Internat'l Agric	3
AGRI 341	Research Methods In Agricultur	3
Two Foreign Language courses:		**6**
ARAB Beginning I and II or Intermediate I and II		
FREN Beginning I and II or Intermediate I and II		
SPAN Beginning I and II or Intermediate I and II		
One course from the following:		
GLST 202	Global Studies Abroad: Topic	3
or GLST 302	Global Studies Abroad: Topic	
or GLST 402	Global Studies Abroad: Topic	
AGRI 301	Global Field Exp Interna'l Ag	3
One course from ANY category below (200 level or higher):		
Unrestricted Elective		3
Agriculture discipline area concentration: AGRI, ANSC, AGME, PLSC, HORT, SOSC, AGEC, PADM		3

Department of Family and Consumer Science

Chairperson: Dr. Jada Brooks (Interim)
Location: Gandy Hall, Room 215
Contact Information: (804)524-6351 | jebrooks@vsu.edu

Department Overview

The Department of Family and Consumer Sciences prepares students for diverse careers focused on improving individual and family life by offering programs leading to the **Bachelor of Science in Family and Consumer Science** with the following concentrations: **Dietetics** (Accreditation Council for Education in Nutrition and Dietetics - ACEND accredited); **Family, Child and Community Development (FCCD)**.; and **Textiles Apparel, Merchandising and Management (TAMM)**. An ACEND accredited **Dietetic Internship** program is also offered and provides eligibility to take the national Registered Dietitian (RD) Examination. The Department provides a secondary education teacher endorsement in Family and Consumer Sciences.

Mission Statement

The mission of the Department of Family and Consumer Sciences is to provide quality educational experiences that prepare students to integrate the Family and Consumer Sciences body of knowledge into practice and who, are committed to applying these principles to individuals in our diverse society.

Accreditation

The Didactic Program in Dietetics (DPD) is accredited by the Accreditation Council for Education in Nutrition and Dietetics which (ACEND) is the Academy of Nutrition and Dietetics' accrediting agency for education programs preparing students for careers as registered dietitians (RD) or dietetic technicians, registered (DTR). ACEND serves and protects students and the public by assuring the quality and continued improvement of nutrition and dietetics education programs.

Department Goals

The goals of the Department of Family and Consumer Sciences:

- Ensure the advancement of students as competent professionals who understands the major concepts, theoretical and cultural perspectives, empirical findings and trends in Family and Consumer Sciences.
- Facilitate student achievement through engagement and application of the principles, language, and major theories of the discipline to demonstrate an understanding of the scope and comprehensiveness of the field of study.
- Promote leadership presence, strategic thinking, and professional development to reflect the vision, mission and values of the discipline.

Program Listings

Bachelor of Science in Family and Consumer Sciences

Concentration: Dietetics

The Didactic Program in Dietetics (DPD) is a concentration under the B.S. in Family and Consumer Sciences. The DPD is designed to provide foundational knowledge and skills as set by the standards of the Accreditation Council for Education in Nutrition and Dietetics (ACEND). The knowledge and skills consist of basic and working knowledge and demonstrable abilities in the content areas of communications, physical and biological sciences, social sciences, research, food, nutrition, management, and health care systems.

The DPD is one of the two Dietetics programs offered in the Department of Family and Consumer Sciences; the other program is the Dietetic Internship (DI). Graduates of the DPD are eligible to apply for an ACEND accredited DI. Successful completion of the DI provides eligibility to take the national Registered Dietitian (RD) Examination. To practice as an RD, one needs to pass the RD examination.

Concentration: Family, Child, and Community Development

Family Child and Community Development (FCCD) focuses on growth and development of the individual throughout the life span. It is designed to provide students with competencies necessary for improving the physical, emotional, physiological, and educational well-being of individuals and families. In addition, the program focuses on the study of interpersonal relationships within the family, social, physical, emotional, and cognitive changes during infancy, childhood, adolescence, and adulthood are emphasized. Career opportunities are offered in public and private human service agencies, and specialized facilities serving children, adolescents, adults, and families. A practicum and other volunteer work experiences are required.

Concentration: Secondary Education

The Family and Consumer Sciences Department provides students the opportunity to obtain a Teacher Endorsement for secondary education (6-12th) in Family and Consumer Sciences. The Teacher Education Endorsement concentration meets the requirements of the Virginia Department of Education. Programs of study at the secondary level include the following: fashion, child development, housing and interior design, culinary arts, nutrition and wellness, family relations, and financial management. The program focuses on preparing students for careers as teachers and employment in business, industry, and governmental agencies.

The Teacher Education Endorsement in Family and Consumer Sciences curriculum prepares individuals to serve effectively as secondary school teachers in Family and Consumer Sciences core areas of family, child development, nutrition and wellness, and fashion merchandising. Students will receive a Bachelor of Science degree in Family and Consumer Science, with a secondary education minor.

Concentration: Textiles, Apparel, and Merchandising Management

The Textiles, Apparel, Merchandising and Management (TAMM) program prepares students for a variety of careers in fashion and textile industries. Courses include History of Fashion, Fashion Illustration, Fashion Design and Principle of Marketing. Students learn how clothing is made and

marketed to the public and how decisions are made in the fashion industry. The program is designed to prepare students, via a broad yet focused education, for the diverse careers available in Textile, Apparel Design, and Fashion Merchandising and Management. Textiles, Apparel Merchandising & Management comprises three components Textile Technology, Apparel Design & Production, Fashion Merchandising & Management.

> **Course Requirements:** Students majoring in all concentrations/ areas in Family and Consumer Sciences are required to pass all courses offered in the department with a grade of "C" or better for such grades to count towards their major curriculum requirements for graduation.

Minors (course details below):

- The **Minor in Textile, Apparel, and Merchandising Management (TAMM)** is open to students from other majors and is designed to provide a useful overview of the concentration and will enhance awareness regarding various fundamental aspects of the textile, apparel and merchandising management field. The additional investment in time will be an asset to a student graduating with a liberal arts or business degree and can be tailored towards their area of specific interest within the field.
- The **Minor in Family, Child, and Community Development (FCCD)** is open to students from other majors and is designed to provide a useful overview of the concentration and will enhance awareness regarding families, children, or communities. This minor will be an asset to a student graduating with a degree in Psychology or Social Work.

Certificate:
Nutrition and Dietetics

Major(s)

- Family and Consumer Science, Bachelor of Science with a Minor in Secondary Education (B.S.) (p. 183)
- Family and Consumer Science, Bachelor of Science with a Concentration in Family, Child and Community Service (B.S.) (p. 184)
- Family and Consumer Science, Bachelor of Science with a Concentration in Dietetics (B.S.) (p. 185)
- Family and Consumer Science, Bachelor of Science with a Concentration in Textile, Apparel and Merchandising Management (B.S.) (p. 187)

Minor(s)

- Minor in Family, Child, and Community Development (p. 188)
- Minor in Textile, Apparel, and Merchandising (p. 189)

Certificate(s)

- Certificate in Nutrition and Dietetics (p. 189)

FAMILY AND CONSUMER SCIENCES
Course Descriptions
DIETETICS

DIET 101 NUTRITION CONTEMPORARY HEALTH ISSUES – 3 semester hours
This course presents basic principles for chronic disease prevention, provides scientific answers to questions found daily in the media regarding nutrition. Topics emphasized are basic functions of nutrients, biological nutrient requirements, and impact of gender, culture, ethnicity, social environment, and lifestyle on nutrition status and health.

DIET 210 INTRODUCTION TO HUMAN NUTRITION - 3 semester hours

An introductory course providing the basic principles of human nutrition, covering topics of

macro/micro-nutrient interactions, metabolism and energy balance, nutrient requirements through the life cycle. This course requires a technology based nutrient analysis project.

Prerequisite: BIOL 120 w/lab or equivalent

DIET 221 PRINCIPLES OF ANALYSIS OF FOODS- 3 semester hours
The course studies the fundamental processes underlying food selection, preparation, and preservation with practical selection application through laboratory experiences. Emphasis is on the composition and properties of food, food handling to retain nutrients, standards for acceptable products and food costs.

DIET 275 SEMINAR IN PRACTICE - 1 semester hours
Coursework present includes the study of the history, structure, and function of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and current issues facing the profession. Students explore career options and laws, regulations and standards affecting dietetic practice.

DIET 311 NUTRITION THROUGH THE LIFECYCE - 3 semester hours
A study of the nutritional requirements at different stages of the life span and the factors, which influence eating patterns, is presented in this course. Emphasis is placed on life cycle nutritional assessment and nutritional planning. Learning experiences in nutrition programs are required.
Prerequisites: DIET 310 Human Nutrition

DIET 322 MEAL MANAGEMENT - 3 semester hours
Menu development, styles of meal service, table appointments, food presentation and meal planning. Emphasis is given to the economics, efficiency, aesthetics and nutrition of meal service. Computerized nutritional and cost analysis of menus required.
Prerequisites: DIET 210, DIET 221

DIET 385 NUTRITIONAL BIOCHEMISTRY - 3 semester hours
The course is a study of energy metabolism and the role of nutritional factors. Students will discuss the composition of living matter and the chemical charges associated with nutritional status.
Prerequisites: CHEM 305, CHEM 307, DIET 210

DIET 410 NUTRITION COUNSELING PRACTICUM - 2 semester hours
Counseling skills applied to dietetic practice. Students will learn skills which Emphasizes interviewing and listening skills, surfacing underlying issues, motivation, behavior modification, supporting group processes, and documentation. Student counseling experiences required.
Prerequisite: DIET 311, PYSC 101

DIET 422 NUTRITION AND THE COMMUNITY - 3 semester hours
This course explores resources existing in governmental and voluntary organizations for working with nutrition problems. Include this course is the study of legislative process and historic and current nutrition legislation. Proposal writing and subsequent steps in establishing and managing community nutrition programs are discussed.
Prerequisites: DIET 311, DIET 322, STAT 210

DIET 424 ADVANCED HUMAN NUTRITION - 3 semester hours

The course discusses the recent research with its application to human nutrition. It also discusses the metabolic consequences of nutritional manipulation.
Prerequisites: DIET 385

DIET 431 MEDICAL NUTRITION THERAPY I - 3 semester hours
The study of nutrition services in the health care system and the nutritional care of the individuals during illness. It includes understanding of medical terminology, physiological changes in the disease states, nutrition assessment, developing plan of care, documentation, application of nutrition therapy in medical conditions, and total quality management of clinical nutrition. This is Part 1 of a two-part course.
Prerequisites: DIET 311, DIET 385

DIET 433 QUANTITY FOOD – 3 semester hours
Study and practice in planning, purchasing, preparing, and servicing food in quantities, and calculation the cost of portions and meals for large groups.
Prerequisites: DIET 210, DIET 221, DIET 322

DIET 435 ORGANIZATION AND MANAGEMENT OF FOOD SERVICES - 3 semester hours
This course provides students with the tools necessary to succeed in the dynamic and ever changing global hospitality industry. Includes focus on the principles of management and leadership, TQM, empowerment and team development processes, emphasis on leadership styles and models in the hospitality industry. Quantitative aspects of management and internal controls will be addressed with an overview of managerial financial concepts for decision-making and purchasing.
Prerequisites: DIET 322

DIET 489 PRACTICUM IN DIETETICS - 3 semester hours
The course studies the practical application of previously learned theories in Medical Nutrition Therapy, Food Service Management Systems, and other dietetics practice areas.
Prerequisites: DIET 431
Co-requisites: DIET 437

FAMILY AND CONSUMER SCIENCES

FACS 141 PERSPECTIVES ON PROFESSIONALISM - 1 semester hours
An overview of the profession of family and consumer sciences; introduces students to career expectations and opportunities; career planning and strategies for successful decision-making. **FACS MAJORS ONLY.**

FACS 161 PRINCIPLES OF ART and DESIGN- 3 semester hours
This course is an introduction of the basic principles of design as they relate to fashion, residential and workspace environments. Special considerations will be given to visual design in a sensory and behavior context.

FACS 201 CONSUMER ECONOMICS - 3 semester hours
A study of how consumers interact in the global economic arena. The course provides perspectives in terms of consumer interest, the responsibilities of business, government, private voluntary groups as it relates to consumerism. It provides insights into the essence of consumerism in the present, past, and future. Additionally, the course explains government role in monetary policymaking. Finally, the course provides information to aid the consumer with regard to decision-making and financial management for individuals as well as families.

FACS 263 HOUSEHOLD FURNISINGS AND EQUIPMENT - 3 semester hours
The course instructs students on the concepts of housing and equipment, which include selection criteria, quality standards, operation and financial analysis for family decision-making. Additionally, students will investigate and examine the development of architectural styles, compare historical architectural, understand the function of housing, consider the trends in architectural and furniture design and explore features of furnishings that are characteristic of various historical periods. Finally, furniture placement with reference to floor plan, design, traffic flow using computer design is emphasized.

FACS 342 OCCUPATIONAL FAMILY AND CONSUMER SCIENCES - 3 semester hours
This course of study focuses on planning, implementing and evaluating Family and Consumer Sciences occupational education programs in chosen areas of occupational endorsement. In addition, this course explores leadership theory and practice in relation to theories and processes of innovation and change. It includes the opportunity to explore leadership techniques relevant to change management, entrepreneurship and innovation. You will be encouraged to use your own experience in leadership roles to inform discussion, inquiry, critical thinking and reflection.
Prerequisites: DIET 210, DIET 221, FCCS 301

FACS 401 INDEPENDENT STUDY – 3 semester hours
This is a course designed for students to work independently with an instructor on a topic interest. Students register for the course and schedule an appointment with advisor for project ideas, then present a written proposal describing a research paper or project.

FACS 402 TEACHING OF FAMILY AND CONSUMER SCIENCES - 3 semester hours
This course explores a historical prospective of Family and Consumer Sciences. Pre-candidates will develop an understanding of the specializations and concepts centered around the Family and consumer Sciences subject matter. Students will develop lesson plans, and materials utilized for teaching. Candidates will evaluate and analyze methods of teaching, conduct observations and assessment management practices for teaching various elements of Family and Consumer Sciences as well as the organization and role of public education in America. Emphasis will be given to the student diversity, the legal aspects of teaching, and governance. The course will highlight the significance of FCCLA and FACS student associations. Current trends and issues will be included.
Prerequisite: EDUC 201, EDUC 202, or Instructor's Approval

FACS 403 HOME AND FINANCIAL MANAGEMENT - 3 semester hours
Democratic principles in family living constitute the basis on which the home management experience is planned. Areas of responsibility rotate to give family members experience in all phases of home life with emphasis upon management of time, energy and other resources. A practicum experience is conducted in the home applying the aforementioned concepts.

FACS 440 CONTEMPORARY APPROACH TO CURRICULUM AND TECHNIQUES 3 semester hours
This course provides a common core of experiences for all prospective teachers and trainers, which develops an understanding of the historical, philosophical, and sociological foundations underlying the development, organization and role of public and private education in America. Emphasis will be given to culture as a foundation, the legal aspects of teaching, and the governance, relation, organization, and support of public education. Contemporary trends and issues will be included.

FACS 461 HOUSING AND SOCIETY - 3 semester hours

The course is designed to explore contemporary issues related to family and housing. A study of the relationship of people's basic needs and values in relations to their housing is explored. Modern, rural, and urban living patterns as related to diversified societies and cultural backgrounds are studied. Additionally, housing needs and resources for the aged are also examined as well as a historical aspect of housing is also presented. Attention is given to aspects and to the factors relating to construction, architectural design, regulations and housing codes. The class is open to non-majors.

Prerequisites: FACS 263

FACS 480 ADMINISTRATION OF HUMAN DEVELOPMENT AND FAMILY SYSTEMS 3 semester hours
This course examines principles and concepts related to administering human service programs and organizations in an environment designed to assist individuals with reaching their full potential. Key concepts include administration, organizational structure, supervision, and resource management. Issues related to planning and implementation are addressed. **FACS MAJORS ONLY.**
Prerequisite: FACS 141, FCCS 102, FCCS 301

FACS 482 PRACTICUM IN FAMILY AND CONSUMER SCIENCES – 3 semester hours
Students will participate in introductory work experiences related to their area of emphasis. The areas will included Early Care and Development, Extension Services, and Community Services. The course will afford students the opportunity to gain skills and competencies as practitioners. One-hundred fifty (150) clock hours are required with supervision by Family and Consumer Sciences faculty and on-site coordinators. **FACS MAJORS ONLY.**
Prerequisite: FACS 141, FCCS 102, FACS 480, Permission from Program Coordinator

FCCS 101 FAMILY AND COMMUNITY HEALTH - 3 semester hours
A study of personal hygiene, sanitary care of the home, first aid, prevention of disease and home care of the sick. An introductory course that will examine current practices and trends in health related problems and lifestyle behaviors, emphasizing self-help and preventable aspects of health care.

FCCS 102 INDIVIDUAL, FAMILY AND COMMUNITY SERVICES - 3 semester hours
This course explores various contemporary issues related to individual and family roles, responsibilities, interpersonal interactions, functions and development tasks. Specific emphasis is placed upon cultural diversity among families.

FCCS 301 CHILD DEVELOPMENT/LABORATORY - 3 semester hours
This course explores the profession of child development. Special attention is given to the perceptual, social, emotional, cognitive and physical processes from infancy through age eight. The laboratory experience is an element of this course and taught simultaneously with the class. This allows students to work directly with children and to receive hands-on-experiences in the preschool classroom.

FCCS 302 FAMILY RELATIONS - 3 semester hours
Focus is on applying knowledge and theory to the study of how families relate to one another and manage their resources for both survival and fulfillment. Factors related to the development of functional family lifestyles are assessed from multiple perspectives.

FCCS 381 ADOLESCENCE AND EMERGING ADULTHOOD - 3 semester hours

This course examines mental, moral, social, emotional, and physical development within the

adolescence and emerging adulthood (ages 10-25) period of life. The course includes a multicultural

approach. It is designed for professionals who plan to work with children and young adults.

FCCS 401 FAMILY PLANNING/SEXUAL EDUCATION - 3 semester hours
The course investigates factors related to the development of functional lifestyles and families. Consideration is given to current problems relating to marriage and family life and those changes in society, which affect the institution of the family. The course exams concepts related to family planning and the relationship of sexual attitudes and behavior to human development and functioning. Special emphasis on economic, social, cultural, legal, and political factors, which influence decisions, related to family planning, sexual behavior, and attitudes. Open to non-majors.

FCCS 402 DECISION MAKING PROCESSES IN MODERN LIFESTYLES - 3 semester hours
A fundamental course in the study of decision making as it takes place. Students explore the theories for understanding and carrying out the decision-making process. In addition, theories on motivation, rational choice, and behavior are explored.

FCCS 405 PARENT EDUCATION - 3 semester hours
The course studies the assessment of current theories and concepts relative to parent education. Emphasis is placed on parenthood responsibilities and the task of parenting in today's diverse culture.

TEXTILES, APPAREL AND MERCHANDISE MANAGEMENT

TAMM 171 TEXTILES - 3 semester hours
This course is an introduction to the diversity of textiles arts, fiber science, and a focus on a though knowledge of textiles , their design structure and application Emphasis is placed upon processes, such as twining, plaiting, spinning, knitting, dyeing, hand-printing, and loom-weaving. In addition, this course surveys textile terminology and properties to enable students to make appropriate choices in textile selection for a product.

TAMM 172 SURVEY OF THE TEXTILE AND APPAREL INDUSTRY - 1 semester hours
In this course, students will gain a broad understanding of the Apparel and Textile industry. Topics will provide students a better understanding of industry structure from the primary level, secondary level, Core and Auxiliary level. This will provide a good foundation on which to build deeper specialist knowledge as students' progress through the TAMM program. Students will learn how to explore the business of fashion through investigation, observation and gathering of materials. Through critical analysis, students will question, discuss, and argue debate current fashion business issues and to put forward ideas and information in presentations, and written work.

TAMM 271 CLOTHING CONSTRUCTION - 3 semester hours
This course is a study in the acquisition of construction skills and techniques necessary for transforming fabrics into apparel and/or home fashions. It includes an understanding of sewing equipment supplies and materials as well as applications for specific figure types and personalities. Emphasis is also placed on construction methods,

technology and appropriate applications. **FACS MAJOR ONLY or Permission from Instructor/Program Coordinator.**

TAMM 272 FASHION HISTORY - 3 semester hours
A fundamental course in Fashion and Costume History including identity of costume starting with the Ancient Civilization to the development Western Civilization ending in the 20th Century. It also will assist the student in describing how technology and economics influence fashion development and change.

TAMM 274 FASHION MARKETING AND MERCHANDISING - 3 semester hours
This course focuses on the integration of fashion marketing concepts and applications in the development of a merchandising plan. Students will learn about merchandise positioning, brand building, market segmentation, and market research as it relates to the fashion industry.
Prerequisite(s): TAMM 172

TAMM 373 FASHION ILLUSTRATION AND COMPUTER APPLICATIONS – 3 semester hours
This course provides an exploratory of the tools and techniques used to communicate Fashion. In areas such as design, branding, and merchandising effective communication is essential. Students will experience hand drawn techniques up to advanced computer software to develop presentation boards, promotion and production materials. The course format will include a lecture and studio to enhance the student learning experience through application. In addition, students will engage in the portfolio development process to create the prototype for their Senior Portfolio.
Prerequisite(s): TAMM 172, HIDG 161, TAMM 271

TAMM 375 VISUAL MERCHANDISING AND STYLING - 3 semester hours

This course is a study of presentation techniques and merchandising concepts employed to promote store image or brand strategy. Students will utilize artistic principles such as line, balance, rhythm to create effective merchandising displays and floor sets for a retail environment. Students will also explore the stylist's role in print and interactive media. Using both lecture and studio delivery, activities will include mock assignments, story boarding photo shoots, display window installations and other experiences associated with visual merchandising and stylist's responsibilities.
Prerequisite(s): FACS 161, TAMM 172, TAMM 271, TAMM 272

TAMM 376 PRINCIPLES OF RETAIL MATH AND BUYING - 3 semester hours
This course is an introduction to retail math and buying simulation. Students will be introduced to a buying simulation where they will learn the concepts and calculations necessary for merchandise buying and assortment planning for a retail store. Students will understand the retail method of inventory, planning seasonal purchases, markups, turnover, stock to sales ration, open to buy, markdowns, and terms of sale.
Prerequisites: TAMM 172, MATH 112, MATH 113

TAMM 377 APPAREL DESIGN - 3 semester hours
A specialized course designed to expose the TAMM major to advanced design technique. Students will engage in the design conceptualization process, flat pattern, and advanced level construction to design and construct a sample collection. Students will develop design ideas using croquis, draft final patterns, create mock-up and finalize using fashion fabric. Upon completion, garments will be presented for review and juried for fashion presentation.
Prerequisites: TAMM 172, TAMM 171, TAMM 271, TAMM 272, TAMM 373

TAMM 379 TRENDS AND CONCEPTS - 3 semester hours
A comprehensive study of cultural and social issues that affect fashion and the emergence of trends. Students will analyze the meanings and importance of clothing and apply these concepts to contemporary society. Upon completion of the course, students will be able to complete trend analysis as well as prepare and present a Trend Forecast report based on their analyses.
Prerequisite(s): FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 373

TAMM 477 SENIOR SEMINAR AND PROFESSIONAL DEVELOPMENT - 3 semester hours
Senior Seminar is a capstone course which involves an in-depth project undertaken by the TAMM student under the direction of the Program Coordinator and/or identified faculty. It is required to be taken during the student's Final Semester. The project is primarily concerned with the student's knowledge of the substantive content of their major field as defined by the general program of study. Students will displayed their knowledge through research project, case study, entrepreneurship / small business plan, or an approved internship/study tour project. The project is regarded as the student's culminating work and should draw upon all the student's experience and four years of study. The course will culminate with a final project paper and presentation. In addition, Students will submit a portfolio which is professionally guided and applies student skill set.
Prerequisite:(s) FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 274, TAMM 373, TAMM 376, TAMM 379, TAMM 478

TAMM 478 APPAREL PRODUCT DEVELOPMENT - 3 semester hours
This advanced level course provides TAMM students with a simulated experience in product development processes and apparel production. Building upon introductory courses, students will apply fashion terminology, construction, textile science, and retail management principles to simulate the three levels of the industry design, production & sales. Students will engage in the design process, will learn flat pattern design and advanced construction skills to address production challenges. In addition, students will utilize analytical skills to cost and source as well as analyze global market challenges. Students will synthesize design concepts, advanced production technology, the development of merchandising in the modern market, including analysis of target markets, analyze the source, cost and development of a product in that market in presentation form.
Prerequisite:(s) FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 274, TAMM 373, TAMM 376, TAMM 379

TAMM 479 FASHION PROMOTION AND EVENT PLANNING - 3 semester hours
This course examines the process of promotion and the promotion mix tools utilized by fashion companies. Students are engaged in all aspects of the planning process of an actual event (e.g. setting goals, preparing budgets, creating ad layouts, creating press kits, coordinating production, and evaluating). Further, students will plan and execute a fashion event (e.g., Fashion Show, Lecture Series, Fashion Publication, Trunk Show, and Bazaar).
Prerequisite:(s) FACS 161, TAMM 172, TAMM 272, TAMM 274, TAMM 373

Family and Consumer Science, Bachelor of Science with a Minor in Secondary Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
HIST 122	U.S. History to 1865	3
FCCS 102	Multicultural Families & Comm.	3
FACS 141	Intro to Fam & Consr Sci Sem	1
GE Global Studies		3
FACS 161	Principles of Art and Design	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
Elective		3
AGRI 100	General Earth Science	4
	Credit Hours	**32**
Sophomore Year		
BIOL 116	Biological Science	4
FACS 201	Consumer Economics	3
EDUC 201	Seminar in Education	3
HPER 170	Health And Wellness	2
TAMM 271	Clothing Construction	3
DIET 221	Principles of Analysis of Food	3
GE Literature		3
FACS 263	Housing & Interior Planning	3
EDUC 202	Foundations of Education	3
PSYC 212	Human Growth & Development	3
EDUC 200	Technology in the Classroom	3
	Credit Hours	**33**
Junior Year		
DIET 210	Introduction Human Nutrition	3
FACS 342	Occupuational Family & Consume	3
HLTH 346	School & Community Health Prog	2
FCCS 381	Adoles. & Emerging Adulthood	3
SPEE 214	Introduction To Public Speakin	3
DIET 322	Meal Management	3
EDUC 427	Reading In The Subject Area	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 315	Data Driven Instructional Desi	3
FCCS 301	Child Development/Laboratory	3
	Credit Hours	**29**
Senior Year		
FCCS 401	Human Sexuality & Fam Planning	3
FACS 403	Resource Management	3
EDUC 424	Culturally Responsive Pedagogy	2
FACS 440	Contemp Approach To Curriculum	3
FCCS 402	Decision Making Process In Mod	3
EDUC 401	Student Teaching Seminar	3
FACS 402	Teaching Family Consumer Sci	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**29**
	Total Credit Hours	**123**

Additional Requirement for Teacher Endorsement

- IDST 100/101 are not needed if the student met PRAXIS I score or SAT score
- The student must take and pass PRAXIS Assessment
- Complete admission to Teacher Education Professional Program

Substitutions must be approved by College Dean and Department Chair

Teacher Education Courses

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
HLTH 346	School & Community Health Prog	2
PSYC 212	Human Growth & Development	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

A grade of "C" or better is required for all Major Courses.

Code	Title	Credit Hours
FACS 141	Intro to Fam & Consr Sci Sem	1
FCCS 102	Multicultural Families & Comm.	3
FACS 342	Occupuational Family & Consume	3
FACS 440	Contemp Approach To Curriculum	3
FCCS 402	Decision Making Process In Mod	3
DIET 210	Introduction Human Nutrition	3
SPEE 214	Introduction To Public Speakin	3
PSYC 212	Human Growth & Development	3

FACS 201	Consumer Economics	3
Total Credit Hours		**25**

Code	Title	Credit Hours
FACS 161	Principles of Art and Design	3
DIET 221	Principles of Analysis of Food	3
TAMM 271	Clothing Construction	3
DIET 322	Meal Management	3
FCCS 301	Child Development/Laboratory	1-3
FACS 263	Housing & Interior Planning	3
FCCS 381	Adoles. & Emerging Adulthood	3
FCCS 401	Human Sexuality & Fam Planning	3
FACS 402	Teaching Family Consumer Sci	3
Total Credit Hours		**25-27**

Teacher Education Courses

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
HLTH 346	School & Community Health Prog	2
PSYC 212	Human Growth & Development	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**37**

See Advisor or Department Chair for guidance.

Code	Title	Credit Hours
Unrestricted Electives		**3**
Total Credit Hours		**3**

Summary of Graduation Requirements

Code	Title	Credit Hours
General Education Courses		33
Core Requirements		25
Major Requirements		62
Electives		3
Total Credit Hours		**123**

Family and Consumer Science, Bachelor of Science with a Concentration in Family, Child, and Community Service (B.S.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
HPER 170	Health And Wellness	2
FCCS 102	Multicultural Families & Comm.	3
FACS 141	Intro to Fam & Consr Sci Sem	1
PSYC 101	Introduction to Psychology	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
FACS 161	Principles of Art and Design	3
AGRI 100	General Earth Science	3
Elective		3
	Credit Hours	**30**
Sophomore Year		
BIOL 116	Biological Science	4
HIST 122	U.S. History to 1865	3
FACS 201	Consumer Economics	3
DIET 221	Principles of Analysis of Food	3
TAMM 271	Clothing Construction	3
ECON 210	Principles Of Microeconomics	3
GE Literature		3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3
GE Global Studies		3
	Credit Hours	**31**
Junior Year		
DIET 210	Introduction Human Nutrition	3
GEEN 310		3
Elective		3
FACS 480	Adm Human Develop & Family Sys	3
FACS Elective		3
DIET 322	Meal Management	3
MISY 201		3
FCCS 301	Child Development/Laboratory	3
FACS 263	Housing & Interior Planning	3
Elective		3
	Credit Hours	**30**
Senior Year		
FCCS 381	Adoles. & Emerging Adulthood	3
FCCS 401	Human Sexuality & Fam Planning	3
MGMT 330	Org'l Behavior & Leadership	3
Elective		3
FACS Elective		3
FACS 440	Contemp Approach To Curriculum	3
FACS 482	Practicuum Family & Consumer	3
FCCS 402	Decision Making Process In Mod	3
Elective		3
Elective		3
	Credit Hours	**30**
	Total Credit Hours	**121**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Courses

A grade of "C" or better is required for all Major Courses.

Code	Title	Credit Hours
DIET 210	Introduction Human Nutrition	3
DIET 221	Principles of Analysis of Food	3
DIET 322	Meal Management	3
FACS 141	Intro to Fam & Consr Sci Sem	1
FACS 161	Principles of Art and Design	3
FACS 263	Housing & Interior Planning	3
FACS 440	Contemp Approach To Curriculum	3
FACS 480	Adm Human Develop & Family Sys	3
FCCS 102	Multicultural Families & Comm.	3
FCCS 301	Child Development/Laboratory	1-3
FCCS 381	Adoles. & Emerging Adulthood	3
FCCS 401	Human Sexuality & Fam Planning	3
FCCS 402	Decision Making Process In Mod	3
TAMM 271	Clothing Construction	3
Total Credit Hours		**38-40**

Code	Title	Credit Hours
FACS 161	Principles of Art and Design	3
DIET 221	Principles of Analysis of Food	3
TAMM 271	Clothing Construction	3
DIET 322	Meal Management	3
FCCS 301	Child Development/Laboratory	1-3
FACS 263	Housing & Interior Planning	3
FACS 480	Adm Human Develop & Family Sys	3
FCCS 381	Adoles. & Emerging Adulthood	3
FCCS 401	Human Sexuality & Fam Planning	3
ECON 210	Principles Of Microeconomics	3
ENGL 310	Advanced Communications Skills	3
CISY 201	Microcomputer Concepts	3
Total Credit Hours		**34-36**

Electives

Code	Title	Credit Hours
Restricted Electives		
FACS Elective	Any course in FACS, FCCS, DIET, or TAMM that is not in the curriculum	3
MGMT Elective	MGMT 300, MGMT 330, or DIET 435	3
Earth Science (Course and Lab)	AGRI 100	4
Unrestricted Electives		**14**
Total Credit Hours		**24**

Code	Title	Credit Hours
General Education Courses		33
Core Requirements		28
Major/Concentration Requirements		36
Electives		24
Total Credit Hours		**121**

Family and Consumer Science, Bachelor of Science with a Concentration in Dietetics (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
BIOL 120	Principles Of Biology I	4
MATH 120	College Algebra	3
FACS 141	Intro to Fam & Consr Sci Sem	1
FCCS 102	Multicultural Families & Comm.	3
PSYC 101	Introduction to Psychology	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
ENGL 111	Composition II	3
GE History Electives (p. 146)		3
MATH 121	Trigonometry	3
SPEE 214	Introduction To Public Speakin	3
	Credit Hours	**33**
Sophomore Year		
AGRI 295	Contemporary Global Studies	3
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
ECON 210	Principles Of Microeconomics	3
DIET 210	Introduction Human Nutrition	3
HPER 170	Health And Wellness	2
BIOL 241	Introduction To Microbiology	4
DIET 221	Principles of Analysis of Food	3
DIET 275	Seminar In Practice	1
PSYC 212	Human Growth & Development	3
STAT 210	Elementary Statistics I	3
	Credit Hours	**29**

Junior Year		
BIOL 316	Human Physiology	3
CHEM 305	Organic Chemistry I	3
CHEM 307	Organic Chemistry Lab I	1
DIET 311	Nutrition in the Life Cycle	3
ENGL 302	Engl Literature Of Renaissance	3
FACS 342	Occupuational Family & Consume	3
DIET 322	Meal Management	3
DIET 385	Nutritional Biochemistry	3
DIET 410	Nutrition Counseling Practicum	2
DIET 424	Advanced Human Nutrition	3
HMGT 402	Hospitality Human Resources Mg	3
	Credit Hours	**30**
Senior Year		
DIET 422	Nutrition And the Community	3
DIET 431	Medical Nutrition Therapy I	3
DIET 433	Quantity Foods	3
DIET 435	Org & Management of Food Serv	3
Elective		2
DIET 437	Medical Nutrition Therapy II	3
DIET 489	Practicum In Dietetics	3
FACS 440	Contemp Approach To Curriculum	3
FCCS 402	Decision Making Process In Mod	3
Elective		3
	Credit Hours	**29**
	Total Credit Hours	**121**

Substitutions must be approved by School Dean and Department Chair.

Note: Students must have a minimum GPA of 2.25 and a "C" or better is required in all Major Courses and General Education denoted with an asterisk to matriculate in this program.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Courses

A grade of "C" or better is required for all Major Courses.

Code	Title	Credit Hours
DIET 210	Introduction Human Nutrition	3
DIET 221	Principles of Analysis of Food	3
DIET 275	Seminar In Practice	1
DIET 311	Nutrition in the Life Cycle	3
DIET 322	Meal Management	3
DIET 385	Nutritional Biochemistry	3
DIET 410	Nutrition Counseling Practicum	2
DIET 422	Nutrition And the Community	3
DIET 424	Advanced Human Nutrition	3
DIET 431	Medical Nutrition Therapy I	3
DIET 433	Quantity Foods	3
DIET 435	Org & Management of Food Serv	3
DIET 437	Medical Nutrition Therapy II	3
FACS 141	Intro to Fam & Consr Sci Sem	1
FACS 440	Contemp Approach To Curriculum	3
FCCS 102	Multicultural Families & Comm.	3
FCCS 402	Decision Making Process In Mod	3
HMGT 402	Hospitality Human Resources Mg	3

Code	Title	Credit Hours
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 241	Introduction To Microbiology	1-4
STAT 210	Elementary Statistics I	3
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
BIOL 316	Human Physiology	3
HMGT 402	Hospitality Human Resources Mg	3
DIET 221	Principles of Analysis of Food	3
DIET 275	Seminar In Practice	1
DIET 311	Nutrition in the Life Cycle	3
DIET 322	Meal Management	3
DIET 385	Nutritional Biochemistry	3
DIET 410	Nutrition Counseling Practicum	2
DIET 424	Advanced Human Nutrition	3
DIET 422	Nutrition And the Community	3
DIET 431	Medical Nutrition Therapy I	3
DIET 437	Medical Nutrition Therapy II	3
DIET 435	Org & Management of Food Serv	3
DIET 433	Quantity Foods	3
ECON 210	Principles Of Microeconomics	3
Total Credit Hours		**54-57**

Electives

Code	Title	Credit Hours
Science		
BIOL 120	Principles Of Biology I	4
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1

History		
HIST 122	U.S. History to 1865	3
Humanities		
SPEE 214	Introduction To Public Speakin	3
Literature		
ENGL 302	Engl Literature Of Renaissance	3
Mathematics		
MATH 120	College Algebra	3
MATH 121	Trigonometry	3
Social Science		
ECON 210	Principles Of Microeconomics	3
PSYC 101	Introduction to Psychology	3
PSYC 212	Human Growth & Development	3
Business		
MISY Course	Advisor Approved Course	3
Global Studies		
SPAN 110	Elementary Spanish I	3
Wellness/Health		
HPER 170	Health And Wellness	2

Code	Title	Credit Hours
General Education		34
Core Requirements		28
Major/Concentration Requirements		57
Electives		5
Total Credit Hours		**124**

Family and Consumer Science, Bachelor of Science with a Concentration in Textile, Apparel and Merchandising Management (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
FCCS 102	Multicultural Families & Comm.	3
HPER 170	Health And Wellness	2
TAMM 171	Textiles	3
TAMM 172	Survey of Textile & Apparel In	1
FACS 141	Intro to Fam & Consr Sci Sem	1
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
FACS 161	Principles of Art and Design	3
HIST 122	U.S. History to 1865	3
PSYC 101	Introduction to Psychology	3
	Credit Hours	**31**
Sophomore Year		
CHEM 100	Chemistry in Society	4
FACS 201	Consumer Economics	3
ENGL 201	Introduction To Literature	3
PHIL 180	Critical Thinking	3
TAMM 271	Clothing Construction	3
SPEE 214	Introduction To Public Speakin	3
ECON 210	Principles Of Microeconomics	3
PSYC 212	Human Growth & Development	3
TAMM 272	Fashion History	3
TAMM 274	Fashion Marketing/Merchandisin	3
	Credit Hours	**31**
Junior Year		
DIET 210	Introduction Human Nutrition	3
GE Global Studies Electives (p. 146)		3
TAMM 373	Fash Illus & Comptr Applicatio	3
TAMM 375	Visual Merchanding & Styling	3
TAMM 376	Principles Retail Math & Buyin	3
MKTG 300	Principles Of Marketing	3
FACS 403 or FINC 305	Resource Management or Personal Finance Management	3
TAMM 377	Apparel Design	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
FACS 342	Occupuational Family & Consume	3
TAMM 379	Trends and Concepts	3
Restricted Elective (FACS Course Only)		3
Restricted Elective (FACS/FCCS/DIET Course Only)		3
Unrestricted Elective		2
FCCS 402	Decision Making Process In Mod	3
FACS 440	Contemp Approach To Curriculum	3
TAMM 477	Senior Sem & Professional Deve	3
TAMM 478	Apparel Product Development	3
TAMM 479	Fashion Promotion & Event Plan	3
	Credit Hours	**29**
	Total Credit Hours	**121**

Substitutions must be approved by College Dean and Department Chair.

Note: Students must have a minimum GPA of 2.25 and a "C" or better is required in all Major Courses and General Education denoted with an asterisk to matriculate in this program.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Courses

A grade of "C" or better is required for all Major Courses.

Code	Title	Credit Hours
FACS 141	Intro to Fam & Consr Sci Sem	1
FCCS 102	Multicultural Families & Comm.	3
FACS 342	Occupuational Family & Consume	3
FACS 440	Contemp Approach To Curriculum	3
FCCS 402	Decision Making Process In Mod	3
DIET 210	Introduction Human Nutrition	3
SPEE 214	Introduction To Public Speakin	3
PSYC 212	Human Growth & Development	3
FACS 201	Consumer Economics	3
TAMM 477	Senior Sem & Professional Deve	3
Total Credit Hours		**28**

Code	Title	Credit Hours
TAMM 171	Textiles	3
TAMM 172	Survey of Textile & Apparel In	1
FACS 161	Principles of Art and Design	3
TAMM 271	Clothing Construction	3
TAMM 272	Fashion History	3
TAMM 274	Fashion Marketing/Merchandisin	3
TAMM 373	Fash Illus & Comptr Applicatio	3
TAMM 375	Visual Merchanding & Styling	3
TAMM 376	Principles Retail Math & Buyin	3
TAMM 377	Apparel Design	3
TAMM 379	Trends and Concepts	3
TAMM 478	Apparel Product Development	3
TAMM 479	Fashion Promotion & Event Plan	3
MKTG 300	Principles Of Marketing	3
FACS 403	Resource Management	3
or FINC 305	Personal Finance Management	
ECON 210	Principles Of Microeconomics	3
Total Credit Hours		**46**

Electives

Code	Title	Credit Hours
Restricted Electives	Any course in FACS, FCCS, DIET, or TAMM not in the curriculum	6
Unrestricted Electives		8
Total Credit Hours		**14**

Summary of Graduation Requirements

Code	Title	Credit Hours
General Education Courses		33
Core Requirements		28
Major/Concentration Requirements		46
Electives	Restricted: 6 & Unrestricted: 8	14
Total Credit Hours		**121**

Family and Consumer Science, Minor in Family, Child, and Community Development

Code	Title	Credit Hours
Minor Requirements		
FCCS 102	Multicultural Families & Comm.	3
FCCS 301	Child Development/Laboratory	1-3
FCCS 302	Family Relations	3
FCCS 401	Human Sexuality & Fam Planning	3
FACS 480	Adm Human Develop & Family Sys	3
FACS or FCCS Elective		3

FACS or FCCS Elective is any FACS or FCCS class, options include: FCCS 101, FCCS 381, FCCS 405, FACS 342, and FACS 403

FCCS 102. Multicultural Families & Comm.. (3 Credits)
This course explores various contemporary issues related to individual, family, and community roles, responsibilities, interpersonal interactions, functions and development tasks. Specific emphasis is placed upon cultural diversity among families in the United States.

FCCS 301. Child Development/Laboratory. (1-3 Credits)
This course explores the profession of child development. Special attention is given to the perceptual, social, emotional, cognitive and physical processes from infancy through age eight. The laboratory experience is an element of this course and taught simultaneously with the class. This allows students to work directly with children and to receive hands-on-experiences in the preschool classroom.

FCCS 302. Family Relations. (3 Credits)
Focus is on applying knowledge and theory to the study of how families relate to one another and manage their resources for both survival and fulfillment. Factors related to the development of functional family lifestyles are assessed from multiple perspectives.

FCCS 401. Human Sexuality & Fam Planning. (3 Credits)
The course investigates factors related to the development of lifestyles and families. Consideration is given to current issues relating to marriage and family life and those changes in society, which affect the institution of the family. The course explores concepts related to family planning and the relationship of sexual attitudes and behavior to human development and sexuality. Special emphasis on economic, social, cultural, legal, and political factors, which influence decisions, related to family planning, sexual behavior, and attitudes. Open to non-majors.

FACS 480. Adm Human Develop & Family Sys. (3 Credits)
This course examines principles and concepts related to administering human service programs and organizations in an environment designed to assist individuals with reaching their full potential. Key concepts include administration, organizational structure, supervision, and resource management. Issues related to planning and implementation are addressed. FACS MAJORS ONLY. Prerequisite: FACS 141 Perspectives of Professionalism, FCCS 102 Individual Family & Community Services, FCCS 301 Child Development/Laboratory.

Family and Consumer Science, Minor in Textile Apparel Merchandising

Code	Title	Credit Hours
TAMM 171	Textiles	3
FACS 161	Principles of Art and Design	3
TAMM 271	Clothing Construction	3
TAMM 272	Fashion History	3
TAMM 376	Principles Retail Math & Buyin	3
TAMM 478	Apparel Product Development	3

FACS 161. Principles of Art and Design. (3 Credits)
This course is an introduction of the basic principles of design as they relate to fashion, residential and 100 workspace environments. Special considerations will be given to visual design in a sensory and behavior context. FACS 201 CONSUMER ECONOMICS - 3 semester hour.

TAMM 171. Textiles. (3 Credits)
This course is an introduction to the diversity of textiles arts, fiber science, and a focus on a though knowledge of textiles , their design structure and application Emphasis is placed upon processes, such as twining, plaiting, spinning, knitting, dyeing, hand-printing, and loom-weaving. In addition, this course surveys textile terminology and properties to enable students to make appropriate choices in textile selection for a product.

TAMM 271. Clothing Construction. (3 Credits)
This course is a study in the acquisition of construction skills and techniques necessary for transforming fabrics into apparel and/or home fashions. It includes an understanding of sewing equipment supplies and materials as well as applications for specific figure types and personalities. Emphasis is also placed on construction methods, technology and appropriate applications. FACS MAJOR ONLY or Permission from Instructor/Program Coordinator.

TAMM 272. Fashion History. (3 Credits)
A fundamental course in Fashion and Costume History including identity of costume starting with the Ancient Civilization to the development Western Civilization ending in the 20th Century. It also will assist the student in describing how technology and economics influence fashion development and change.

TAMM 274. Fashion Marketing/Merchandisin. (3 Credits)
This course focuses on the integration of fashion marketing concepts and applications in the development of a merchandising plan. Students will learn about merchandise positioning, brand building, market segmentation, and market research as it relates to the fashion industry. Prerequisite(s): TAMM 172.

TAMM 376. Principles Retail Math & Buyin. (3 Credits)
This course is an introduction to retail math and buying simulation. Students will be introduced to a buying simulation where they will learn the concepts and calculations necessary for merchandise buying and assortment planning for a retail store. Students will understand the retail method of inventory, planning seasonal purchases, markups, turnover, stock to sales ration, open to buy, markdowns, and terms of sale. Prerequisites: TAMM 172, MATH 112, MATH 113.

TAMM 375. Visual Merchanding & Styling. (3 Credits)
This course is a study of presentation techniques and merchandising concepts employed to promote store image or brand strategy. Students will utilize artistic principles such as line, balance, rhythm to create effective merchandising displays and floor sets for a retail environment. Students will also explore the stylist's role in print and interactive media. Using both lecture and studio delivery, activities will include mock assignments, story boarding photo shoots, display window installations and other experiences associated with visual merchandising and stylist's responsibilities. Prerequisite(s): FACS 161, TAMM 172, TAMM 271, TAMM 272.

TAMM 478. Apparel Product Development. (3 Credits)
This advanced level course provides TAMM students with a simulated experience in product development processes and apparel production. Building upon introductory courses, students will apply fashion terminology, construction, textile science, and retail management principles to simulate the three levels of the industry design, production & sales. Students will engage in the design process, will learn flat pattern design and advanced construction skills to address production challenges. In addition, students will utilize analytical skills to cost and source as well as analyze global market challenges. Students will synthesize design concepts, advanced production technology, the development of merchandising in the modern market, including analysis of target markets, analyze the source, cost and development of a product in that market in presentation form Prerequisite:(s) FACS 161, TAMM 171, TAMM 172, TAMM 271, TAMM 272, TAMM 274, TAMM 373, TAMM 376, TAMM 379.

TAMM 479. Fashion Promotion & Event Plan. (3 Credits)
This course examines the process of promotion and the promotion mix tools utilized by fashion companies. Students are engaged in all aspects of the planning process of an actual event (e.g. setting goals, preparing budgets, creating ad layouts, creating press kits, coordinating production, and evaluating). Further, students will plan and execute a fashion event (e.g., Fashion Show, Lecture Series, Fashion Publication, Trunk Show, and Bazaar). Prerequisite:(s) FACS 161, TAMM 172, TAMM 272, TAMM 274, TAMM 373.

Family and Consumer Science, Certificate in Nutrition and Dietetics

Admission

- Baccalaureate degree from a U.S. regionally accredited college/university or a foreign degree equivalent to at least a U.S. baccalaureate degree. The degree must meet requirements as identified by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).
- Please complete the transfer application for undergraduate admission.

  http://www.vsu.edu/admissions/apply/transfer-apply/index.php (http://www.vsu.edu/admissions/apply/transfer-apply/)
- Once admitted into the Certificate Program of Nutrition and Dietetics, you will have to submit an additional application to gain admission into the Didactic Program in Dietetics.

Admission to Didactic Program in Dietetics (You must complete an additional application.) Please consult DPD Program Director for timeline.

1. Completion of the following courses (or transferred equivalent) with a grade of "C" or better:

- CHEM 151/153: General Chemistry I
- CHEM 152/154: General Chemistry II
- CHEM 305/307: Organic Chemistry I
- BIOL 120: General Biology I/Lab
- BIOL 318: Anatomy & Physiology I
- MATH 120: College Algebra I

2. Minimum GPA of 2.85, conditional

3. Nutrition related work and/or volunteer experience

4. Completion of DPD Application Form

5. Expected graduation date is within two years of program application.

6. The DPD program is capped at 30 students. Selection is determined by the VSU Dietetics Program

***Advisory Council and is based on:**

- Meeting the above requirements,
- ≥3.0 GPA,
- Depth and breadth of nutrition-related experience

An application for the Didactic Program in Dietetics (DPD) must be completed for students interested in becoming a Registered Dietitian. All students (freshmen and transfers) who have been admitted to the university must apply and be accepted into the DPD and have the DPD major listed on their record in order to receive a Verification Statement upon graduation, which is needed to enter into a Dietetic Internship.

DPD Applications are required to be submitted either by October 15 or by March 15 after students have met the DPD admissions criteria above. These dates may flex depending upon the administration of midterm grades.

Department of Hospitality Management

Chairperson: Dr. Ivan Turnipseed (Interim)
Location: Gandy Hall, 3rd Floor
Contact Information: 804-524-2552 | iturnipseed@vsu.edu

Department overview

The Hospitality Industry is the largest private industry worldwide. The Hospitality Management Department is designed to prepare students for a wide variety of career opportunities in the hospitality industry. The curriculum is designed to develop students focus on operations management at the property level and prepare them for careers leading to general and executive management. Students are advised on selection of classes based on their stated career interest. Internship placement will support the area of interest. Upon successful completion of the undergraduate degree requirements, students will receive a **Bachelor of Science (B.S.) in Hospitality Management**.

Students participate in laboratory experiences and are required to complete two (2) supervised internships to ensure the application of classroom theory to the workplace and to prepare them for the operational challenges of the industry. Students gain added credentials and valuable learning experiences that will allow them to advance their career goals by taking nationally recognized certification courses and participate in professional conferences and study abroad programs.

Mission statement

The mission of the department is to educate and prepare students to be informed citizens and leaders who can assume productive roles within the global hospitality industry and the community.

Degree Highlight Information

The VSU Hospitality Management major, upon graduation, receives multiple job offers and experiences placement rates of close to 90% each year for its graduates. There is critical and constant need for qualified talent in the hospitality industry and with the projected growth for the future; companies are in desperate need of entry-level managers with the potential for leadership. This also translates into a need for diversity within the ranks, from the entry level and more importantly through the executive levels, as the face of the nation changes. Upon completion of the bachelor's degree in hospitality management, students should be academically well-rounded professionals, with specialized knowledge, skills and competencies needed to thrive in the continuously changing global hospitality environment. Graduates of the program enjoy management positions in all areas of the industry.

Student Organizations

- Hospitality Management Student Association (HMSA)
- National Society of Minorities in Hospitality (NSMH)
- ETA Sigma Delta International Hospitality Honors Society (ESD)
- Society for Hospitality and Food Service Management (SHFM)

Accreditation Information

The Department of Hospitality Management is housed within the College of Agriculture. Our curriculum is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA), which proves our program exceeds standards in educational quality.

Department Goals

The curriculum of the Hospitality Management Department is designed in recognition of the demands of the industry for well-trained and qualified

leaders. Minority representation is needed to create balance in the higher echelons of the businesses that comprise the hospitality industry.

Upon completion of the program, students will be able to:

1. Identify and apply the knowledge and skills necessary for hospitality and tourism operations
2. Develop and integrate a core set of business skills necessary to successfully operate a hospitality and tourism organization
3. Demonstrate competence in the communication skills necessary for hospitality and tourism management
4. Formulate business decisions in hospitality and tourism management
5. Evaluate leadership principles necessary in the diverse and global hospitality and tourism industry

Program Listings

Bachelor of Science (B.S.) in Hospitality Management

The Hospitality Management program will emerge as a Center of Excellence in Hospitality, that embraces current and relevant global concepts, leadership, team building behavior and concepts, specific to the dynamics of the hospitality industry. The focus of the program is the development of managerial and leadership skills essential to all hospitality managers, with rigorous course work to lead to the bachelor's degree.

> **Course Requirements:** Students majoring in Hospitality Management are required to pass all courses offered in the department (HMGT courses) with a grade of C or better for such grades to count towards their major curriculum requirements for graduation. Additionally, students must receive a C or better in English 110 and 111 for their grades to count towards their requirements for graduation.

Scholarships

- Thompson Hospitality
- Hilton Worldwide
- Marriott International
- Hyatt Resorts and Hotels
- Hospitality Management Advisory Board – Study Abroad Fund
- National Coalition of Black Meeting Planners (NCBMP)
- Greater Richmond Convention and Visitors Bureau
- American Hotel & Lodging Educational Foundation (AH&LEF)
- HSMAI-VA Dee Harris Scholarship

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
HMGT 101	Introd Hospitality Management	3
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
HMGT 107	Food Sanitation And Safety	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
BIOL 116	Biological Science	4
HPER 170	Health And Wellness	2
HMGT 102	HMGT Mgmt Prof Development	3
	Credit Hours	**30**
Sophomore Year		
ENGL 201	Introduction To Literature	3
ECON 210	Principles Of Microeconomics	3
PSYC 101	Introduction to Psychology	3
HMGT 201	Hospitality Technology Applic	3
HMGT 200	Tourism Management	3
HMGT 203	Lodging Management	3
HMGT 221	Principles Of Food Preparation	3
SPEE 214	Introduction To Public Speakin	3
STAT 210	Elementary Statistics I	3
HMGT 349	Hospitality Mgmt Internship I	3
	Credit Hours	**30**
Junior Year		
HMGT Restrictive Elective		3
DIET 101	Nutrition:Contemp Health Issue	3
COBU 201 or ACCT 201	Introductory Accounting I or Introductory Accounting I	3
ENGL 310	Advanced Communications Skills	3
HMGT 322	Meal Management	3
MGMT 330	Org'l Behavior & Leadership	3
HMGT 399	Hospitality Mgmt Internship II	3
HMGT 303	Hospitality Law And Ethics	3
HMGT 301	Lodging Operations Management	3
GE Humanities Electives (p. 146)	Spanish or French Course	3
	Credit Hours	**30**
Senior Year		
Unrestricted Elective		3
HMGT 404	Hospitality Accounting & Purch	3
HMGT 409	Hospitality Facility Plan Mgmt	3
HMGT 435	Org'L Leadership Mgt, Decision	3
Restricted Elective	HMGT Restricted Elective	3
HMGT 402	Hospitality Human Resources Mg	3
HMGT Restricted Elective		3
HMGT 407	Conference & Exposition Mgmt	3
HMGT 449	Hospitality Marketing Manageme	3
HMGT 450	Senior Seminar	3
	Credit Hours	**30**
	Total Credit Hours	**120**

HOSPITALITY MANAGEMENT DEPARTMENT
Course Descriptions

HMGT 101 INTRODUCTION TO HOSPITALITY MANAGEMENT - 3 semester hours
A historical overview of the hospitality and tourism industry and its economic significance. Forms of organization and development, theories; trends and issues will be explored. Students will be exposed to professional opportunities and leadership development through involvement of industry executives and field trips.

HMGT 102 PROFESSIONAL DEVELOPMENT - 3 semester hours
This is the first in the series of courses designed to provide exposure to the competencies required for success in the hospitality industry. The focus will be on improving the "soft skills" of the undergraduate in preparation for careers in the industry. Content includes, but is not limited to; Realities of the workplace, professional code of conduct, business and dining etiquette, dress code for success, field trips and HMP association membership mandatory. Sections offered in the second semester of the freshman year.

HMGT 107 FOOD SANITATION AND SAFETY - 3 semester hours

This course introduces the basic principles of food sanitation and safety and their relationship to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of food sanitation and safety in the hospitality industry.

HMGT 200 TOURISM MANAGEMENT - 3 semester hours

A survey of travel and tourism concepts and management tools in the United States and internationally. Emphasis will be placed on terminologies, demographics, economics, socio-cultural and environmental impacts of travel and tourism, and the industry's management issues in a global context.

HMGT 201 HOSPITALITY TECHNOLOGY APPLICATIONS - 3 semester hours
An exploration of hospitality management information systems, computer software applications and their impact on the hospitality industry. Provides familiarization with property management systems and software programs used in the management of various hospitality entities.

HMGT 203 LODGING MANAGEMENT - 3 semester hours

Study of the fundamental processes underlying the operation of lodging facilities, an analysis of all lodging brands, ratings, and classifications. The operation of the front office is emphasized and its relationship to guest service, reservations, housekeeping, coordination, maintenance of the folio, computer applications, and procedures needed for night auditing. Particular emphases are on selling strategies of forecasting, rate efficiencies, and guest relations.

HMGT 221 PRINCIPLES OF FOOD PREPARATION - 3 semester hours
Study of the fundamental processes underlying food selection, preparation and preservation with practical selection application through laboratory experiences. Emphasis is on the composition and properties of food, food handling to retain nutrients, standards for acceptable products and food costs. Laboratory supplies are required.
Prerequisites: HMGT 107

HMMGT 223 INTRODUCTION TO BAKING AND PASTRY - 3 semester hours
Lecture and production of basic breads and rolls, desserts and pastry creations. Covers proofing, baking temperatures, muffins, quick breads, cakes, cookies and pies. Use of liquid measurements, scales, and equipment identification.
Prerequisites: HMGT 107, HMGT 221

HMGT 300 INTERNATIONAL STUDY TOUR - 3 semester hours
ELECTIVE: The international Study Tour is designed to add another level of experiential learning to the hospitality management curriculum. This course will use the world as a classroom for the education of the HMP student through travel and explorations. Tours will be arranged to a variety of tourist destinations to allow for exposure to a wide range of experiences.
Prerequisites: HMGT 101, HMGT 200

HMGT 301 LODGING OPERATIONS MANAGEMENT - 3 semester hours
A course designed to show emphasis on the highly complex nature of the housekeeping department. It provides students with the managerial tools needed to handle this function with professionalism. It involves studies of the challenges associated with logistics and quality controls and purchasing to ensure efficiency in operation as well as customer satisfaction. Requires heavy usage of property management systems, (PMS).
Prerequisites: HMGT 203

HMGT 302 CATERING AND EVENT MANAGEMENT - 3 semester hours
ELECTIVE: This course will focus on two major areas: Off-premise and on premise catering for social and business functions, and the management of large scale, special events, such as sporting events and artistic performances. A significant portion of the class will be dedicated to catered function and special events planning, design, and execution. Other topics will include: organizational structure, legal aspects of catering and special events management product and service development, marketing and sales, staff development, post-event analysis and evaluating the financial success of catering and special event business.

HMGT 303 HOSPITALITY LAW AND ETHICS - 3 semester hours
Examination of laws and regulations which exert control on foodservice, lodging and tourism industries. Local, state and federal laws applicable to the operation of the hospitality industries will be analyzed. The innkeeper / guest relationship and liability issues impacting ownership and management of employees will also be examined. Bailment, agency and contracts are presented in the context of the hospitality and tourism enterprises.

HMGT 304 FOOD AND BEVERAGE CONTROL - 3 semester hours
An analysis of factors and techniques used to control food cost and generate revenues. This course addresses requisite competencies related to the application of cost control systems and the development and implementation and evaluation of such mechanisms. Includes inventory and supplies management.

HMGT 305 HOSPITALITY MANAGEMENT CONTRACTS - 3 semester hours

A critical analysis of the negotiation and administration of hospitality management contracts. Topics include contracts, risks and their advantage and disadvantages; owner and ethical issues during negotiation and administration of the contract, and the future role of contract use.

HMGT 306 FINANCIAL MANAGEMENT AND PLANNING - 3 semester hours
An examination of the techniques of financial analysis and planning, with discussions on the tax environment, profit planning and forecasting, budgeting, capital budgeting techniques and cost- of - capital determinations.
Prerequisite: ACCT 200

HMGT 310 SECURITY AND LOSS PREVENTION MANAGEMENT - 3 semester hours
This course will constitute the development of security and loss prevention programs. It examines risk management and security processes and insurance details from a lodging perspective and looks at security equipment, technology and the overall protection of guests, employees and physical assets of the property.
Prerequisites: HMGT 201, HMGT 203, HMGT 301

HMGT 320 TOURISM DEVELOPMENT - 3 semester hours
Relationship of economic theory and planning principles, processes, and policies of sustainable tourism development; application of pre-feasibility analysis to tourism development projects. Special emphasis placed on economic, socio-cultural and environmental trends in tourism development. This course requires extensive interaction with tourism organizations through field trips, guest lectures and cooperative projects.

Prerequisites: HMGT 200, ECON 210

HMGT 321 SERVICE MANAGEMENT - 3 semester hours
An evaluation of the service industry, history, current status, trends and futurism. Students will develop a deep understanding of the management principles and challenges unique to the service industries. Emphasis will be placed on the characteristics and operations of service delivery systems, management and organizations. The main course goal is to develop critical analytic skills and knowledge needed to implement service strategies for competitive advantage.

HMGT 322 MEAL MANAGEMENT - 3 semester hours
Menu development, styles of meal service, table appointments, food presentation, meal planning and service. Emphasis is given to the economics, efficiency and aesthetics of meal service. Menu planning and cost analysis of menus required, marketing of goods and services are key components. The operation of M & M Restaurant, the Trojan Room (faculty dining room) and/or childcare meal preparation are required. Laboratory supplies needed.

HMGT 324 INTRODUCTION TO BEVERAGE SERVICE - 3 semester hours
An introduction to beverages; this course provides specialized training for students interested in pursuing management careers in the food and beverage industry. Lecture topics will include what the consumer needs to know to purchase wine in retail outlets and in a restaurant setting, pairing wine with food, responsible drinking, selecting quality wines and wine etiquette. Different types of alcoholic and non-alcoholic beverages, coffee, tea and water will be evaluated in a controlled environment. This course is restricted to hospitality majors / minors and will be conducted at onsite and off-site locations.

HMGT 325 CULTURE AND CUISINE - 3 semester hours
An introduction to world cooking techniques including braising, stewing, grilling, and roasting. Lectures and demonstrations revolve around European, North, Central, and South American cuisine, ingredients and plate presentations and service.

HMGT 326 GARDE MANGER - 3 semester hours
Students will be introduced to traditional and modern preparation techniques of cold entrees, pates, terrines, and galantines. Students plan, organize and set up buffet displays. The course concentrates on the practical techniques of platter presentation and management of related equipment and service ware.
Prerequisites: HMGT 107, HMGT 221

HMGT 330 INTERNATIONAL HOSPITALITY MANAGEMENT - 3 semester hours
This course is designed to provide students with basic understanding of international hospitality management and operations. It presents an overview of the historic perspectives of globalization, tourism and the lodging sector. Students will investigate the emergence of international hotels and their classifications and standards. Cultural diversity, human resources, marketing and global competition, politics of travel, trends in investment and financing international hotel projects will be addressed. Students taking this class are required to participate in one International Study Tour.
Prerequisites: HMGT 200, HMGT 203, HMGT 300

HMGT 333 QUALITY MANAGEMENT - 3 semester hours
ELECTIVE: This course explores the concepts of total quality management and various quality measurements indices in relationship to high performance organizations. Concepts such as ISO9000, Malcolm Baldridge, continuous improvement, empowerment, goal setting, conflict management, change management and diversity will be addressed.

Prerequisites: HMGT 201, HMGT 203, HMGT 301

HMGT 349 INTERNSHIP IN HOSPITALITY MANAGEMENT I – 3 semester hours

This is a continuation of the internship series to be taken after completion of sophomore year. Students will be in the employ of a hospitality business and rotate throughout at least three departments / areas over the term of the internship. This will allow the students practical application of concepts learned in class and exposure to the different facets of this diverse global industry.

Prerequisite: HMGT 101

HMGT 350 GAMING AND CRUISE-SHIP OPERATIONS - 3 semester hours

The cruise course will present an introduction to the cruise line and gaming industry. It will address the history and development of cruises and distinguish between sea based and land-based operations and provide information on the cruise sales, marketing and operations. Gaming will include the development of gaming, a survey of gaming destinations and casino management and examines gaming as a social phenomenon, its legal issues and economic impact.

HMGT 399 INTERNSHIPS IN HOSPITALITY MANAGEMENT III - 3 semester hours
Internship for students in HMGT to be taken during the summer or the semester following the completion of the junior year. Designed to provide junior level students with decision making and experiential learning experiences in a hospitality industry. 480 clock hours are required.

HMGT 400 ROOMS DIVISION MANAGEMENT - 3 semester hours
Design of a business plan and evaluation of business performance based on quality measurement indicators. This course integrates the concepts of management with the development of communication skills and decision making practices in the rooms division. Emphasis is placed on the development of management personnel in hospitality operations and techniques of financial planning and property analysis.
Prerequisites: HMGT 203, HMGT 301

HMGT 402 HOSPITALITY HUMAN RESOURCE MANAGEMENT - 3 semester hours
Students obtain working knowledge of the terminology, concepts and procedures used by hospitality managers in developing information and making decisions relevant to forecasting and controlling human resource requirements. Major topics: staff planning, budgeting, scheduling and payroll, control collective bargaining consideration, productivity, human behavior, job design, recruitment, selection and retention system.
Prerequisite: Senior standing, HMGT 303

HMGT 404 HOSPITALITY ACCOUNTING AND PURCHASING - 3 semester hours
Essentials of hospitality accounting controls from both the operational and corporate perspectives. Practice with typical methods of costing, rational analysis found in the hospitality industry as well as computer applications are included. Specific topics include: uniform system accounts, revenue and expense tracking, cost controls, comparative analysis and management of the purchasing function.
Prerequisite: ACCT 200

HMGT 407 CONFERENCE AND EXPOSITION MANAGEMENT - 3 semester hours
A course designed to provide students with a basic understanding of the scope and processes of meetings, conferences and exposition/exhibition

management. Students will be required to research, design, plan, coordinate, and evaluate both professional domestic and international conferences and expositions. This will include roles in budgeting, operations and evaluation of conference services. (Note: Industry professionals will be featured speakers).
Prerequisite: HMGT 203, HMGT 303, HMGT 322 or junior standing

HMGT 409 HOSPITALITY FACILITIES MANAGEMENT AND PLANNING - 3 semester hours
The scientific principles and regulations guiding the layout and design for efficient management of hotels, restaurants and institutional facilities. Management and organization of facility operations and preventive maintenance, as well as energy management programs will be emphasized.
Prerequisite: HMGT 203, HMGT 322

HMGT 420 RESORT MANAGEMENT - 3 semester hours
The study of principles and practices of the management procedures and leadership role in resorts and private clubs. This course provides a comprehensive approach to the operation of a resort with entertainment and recreational facilities. Vacation ownership, condominium concept and current trends and developments in resort developments will be addressed.
Prerequisites: HMGT 400

HMGT 430 REVENUE MANAGEMENT AND STRATEGIC PLANNING - 3 semester hours
This course examines the principles of yield management from a strategic planning standpoint. Factors including yield management techniques and strategy formulation, content development, implementation, and evaluation in diverse hospitality operations.
Prerequisites: HMGT 400, HMGT 404

HMGT 432 ADVANCED FOOD PREPARATION - 3 semester hours
Students are introduced to more in depth cooking techniques, preparatory skills, and inventory evaluation. Lecture, demonstration and production focuses on store room procedures, inventory systems, meat butchery and plate presentation.
Prerequisites: HMGT 221, HMGT 304, HMGT 322

HMGT 433 QUANTITY FOODS - 3 semester hours
Study and practice in planning, purchasing, preparing and serving food in quantities, calculating the cost of portions and meals for large groups, and calculating profit and loss statements given the operations of special enterprises. Laboratory supplies, project planning, organizing, implementation and evaluation are required.
Prerequisite: HMGT 322

HMGT 435 ORGANIZATIONAL LEADERSHIP, MANAGEMENT AND DECISION-MAKING - 3 semester hours
This course provides students with the tools necessary to succeed in the dynamic and ever -changing global hospitality industry. Includes focus on the principles of management and leadership, total quality management (TQM) and empowerment models in the hospitality industry. Quantitative aspects of management and internal controls will be addressed, with an overview of managerial and financial concepts used in the decision-making process.
Prerequisite: HMGT 402, HMGT 404

HMGT 440 CONTEMPORARY ISSUES IN HOSPITALITY MANAGEMENT - 3 semester hours
This course is a study of current trends and issues facing the hospitality industry. Students will participate in active research of current interest topics and community based service learning projects.

Prerequisites: HMGT 201, HMGT 203, HMGT 301

HMGT 444 HOSPITALITY AND TOURISM RESEARCH - 3 semester hours
ELECTIVE: Exposition of quantitative and qualitative hospitality and tourism research methods and their applications to lodging, foodservice and tourism management. Primary emphasis on how survey research methods can be used to generate the information needed to improve management and marketing decisions.
Prerequisites: HMGT 200, HMGT 203, HMGT 435, STAT 210

HMGT 449 HOSPITALITY MARKETING MANAGEMENT - 3 semester hours

An overview of the design and delivery of a marketing plan, concepts and techniques employed in marketing hospitality and tourism industry services to achieve guest satisfaction and competitive distinctiveness. Probes will be made into the techniques of evaluation and the analysis of service marketing, and its application to the hospitality and tourism industries.
Prerequisite: HMGT 303 and junior standing

HMGT 450 SENIOR SEMINAR - 3 semester hours
A capstone course designed to apply technical, human and conceptual knowledge to solve current problems related to the hospitality industry. The course includes activities that will allow students to study and analyze critical requirements of the hospitality industry. Current issues related to managing and measuring service quality, current concepts and leadership qualities are the major emphasis. There will be a strong research component where the student will be required to conduct research and produce findings in the form of a report and presentation in a formal setting, typical of the hospitality business profession.
Prerequisite: Senior standing with permission of Department Chair

HMGT 455 HOSPITALITY MANAGEMENT INDENPENTANT STUDY – 1-6 semester hours
This course will allow the working Hospitality Management senior to complete the graduation requirements independently in an emerging and/or state-of-the-art hospitality or related area by investing a problem or topic of interest in his/her area of specialization.
Prerequisite: Senior Standing with permission of Department Chair

HMGT 499 HOSPITALITY MANAGEMENT SEMINAR - 3 semester hours
Exploration of three topics: Managing and Measuring Service Quality, Current Trends in Hospitality Administration and Leadership in the Hospitality Industry. Cases studies, decision-making simulations are used as critical to Exploration of three topics: Managing and Measuring Service Quality, Current Trends in Hospitality Administration, and Leadership in the Hospitality Industry. Case studies, decision-making simulations are used as critical tools to learning and application.
Prerequisite: Senior Standing with permission of Department Chair

Hospitality Management Major, Bachelor of Science (B.S.)

Freshman Year		Credit Hours
FRST 101	Freshman Studies	0
HMGT 101	Introd Hospitality Management	3
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3

HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
HMGT 107	Food Sanitation And Safety	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
BIOL 116	Biological Science	4
HPER 170	Health And Wellness	2
HMGT 102	HMGT Mgmt Prof Development	3
	Credit Hours	**30**
Sophomore Year		
ENGL 201	Introduction To Literature	3
ECON 210	Principles Of Microeconomics	3
PSYC 101	Introduction to Psychology	3
HMGT 201	Hospitality Technology Applic	3
HMGT 200	Tourism Management	3
HMGT 203	Lodging Management	3
HMGT 221	Principles Of Food Preparation	3
SPEE 214	Introduction To Public Speakin	3
STAT 210	Elementary Statistics I	3
HMGT 349	Hospitality Mgmt Internship I	3
	Credit Hours	**30**
Junior Year		
HMGT Restricted Elective		3
DIET 101	Nutrition:Contemp Health Issue	3
GEEN 310 or ENGL 310	 or Advanced Communications Skills	3
COBU 201 or ACCT 201	Introductory Accounting I or Introductory Accounting I	3
HMGT 322	Meal Management	3
MGMT 330	Org'l Behavior & Leadership	3
HMGT 399	Hospitality Mgmt Internship II	3
HMGT 303	Hospitality Law And Ethics	3
HMGT 301	Lodging Operations Management	3
GE Global Studies Electives (p. 146) Spanish or French Course)		3
	Credit Hours	**30**
Senior Year		
Unrestricted Elective		3
HMGT 404	Hospitality Accounting & Purch	3
HMGT 409	Hospitality Facility Plan Mgmt	3
HMGT 435	Org'L Leadership Mgt, Decision	3
HMGT Restricted Elective		3
HMGT 402	Hospitality Human Resources Mg	3
HMGT Restricted Elective		3
HMGT 407	Conference & Exposition Mgmt	3
HMGT 449	Hospitality Marketing Manageme	3
HMGT 450	Senior Seminar	3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HMGT 101	Introd Hospitality Management	3
HMGT 102	HMGT Mgmt Prof Development	3
HMGT 107	Food Sanitation And Safety	3
HMGT 200	Tourism Management	3
HMGT 201	Hospitality Technology Applic	3
HMGT 203	Lodging Management	3
HMGT 221	Principles Of Food Preparation	3
HMGT 301	Lodging Operations Management	3
HMGT 303	Hospitality Law And Ethics	3
HMGT 322	Meal Management	3
HMGT 349	Hospitality Mgmt Internship I	3
HMGT 399	Hospitality Mgmt Internship II	3
HMGT 402	Hospitality Human Resources Mg	3
HMGT 404	Hospitality Accounting & Purch	3
HMGT 407	Conference & Exposition Mgmt	3
HMGT 409	Hospitality Facility Plan Mgmt	3
HMGT 435	Org'L Leadership Mgt, Decision	3
HMGT 449	Hospitality Marketing Manageme	3
HMGT 450	Senior Seminar	3
Total Credit Hours		**57**

Code	Title	Credit Hours
DIET 101	Nutrition:Contemp Health Issue	3
COBU 201 or ACCT 201	Introductory Accounting I Introductory Accounting I	3
ECON 210	Principles Of Microeconomics	3
STAT 210	Elementary Statistics I	3
ENGL 310	Advanced Communications Skills	3
MGMT 330	Org'l Behavior & Leadership	3
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	**(Choose 3 courses from the following list.)**	**9**
HMGT 302	Catering And Event Management	
HMGT 304	Food And Beverage Controls	
HMGT 321	Service Management	
HMGT 324	Introd to Beverage Service	
HMGT 330	International Hospitality Mgmt	
HMGT 350	Gaming & Cruise Ship Operation	

HMGT 400	Rooms Division Management	
HMGT 444	Hospitality & Tourism Research	
HMGT 455	Independent Study in HMGT	
Unrestricted Electives		**3**
Total Credit Hours		**12**

Code	Title	Credit Hours
General Education Requirements		33
Core Requirements		57
Major/Concentration Requirements		18
Electives		12
Total Credit Hours		**120**

College of Education

Dean
Willis Walter
Location
Harris Hall, Room 101
Contact Information
804-524-5742 | wwalter@vsu.edu

Mission Statement

The mission of the College of Education at Virginia State University is to promote quality programs, using current research and technology-based learning to prepare effective reflective practitioners who are competent, caring and culturally-responsive.

Professional Education Programs Unit

The Professional Education Programs Unit is housed in the College of Education. The Unit is the governing body for all programs preparing candidates for careers in the field of education. Endorsement programs are offered at the undergraduate and graduate levels. All endorsement programs are approved by the Virginia Department of Education and the Unit is accredited by the National Council for the Accreditation of Teacher Education (NCATE), now the Council for the Accreditation of Educator Preparation (CAEP).

The Unit Head is the Dean of the College of Education. Departments in the College of Education include: Teaching and Learning; Health, Physical Education, Recreation and Dance; School and Community Counseling; Administrative & Organizational Leadership; and Doctoral Studies.

Unit's Conceptual Framework

The conceptual framework reflects the shared vision for preparing quality educators. The overall goal of the College of Education at Virginia State University, given its underlying vision, mission, and philosophy, is to facilitate the development of reflective practitioners who analyzes the emotions, experiences, and actions of others to create an unbiased learning environment, and serve as advocates for educational justice for all. This goal undergirds the development of successful candidates who are competent, caring, and culturally responsive. Through reflective inquiry, candidates use professional knowledge to enhance learning for all students.

Reflective Practitioners analyzes the emotions, experiences, and actions of others to create an unbiased learning environment and serve as advocates for educational justice for all.

- Competent: Understanding the central concepts, tools of inquiry, and structures of the content area(s). Understanding ways to enhance the learning process and learning environment through effective use of technology. Creating learning experiences and environments that make the subject matter meaningful for learners.
- Caring: Showing respect to all learners and empowering them to set achievable goals while maintaining high standards. Demonstrating a commitment to professionalism, continuous reflection, and application of research-based best practices.
- Effective: Using research-based best practices and performance assessments to guide the learning process and positively impact the learning environment to ensure that all students acquire the knowledge and skills to face the global challenges of the 21st century.
- Reflective: Reflecting upon and evaluating research and the success of past decisions in an effort to make better decisions in the future.

The Department of Teaching and Learning offers the following Undergraduate Programs:
Bachelor of Interdisciplinary Studies

- Minor in Elementary Education PreK-6
- Minor in Special Education-General Curriculum K-12
- Minor in Community Based Education (Non-Endorsed)

Content Area Major Secondary Education Minor

- Agriculture 6-12
- Biology 6-12
- Chemistry 6-12
- English 6-12
- Family and Consumer Sciences 6-12
- Health and Physical Education PreK-12
- Drivers Education add-on
- History and Social Sciences 6-12
- Mathematics 6-12
- Music Education-Choral PreK-12
- Music Education-Instrumental PreK-12

Bachelor of Education (B.S.Ed.)

- Elementary Education PreK-6
- Special Education- General Curriculum K-12
- Middle School Education (6-8)

Admissions Requirements

Admission requirements for all licensure programs in the College of Education are outlined by each department.

Special Policies

The College of Education reserves the right to make changes to any requirements for its endorsement programs according to the policies and regulations of the Virginia Department of Education.

Student Organizations

The following student organizations are a part of the College of Education:

- Kappa Delta Pi International Honor Society in Education (KDP)
- Leading Ladies to Leadership (3L) Society
- Males Molding Minds (3M) Society
- Virginia Student Education Association (VSEA)

Department of Health, Physical Education, and Recreation

Chairperson: Tracy Lynne Jackson, Esq.
Location: Harris Hall, Room 2301
Contact Information: (804) 524-5777 | tljackson@vsu.edu

Department Overview

The Department of Health, Physical Education and Recreation offers a wide range of curricula for Virginia State University students who wish to earn a Bachelor of Science Degree in Health and Physical Education or a Master of Science Degree in Sport Management. Students completing a course of study within the Department, will have acquired those competencies necessary to function as exemplary practitioners in the contemporary marketplace and as potential candidates for graduate school.

Course study encompasses core curricular areas such as Foundations, First Aid, Exercise Physiology, Adapted Physical Education, Organization and Administration of Sport, Health and Wellness, skills in lifetime sports, and internship experiences in each minor area. In addition, students may seek an endorsement in Drivers Education. In the Department of Health, Physical Education and Recreation, students who major in Health and Physical Education must also select a concentration in one of the following areas:

- Dance
- Health Science
- Physical Education PreK-12
- Public Health
- Recreation
- Sport Management

Mission Statement

The Department of Health, Physical Education and Recreation is a component of the College of Education. In harmony with the mission of the College, the Department's purpose is to prepare professionals to serve the public in the areas of teaching, health and wellness, leisure and recreation, sport management, and allied fields.

This purpose is facilitated through teaching, research/technology-based activities, outreach-public service endeavors, practical experiences, and graduate school preparation strategies. These components are designed to prepare students to negotiate the demands of a global marketplace that require a sensitivity to members of diverse cultures and special populations.

Degree Highlight Information

A degree from our program can take you many places! Our alumni have had successful careers in each of the concentration areas.

One of the highlights of the department curricula is the internship course that all students must take. Undergraduate students are required to complete a 150-hour internship in their respective concentration area, and graduate students complete a 400 hour internship. The internship has led to many of our students been offered jobs prior to graduation.

Accreditation Information

As a department in the College of Education, the program is accredited by the Council for the Accreditation of Educator Preparation (CAEP).

Department Goals

Through teaching, research, and outreach-public service activities, the Department's goal is to prepare students to negotiate the demands of an ever-changing, highly competitive, and global profession.

Upon completion of the program. Students will have the competencies needed to:

- Describe the foundation of history, science, philosophy and techniques needed to develop professionals in health, physical education, recreation, dance, and sport management.
- Discuss and reflect on the engagement of professional, social, ethical, and essential practices in health and fitness among culturally diverse communities.
- Relate, design, implement, and evaluate evidence-based practices acquired in major course work to field-based experiences.
- Apply critical thinking skills to science-based research in the fields of health, physical education, recreation, dance, and sport management.
- Demonstrate the effective use of technology to promote professional practice and improve communication.

Program Listings

Bachelor of Science (B.S.) in Health and Physical Education

Students in the B.S. program must earn a **grade of C or higher** in the following courses:

- ENGL 110 and ENGL 111
- All core major courses
- All required concentration courses

Minors:

- Dance
- Health Science
- Physical Education PreK-12
- Public Health

- Recreation
- Sport Management

Endorsement Opportunities

Teaching Endorsement
Students participating in the PreK-12 HPER Teacher Preparation program must complete competency tests assigned from the Commonwealth of Virginia. These core assessments include the VCLA and Core math assessment as well as the Praxis 2 content assessment. Once completing and passing Virginia related assessments, successful candidates seek admittance to the College of Education. Accepted students must have a 2.5 GPA and a "C" or higher on all major courses.

Driver Education (Add-on Endorsement)

Students seeking an add-on endorsement in Driver Education shall have an endorsement in a secondary area (such as Physical Education) and enroll in the following courses:

Code	Title	Credit Hours
HLTH 143	Prin Accident Causation & Prev	3
HLTH 445	Driver Ed Instruc'L Principles	3

Sankofa Dance Theatre

The HPER Department features the Virginia State University's Sankofa Dance Theatre. Sankofa is the official theatrical dance company at Virginia State University. It is the professional, performing arts extension of the dance minor. Students perform lyrical, modern, jazz, hip-hop, African Diaspora, and traditional African dance in professional presentations throughout the University and surrounding community. Participation in Sankofa requires 1) a student must provide an audition that is approved by the Program Coordinator; 2) must be a dance minor.

The VSU Fitness/Wellness Center
The VSU Fitness/Wellness Center is located in Daniel Gymnasium and is open to VSU students, faculty, and staff. The Fitness/Wellness Center offers a plethora of cardio and weight training equipment for patrons to use.

Swimming Pool
The swimming pool is available for the Virginia State University community, student activities and outside vendors. The area contains spectator seats and a variety of equipment for use in the swimming pool.

Major

- Health, Physical Education, and Recreation, Bachelor of Science (B.S.) (p. 205)

Minor(s)

- Minor in Public Health (p. 207)
- Minor in Dance (p. 206)
- Minor in Health Science (p. 207)
- Minor in Recreation (p. 207)
- Minor in Sport Management (p. 208)

DANCE

DANC 100 FOUNDATIONS OF DANCE - 3 semester hours
An introduction to career options focusing on dance as education, performance, recreation and therapy- including the development of a dance portfolio. This course is offered online through Distance Education during the summer session. The course is offered as a hybrid course during the Fall and Spring.

DANC 101 BALLET I - 3 semester hours
Introduction to the basic concepts, movement and theory of ballet techniques.

DANC 102 BALLET II - 3 semester hours

Further studies in the concepts, movement and theory of ballet techniques.

Prerequisites: DANC 100; DANC 101 or consent of instructor

DANC 201 MODERN DANCE I

An introduction to the concepts and disciplines of Modern Dance. The utilization of basic concepts in modern dance techniques and terminology will be the central focus of classroom instruction.

DANC 202 MODERN DANCE II

An intermediate introduction to the concepts and disciplines of Modern Dance technique and terminology.

DANC 250 DANCE CONDITIONING

Introduction to the basic concepts, movement, and vocabulary of dance in combination with conditioning and toning exercises specifically for the dancer as an athlete in training. Aerobic dance activity, weightlifting, and toning of the muscles are included in the course activities. Dancer conditioning techniques such as Yoga, Pilates, Dunham, Horton, Martha Graham, et al. will be visited and revisited in various muscle conditioning and educational contexts.

DANC 203/204/205/206/207/208/209/210

A study of dance compositions based on elements of dance styles as the performing arts. Laboratory problems with criticism and preparation problems in staging dance for the theater.

DANC 301 JAZZ DANCE I

A basic introduction to build strength, flexibility, and endurance for execution of basic Jazz Dance concepts through floor exercises and combinations. Musicality in dance will be explored, and an understanding of proper body alignment and posture will be emphasized. There will also be an introduction to notable performers and some historical and cultural aspects of jazz through discussion and video observation.

DANC 302 JAZZ DANCE II

This course is designed to build strength, flexibility, and endurance for execution of intermediate level Jazz Dance concepts through floor exercises and combinations. Musicality in dance will be explored, and an understanding of proper body alignment and posture will be emphasized. There will also be an introduction to notable performers and some historical and cultural aspects of jazz through discussion and video observation.

DANC 328 ADVANCED DANCE COMPOSITION - 3 semester hours

The incorporation of various themes, music, staging and movement techniques. Students will have laboratory assignments of creating dances with small groups. Laboratory problems will include dance criticism and preparation problems in staging dance for the theatre as well as actual performances in front of a live audience.

DANC 355 DIRECTED RESEARCH – 3 semester hours

Structured research in dance presented as an undergraduate research publication or conference presentation.

DANC 378 HISTORY OF DANCE AND THE BLACK EXPERIENCE - 3 semester hours

An online survey course about dance history in America and the contributions of African Americans to historical and current trends in dance.

DANC 401 AFRICAN/CARIBBEAN DANCE FORMS I - 3 semester hour

Online course covering the historical and socio-cultural implications that influence dance movements found in Africa, the Caribbean, and the Americas.

DANC 402 AFRICAN/CARIBBEAN DANCE FORMS II - 3 semester hours

Intermediate to advanced movement sequences as well as socio-cultural implications that accompany traditional dances found in Africa and the Caribbean.

DANC 404 SOMATIC MOVEMENT AND THEATRE - 3 semester hours

Interwoven interdisciplinary movement techniques exploring the interface of dance and drama. Includes dancing through mental imagery, interpreting stories, scripts, poetry, and techniques of improvisation and composition.

DANC 471 INTERNSHIP SEMINAR - 1 semester hour

This course involves observation and practice of leadership in a supervised Dance organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth. Note: Conference with teacher of record is required immediately upon registration of this course.

Note: Conference with teacher of record is required immediately upon registration of this course.

DANC 472 INTERNSHIP - 3 semester hours

Supervised work experience under expert guidance at approved sites (as well as onsite) provided for the prospective professional in Dance. Emphasis is on various individual and group opportunities in dance performances, involving theories, techniques, managerial tasks, administrative procedures, dance production, and working with individuals, in the surrounding community including, public schools, community centers, recreation centers, dance studios, and government facilities. Internship is designed to secure enriching experiences in all aspects of the dance profession that will enable students to grow personally and professionally in the field of dance.

Note: Conference with teacher of record is required immediately upon registration of this course

HEALTH

HLTH 143 PRINCIPLES OFACCIDENT CAUSATION AND PREVENTION - 3 semester hours

This course is designed to present an overview of the dimensions of the accident problem with special attention to accident prevention, concepts and theories. Emphasis is placed on student safety and other legal issues, signs, signals, pavement markings, and right-of-away rules; interaction with other highway users (pedestrians, animals, motorcycles, bicycles, trucks, buses, trains, trailers, motor homes, ATVs, and other recreational users); time/space and risk management; alcohol and other drugs and driving; behavior aspects of crash prevention and the natural laws of driving; adverse driving conditions and emergencies; planning ahead for a trip.

HLTH 210 FOUNDATIONS OF HEALTH SCIENCE - 3 semester hours

This course is designed to provide students with an introduction to the areas of health science, public health and related allied fields. Concepts covered include history, principles and philosophies of these areas, ethics, career expiration and current trends and issues in the health field.

HLTH 311 SPECIAL TOPICS IN HEALTH - 3 semester hours

This course is designed to provide students with the opportunity to explore current trends and emerging issues in health.

HLTH 330 DRUG USE AND DRUG ABUSE EDUCATION - 3 semester hours

This course will discuss the different categories of drugs and explain their routes of administration. Patterns of illicit drug use, misuse, and abuse, including who uses illicit drugs and abuse of controlled substances and why they use them, will also be addressed. The legal, social, financial, and personal impact of drug abuse will be addressed.

HLTH 337 HEALTH PRACTICUM - 3 semester hours

Provides various opportunities for the professional student to work with individuals and groups in a variety of settings. These opportunities shall include observation and/or participation in health-related activities in school and/or community locations.

HLTH 340 COMMUNITY HEALTH - 3 semester hours

Designed to cover community health issues relating to foundations and organizations of public health. It includes the study of community health organizations and programs, epidemiology and disease control, environmental health, community and occupational safety and health, the health care system, aging, and other community health issues.

HLTH 342 CONTEMPORARY HEALTH ISSUES - 3 semester hours

Designed to meet the educational needs and interests of students through a study of contemporary health issues. Specific topics relevant for today's society will be determined and include women's health concerns, nutrition and nutritional disorders, pre-menstrual syndrome, sexually transmitted diseases, domestic violence, child abuse, rape, and cancer. Cardiovascular diseases and others may also be included.

HLTH 343 CULTURAL DIVERSITY IN HEALTH COUNSELING - 3 semester hours

This course focuses on health traditions of culturally diverse clients and how those traditions must be considered during effective patient education. A brief history of counseling is addressed and varies counseling theories are also explored. The course focuses on diversity between the generations and explores ageism and counseling approaches with senior citizens in area assistant living facilities.

HLTH 346 SCHOOL AND COMMUNITY HEALTH PROGRAMS - 2 semester hours

This course demonstrates the organization and administration of comprehensive school and community health programs. Topics include: student safety, child abuse, and other legal issues, health services, instruction, program planning and assessment, the role of administration in comprehensive school health, personal health and fitness, active lifestyles and health, environmental, mental and emotional health, family disruptions, nutrition, tobacco, alcohol and other drugs, school and consumer health, and disease prevention and treatment. An overview of the knowledge, skills, and processes needed to teach school health on the elementary, middle, and secondary levels is also provided.

HLTH 347 FIRST AID AND EMERGENCY MEDICAL CARE - 2 semester hours

Lectures and demonstrations on first aid measures for wounds, hemorrhages, burns, exposure, 141 sprains, dislocations, fractures, unconscious conditions, suffocation, drowning, and poisons, with skill training in all procedures. Emphasis will be given to the following areas: safety and other legal issues, activating emergency medical services, safety and emergency care (first aid, CPR, AED, universal precaution), injury prevention, rehabilitation, an understanding of the basic content knowledge needed to teach first aid, and the structure and function of selected body systems. Successful completion of this course may lead to certification by the American Heart Association, the National Safety Council or the American Red Cross in First Aid and Cardiopulmonary Resuscitation.

HLTH 348 DIRECTED RESEARCH - 3 semester hours

This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging health problems and issues in the health care industry.

HLTH 349 SCIENTIFIC READINGS IN HEALTH – 3 semester hours

A course that provides comprehensive knowledge, understanding and concepts in various areas of health. Students are required to read scientific peer reviewed articles in the health profession and demonstrate their understanding of peer reviewed article structure and comprehension of statistical research methods.

HLTH 440 HUMAN REPRODUCTION AND SEXUAL DEVELOPMENT – 3 semester hours

This course is designed to provide a comprehensive look at human reproduction and sexual development. Anatomy and physiology of male and female reproductive systems; psychosocial sexual development, sources of sexual outlet, family planning and relationships are among discussion topics.

HLTH 441 HEALTH TEACHING METHODS AND MATERIALS - 3 semester hours

Fundamental methods of health teaching as applied to school and public health education. Materials applicable to health education, evaluation techniques, preparation of health training units and bibliographies, and surveys of current literature in the field of health education are presented and/or researched.

HLTH 443 EPIDEMIOLOGY AND BIOSTATISTICS - 3 semester hours

This course emphasizes the goals and objectives of epidemiology, its policy and procedure, and its foundation and support in health care information are the focus of this course. Investigation of an epidemic, measures of mortality, incidence and prevalence, measures of risk, biological variability, probability, screening, sampling, statistical significance, correlation, multiple regression, survival analysis, retrospective and prospective studies

HLTH 445 DRIVER EDUCATION INSTRUCTIONAL PRINCIPLES - 3 semester hours

This course is designed to provide an analysis of the rules and regulations governing driver education in the Commonwealth of Virginia with application to program organization and administration, and the development and conduct of learning experiences in the classroom and laboratory. It also provides a guide for teachers, supervisors, and administrators in the organization, administration and planning of a driver and traffic safety curriculum.

Prerequisite: HLTH 143

HLTH 447 NEEDS ASSESSMENT AND PLANNING HEALTH PROMOTION PROGRAMS - 3 semester hours

Principles of program planning in public health education, including needs assessment, health hazard appraisal, community analysis and organization, selection of program topics, coordination of 142 health education and health promotion programs in school, community, occupational or clinical settings, audience analysis, task analysis, and the role of evaluation.

HLTH 450 INSTRUCTIONAL STRATEGIES FOR HEALTH EDUCATION - 3 semester hours

Application of innovative strategies for teaching health education in the elementary, middle, and secondary school level. Attention is given to conceptualizing instruction, specifying instructional objectives, planning properly written units and lessons, utilizing various instructional methods, selecting and using instructional materials, and evaluating teaching effectiveness and technology. Topics include personal health and fitness-related issues such as: mental and emotional health, healthy social development skills, basic consumer, environmental and school health, nutrition, tobacco, alcohol and other drugs, basic disease prevention and treatment strategies, and the relationship between a physically active lifestyle and health.

HLTH 451 INDEPENDENT STUDY IN HEALTH - 3 semester hours

This course provides an opportunity for students to work independently on health-related topics approved under the guidance of an instructor.

HLTH 471 INTERNSHIP SEMINAR - 1 semester hour

This course involves observation and practice of leadership in a supervised health organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth.

HLTH 472 INTERNSHIP – 3 semester hours

Supervised work experience under expert guidance at approved sites provided for the prospective professional in Health. Emphasis is on various individual and group opportunities in health agencies, involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally.

GENERAL EDUCATION HEALTH AND WELLNESS

HPER 160 TEAM SPORTS/WELLNESS – 1 semester hour

This course is designed to provide students with the development of basic skills and abilities needed to perform a variety of team sports and their relationship to personal health, wellness, and physical activity.

HPER 162 TEAM SPORTS II/WELLNESS- 1 semester hour

A continuation of HPER 160, this course is designed to provide students with the development of basic skills and abilities needed to perform a variety of team sports and their relationship to personal health, wellness, and physical activity.

HPER 165 PERSONAL FITNESS- 1 semester hour

The personal fitness curriculum is designed with the intent of improving many aspects of wellness including cardiovascular fitness, muscular strength and endurance, flexibility, mental health, nutritional and personal safety. This class incorporates a wide variety of activities in order to target each one of these aspects. Students will also be introduced to fitness technology to help monitor the fitness progression and workouts.

HPER 166 BEGINNING SWIMMING/WELLNESS- 1 semester hour

This course is designed for non-swimmers to equip students with basic water skills and knowledge needed to make them reasonably safe while in, on, or about the water. Satisfactory 143 completion of this course enables the student to meet the requirements for the American Red Cross Beginner Swimming Certificate.

HPER 167 INTERMEDIATE SWIMMING/WELLNESS – 1 semester hour

Refine five basic strokes; development of endurance; drown proofing and water safety techniques; standing and running dives, and the relationship of swimming skills to personal health and fitness. This course is designed for the student who has passed beginning swimming or who already possesses beginner swimming skills.

HPER 169 GYMNASTICS/WELLNESS – 1 semester hour

A basic course in gymnastics designed to assist students in acquiring fundamental skills in stunts, tumbling, and selected apparatus, and their relationship to personal health and fitness.

HPER 170 HEALTH AND WELLNESS- 2 semester hours

Health encompasses all aspects of an individual's wellbeing. School, work, relationships, social, and family responsibilities are all affected by the quality of health. This course is designed to help participants establish lifestyles that can lead to better health.

HPER 171 LIFETIME SPORTS/WELLNESS – 1 semester hour

Development of fundamental skills and knowledge of rules needed to perform a variety of individual sports and their relationship to personal health and fitness.

HPER 172 LIFETIME SPORTS II/WELLNESS- 1 semester hour

A continuation of HPER 171, this course is designed to provide a development of fundamental skills and knowledge of rules needed to perform a variety of individual sports and their relationship to personal health and wellness.

HPER 182 SKILLS/FIELD EXPERIENCE IN COACHING 1 semester hour

The coaching practicum involves three separate practicum experiences (softball, baseball, basketball, soccer, tennis, etc.) and is designed to provide the student with a realistic experience in a setting and level similar to that in which he/she wishes to obtain employment. The practicum experience is a 50-hour learning opportunity in which the student assist in all phases of the operation of an athletic program. The student may not be the head coach, unless a direct supervisor is present.

HPER 188 BEGINNING TENNIS – 1 semester hour

An introductory course teaching the fundamental skills of tennis. Basic strokes; the forehand and the backhand drives, the flat serve, volley, lob, and smash; history, rules, scoring, and court etiquette. Basic singles and doubles court play and game strategies. In addition, warm-up and

cool-down procedures, as well as conditioning and nutrition for sport participation are covered.

HPER 190 AQUA AEROBICS – 1 semester hour

This course is designed to provide students with the knowledge, skills, and abilities needed to develop proper water aerobics form and techniques and to explore the benefits of water aerobic exercise. The proper of use of water aerobics exercise equipment is also explored.

SPORT MANAGEMENT

PESM 200 – FOUNDATIONS OF SPORT MANAGEMENT- 3 semester hours

This course will introduce students to the sports industry, the history and principles of sports, the wide range of career opportunities involving sports, and the economic impact of sports in America.

PESM 301 SPECIAL TOPICS IN SPORT MANAGEMENT - 3 semester hours

This course provides opportunities for students to pursue topics of interest in sport management beyond those accessible via the standard curriculum. The application of content to authentic situations is stressed.

PESM 330 SPORT MARKETING - 3 semester hours

A study and critical examination of the marketing mix (product, price, place and promotion) related to sports marketing. Special emphasis will be placed on production and advertising and sales techniques applied to educational environments, athletic programs and to amateur and professional sports.

PESM 350 SPORT FACILITY AND EVENT MANAGEMENT - 3 semester hours

This course will provide students with effective management skills for the operation of sport facilities in regard to operations, security, and event planning.

PESM 402 DIRECTED RESEARCH - 3 semester hours

This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging sport management issues in the instructional program.

PESM 405 SPORT IN AMERICAN SOCIETY - 3 semester hours

Discusses the phenomenon of sport as it represents one of the most pervasive social institutions today. The major theme of this course is to demonstrate how sports reflect and enforce the beliefs, values, and ideologies of society. Emphasis is placed on changing attitudes and current trends in the world of sports. The course will be taught from a sociological and philosophical perspective.

PESM 406 SPORT LAW - 3 semester hours

This course is the identification and application on various areas of law to the sports industry. Includes how constitutional law, contract law, employment law and tort law impact sport management decisions and the sports industry.

PESM 408 FINANCIAL ASPECTS OF RECREATION AND SPORT MANAGEMENT - 3 semester hours

This course will investigate fund raising activities and the appropriate use of financial resources within the sport industry.

PESM 472 INTERNSHIP – 3 semester hours

Supervised work experience under expert guidance at approved sites provided for the prospective professional in sport and recreation management. Emphasis is on various individual and group opportunities in sport and recreation management organizations involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally. 300 supervised hours required.

PHYSICAL EDUCATION

PHED 120 FOUNDATIONS OF PHYSICAL EDUCATION - 2 semester hours

An introduction to the personal and professional challenges and opportunities available in the field of human movement. Its primary purpose is to help the student gain insight into the broad discipline of physical education; to acquaint the student, generally, with the organized body of knowledge embraced within the discipline of physical education; and to show the proper relationship of physical education to the fields of health and recreation.

PHED 125 BODY MECHANICS -1 semester hour

This course is a requirement for all physical education majors. The primary purpose of this course is to acquaint students with the basic knowledge, understanding, and value of physical activity as related to optimal healthful living. Emphasis is placed on improving students' performance of basic gross motor skills.

PHED 126 THEORYAND PRACTICE OF GYMNASTICS AND APPARATUS -1 semester hour

Acquaints students with basic knowledge, understanding, and value of gymnastics as related to optimal healthful living. Emphasis is placed on improving students' performance of basic gross motor skills, and the utilization of physical fitness assessment data to plan and implement a lifelong personal fitness program. Content includes the incorporation of scientific principles of movement as they apply to personal health- related fitness (flexibility, strength, aerobic, endurance, body composition) and personal skill-related fitness (coordination, agility, power, balance, and speed).

PHED 127 BEGINNING SWIMMING -1 semester hour

Course is designed to equip students with basic water skills and knowledge needed to make them reasonably safe while in, on, or about the water. Attention given to safety and emergency care (First Aid, CPR, Universal Precaution).

PHED 128 INTERMEDIATE SWIMMING -1 semester hour

Upon completion of this course, students should comprehend the elements of good swimming. Instruction in intermediate swimming is given to students who have taken and passed the beginner's swimming course, or those who have never had swimming instruction but can pass the beginner's swimming test.

PHED 200 TEAM SPORTS I - 1 semester hour

The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach soccer, volleyball, and softball on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary one unit and three lesson plans for each activity. The cultural significance of team sports, competition, and sportsmanship is also included.

PHED 201 TEAM SPORTS II -1 semester hour

The development of basic skills and an understanding of the knowledge, skills and abilities needed to teach a variety of team sports including basketball, softball, and flag football on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary units and lesson plans for each activity. The cultural significance of team sports, competition, and sportsmanship is also included.

PHED 211 LIFETIME SPORTS I -1 semester hour

The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach a variety of individual sports, including archery, badminton, and bowling on the 147 preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary unit and lesson plans for each activity. The cultural significance of individual sports, competition, and sportsmanship is also included.

PHED 212 LIFETIME SPORTS II – 1 semester hour

The development of physical skills and an understanding of the knowledge, skills, and abilities needed to teach a variety of individual sports, including golf, tennis, track and field on the preK-12 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary one unit and lesson for each activity plans. The cultural significance of individual sports, competition, and sportsmanship is also included.

PHED 217 LIFESAVING - 2 semester hours

Course designed to enable students to meet the requirements for the American National Red Cross Advanced Lifesaving Certificate.

Prerequisites: PHED 127; PHED 128

PHED 232 COACHING AND OFFICIATING - 2 semester hours

Concepts and competencies applicable for the physical educator who desires breadth and depth of preparation in athletic coaching and officiating. Designed to prepare the student to understand the role of coaching and the art of officiating in ways that complement his/her basic knowledge of each course activity and its skills.

PHED 238 WATER SAFETY - 3 semester hours

Satisfactory completion of this course qualifies the student for the American National Red Cross Instructor's Certificate. Prerequisite Advanced Swimming; Intermediate level or above.

Prerequisite Advanced Swimming; Intermediate level or above.

PHED 274 HISTORY, PRINCIPLES AND OBJECTIVES OF PHYSICAL EDUCATION - 3 semester hours

The study of the historical foundations of physical education from earlier times to the present and their implications for society. Attention is given to understanding principles which have been developed to insure a valid interpretation of the place of the physical education program. Content also includes the cultural significance of dance, leisure, competition, and sportsmanship, and the value of physical fitness.

Prerequisites: PHED 120

PHED 329 MOTOR LEARNING - 2 semester hours

Course designed to provide the student with an understanding of motor behavior. It is specifically concerned with the efficacy of motor skill acquisition and motor skill performance. Specific topics include classifications and measurement of motor performance; the role and function of sensory processes, perception, memory, and attention; and the delivery of feedback and structure of practice. This course also covers the basics of research design.

PHED 335 RHYTHMIC FORMS -1 semester hour

Explores the historical perspective and cultural significance of American and international folk, square, and social dance, and their steps, patterns, and formations. Integrates an understanding of personal health and skill-related fitness components (e.g., flexibility, strength, coordination and balance). And the knowledge, skills, and processes needed to teach rhythmic forms and dance. Attention given to the selection, development, and utilization of appropriate instructional resources, and technology.

PHED 338 KINESIOLOGY - 3 semester hours

Course designed to provide the student with an understanding of the anatomical and biomechanical 148 bases of human motion, with applications for motor skill acquisition, and developmental and rehabilitative exercise. This course also emphasizes the application of mechanical physics to body movement and sports medicine.

PHED 339 MEASUREMENT AND EVALUATION IN HEALTH AND PHYSICAL EDUCATION - 3 semester hours

The focus of this course is on the development of evaluation and measurement skills used by teachers and administrators of physical education throughout the nation. Major emphasis is placed on interpreting descriptive statistics and developing test construction techniques. Students are given many opportunities to administer physical performance tests and to acquire knowledge of different grading techniques.

PHED 343 ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS AND ACTIVITIES - 2 semester hours

Provides knowledge, skills, and processes needed to teach elementary physical education. Includes the election, development, and utilization of appropriate instructional methods, resources, and technology. Emphasis is place on the importance of the development and maintenance of physically active lifestyles and good health, skills theme approaches and developmental physical education; activities designed to help students understand, develop and value personal fitness; cooperative activities; and activities for special and diverse populations including gifted and talented. Field experiences in this course will provide opportunities for pre-candidates to observe and participate in different roles as a teacher in a school setting prior to doing student teaching. Precandidates will observe experienced teachers in a clinical setting to properly orientate them to the teaching profession.

Prerequisites: EDUC 201 and 202.

PHED 344 MIDDLE AND SECONDARY SCHOOL PHYSICAL EDUCATION METHODS AND ACTIVITIES - 3 semester hours

Methods and materials of teaching physical education in secondary schools. Emphasis is on program content, and the selection, organization, and guidance of learning experiences appropriate for secondary level students. Content also includes a review of personal health-related (flexibility, strength, aerobic, endurance, body composition) and skill-related (coordination, agility, power, balance, speed) fitness components, an understanding of the knowledge, skills, and processes needed to teach cooperative activities, team and individual activities, the relationship between a physically active lifestyle and health. The value of lifelong fitness programs, activities for the mentally and physically challenged, activities for the talented and gifted and the cultural significance of dance, leisure, competition, and sportsmanship. Field experiences in this course will provide opportunities for pre-candidates to observe and participate in different roles as a teacher in a school setting prior to doing student teaching. Pre-candidates will observe experienced teachers in a clinical setting to properly orient them to the teaching profession.

PHED 400 ADAPTED PHYSICAL EDUCATION - 3 semester hours

This course is designed to provide the student with an understanding of disabling conditions, definitions, and implications as they relate to special education, adapted physical education, injury prevention and rehabilitation, the regular physical education program, integration, and future trends. Emphasis is placed on instructional methods and materials as well as teaching laboratory practical experiences, teaching and planning methods appropriate for exceptional students and the integration of technology.

PHED 401 ORGANIZATION AND ADMINISTRATION OF HEALTH PHYSICAL EDUCATION, RECREATION AND ATHLETIC PROGRAMS - 3 semester hours

Provides a basic understanding of the many aspects of administering health, physical education, 149 recreation and athletic programs on the pre k-12 levels, in colleges and universities, as well as in recreational and private industry sectors. Content includes the need for quality instruction, risk management, student safety and other legal issues, the role of administration in comprehensive school health programs and personnel and programmatic planning, management, and assessment. Contemporary and computer-driven team building exercises, research presentations, and community service projects, afford students opportunities to integrate theoretical concepts into practical application, and strengthen their verbal, written and technological levels of proficiency.

PHED 402 STUDENT TEACHING IN HEALTH AND PHYSICAL EDUCATION -2 semester **hours**

This course is designed to provide supervision in the content area for pre-service secondary health and physical education candidates and involves observing student teachers. Coursework includes class instruction on student developed and implemented projects in assessment, technology, school culture as well as lesson and unit planning.

Co-requisites: EDUC 401; EDUC 402

PHED 403 PHYSIOLOGY OF EXERCISE - 3 semester hours

This course is designed to provide the student with a better understanding of the physiological aspects of physical activity, relationships between physical activity, fitness and health, knowledge of the basic fundamentals necessary to understand and apply exercise physiology, and guidelines for devising and managing programs for both active and sedentary individuals. Physical fitness assessments will be conducted during this course.

PHED 407 SPORT PSYCHOLOGY - 3 semester hours

This course presents the theoretical and empirical foundations of sport psychology. Operating from a conceptual rather than an applied framework, this class develops an understanding of social psychological phenomena and processes related to participation in sport and physical activity (e.g., personality, anxiety, arousal, achievement motivation, social facilitation, aggression, emotions, and fan behavior).

RECREATION

RECR 100 FOUNDATIONS OF RECREATION AND LEISURE - 3 semester hours

Community recreation programs, including camping, survey of agencies, activities in the recreation program, recreation as a profession, trends, and an introduction to the literature in the field.

RECR 200 INTRODUCTION TO THERAPEUTIC RECREATION - 3 semester hours

Theoretical, philosophical, and historic foundation of therapeutic recreation; role of treatment and rehabilitation with a survey of major services and settings.

RECR 231 TOURISM AND COMMERCIAL RECREATION - 3 semester hours

Analysis of private, commercial, and industrial recreation fields, focusing on economic impact, marketing strategies, consumer protection, and career opportunities.

RECR 301 SPECIAL TOPICS IN RECREATION - 3 semester hours

This course provides opportunities for students to pursue topics of interest in Recreation beyond those accessible via the standard curriculum. The application of content to authentic situations is stressed.

RECR 321 LEISURE PROGRAM DEVELOPMENT - 3 semester hours

An examination of the principles and practices of leisure programming in terms of needs assessments, development, content, public relation, funding, facilities, leadership, and evaluation. 150 Program methodologies in municipal, voluntary, private, religious, and commercial agencies will be examined.

RECR 350 LEISURE SERVICE MARKETING - 3 semester hours

This course involves the study of the theoretical/practical application of marketing/advertising strategies in the development/delivery of leisure services.

RECR 351 MANAGEMENT OF LEISURE SERVICES - 3 semester hours

Problems commonly encountered in establishing and organizing leisure programs, services, playgrounds, youth centers, community centers, campus and other areas and facilities.

RECR 352 CAMP COUNSELING/OUTDOOR LEISURE ACTIVITIES - 3 semester hours

Knowledge and skills of contemporary, non-competitive activities suitable for participation throughout life, e.g. camping, hiking, walking, etc. Special emphasis is placed on the tenets of outdoor cooperative living.

RECR 353 RECREATION ACTIVITIES AND LEADERSHIP METHODS - 3 semester hours

Principles of leading, planning, and supervising a wide range of social recreational activities including parties, dances, picnics, special celebrations, and a variety of quiet games.

RECR 354 RECREATIONAL AREAS AND FACILITIES - 3 semester hours

Study of planning and design concepts, standards and guidelines, use continuum, grants, and planning of selected areas and facilities; parks, pools, centers, and recreation resource areas development. Major emphasis placed upon the construction, planning, layout, and maintenance of recreation areas and facilities.

RECR 402 DIRECTED RESEARCH IN RECREATION - 3 semester hours

This course is designed to provide opportunities for the pursuit of in-depth knowledge and understanding of a variety of significant and emerging recreation issues in the instructional program.

RECR 453 THEORY AND PHILOSOPHY OF RECREATION - 3 semester hours

An examination of philosophical concepts and issues of recreation and leisure with a focus upon current trends and issues in professional leisure service delivery. Play, games, work, and recreation are studied as aspects of human behavior affected by global, physical, societal, and personal concerns.

RECR 471 INTERNSHIP SEMINAR - 1 semester hour

This course involves observation and practice of leadership in a supervised Recreation organization. Students must investigate all aspects of potential sponsoring organizations, their expectations of internship, and how they can maximize their field experience toward professional growth.

RECR 472 INTERNSHIP - 3 semester hours

Supervised work experience under expert guidance at approved sites provided for the prospective professional in Recreation. Emphasis is on various individual and group opportunities in recreation organizations involving theories, techniques, managerial tasks, administrative procedures and working with exceptional individuals. Internship is designed to secure enriching experiences in all aspects of the organization that will enable students to grow personally and professionally.

Prerequisite: Senior Standing or consent of instructor.

Health & Physical Education Major, Bachelor of Science (B.S.)

Freshman Year		**Credit Hours**
ENGL 110	Composition I	3
ENGL 111	Composition II	3
HPER 170	Health And Wellness	2
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
PHED 120	Foundations Of Physical Ed	2
PHED 125	Body Mechanics	1
GE History Electives (p. 146)		3
GE Social Science Electives (p. 147)		3
Restricted Elective	Technology Course	3
BIOL 120 & 120	Principles Of Biology I and Principles Of Biology I	4
	Credit Hours	**30**
Sophomore Year		
PHED 127 or PHED 128	Beginning Swimming or Intermediate Swimming	1
PHED 200 or PHED 201	Team Sports I or Team Sports II	1
PHED 232	Coaching And Officiating	2
PHED 274	History Principles Objective P	3
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
GE Literature Electives (p. 147)		3
PHED 126	Theory & Practice Gym Apparatu	1
PHED 211 or PHED 212	Lifetime Sports I or Lifetime Sports II	1
Minor Course	See Minor Requirements	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
HLTH 347	First Aid Emergency Medical Ca	2
BIOL 218 & 218	Human Anatomy & Physiology I and Human Anatomy & Physiology I	4
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
PHED 329	Motor Learning	2

PHED 335	Rhythmic Forms	1
PHED 338	Kinesiology	3
Minor Course	See Minor Requirements	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
PHED 339	Measurement Evaluation Health	3
PHED 400	Adapted Physical Education	3
PHED 401	Org & Adm Hlth Pe & Athletic P	3
PHED 403	Physiology of Exercise	3
Minor Course	See Minor Requirements	3
Minor Internship - 472	See Minor Requirements	3
Minor Course	See Minor Requirements	3
Minor Course	See Minor Requirements	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

Substitutions must be approved by College Dean and Department Chair

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
PHED 125	Body Mechanics	1
PHED 120	Foundations Of Physical Ed	2
PHED 127	Beginning Swimming	1
or PHED 128	Intermediate Swimming	
PHED 200	Team Sports I	1
or PHED 201	Team Sports II	
PHED 232	Coaching And Officiating	2
PHED 274	History Principles Objective P	3
PHED 126	Theory & Practice Gym Apparatu	1
PHED 211	Lifetime Sports I	1
or PHED 212	Lifetime Sports II	
HLTH 347	First Aid Emergency Medical Ca	2
PHED 329	Motor Learning	2
PHED 335	Rhythmic Forms	1
PHED 338	Kinesiology	3
PHED 339	Measurement Evaluation Health	3
PHED 400	Adapted Physical Education	3
PHED 401	Org & Adm Hlth Pe & Athletic P	3
PHED 403	Physiology of Exercise	3
Total Credit Hours		**32**

Code	Title	Credit Hours
BIOL 218 & 218	Human Anatomy & Physiology I and Human Anatomy & Physiology I	4
Minor Related Courses	See Specific Minor Requirements	18
Total Credit Hours		**22**

See Advisor or Department Chair for selection and approval of electives.

Code	Title	Credit Hours
Restricted Electives		**3**
Technology Elective		
Unrestricted Electives		**30**
Total Credit Hours		**33**

Summary of Graduation Requirements

Code	Title	Credit Hours
General Education Courses		33
Core Requirements		32
Major/Concentration Requirements		22
Restricted Electives		3
Unrestricted Electives		30
Total Credit Hours		**120**

Health, Physical Education, and Recreation, Minor in Dance

(HPER Majors)

All courses for the Minor must be completed with a minimum grade of C in each course, and a minimum overall grade-point average of 2.0. A Minor Request Form must be completed with proper signatures and filed in the Registrar's Office. Successful completion of the Minor is indicated on the transcript.

Students in any college at Virginia State University may declare the Community Health Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

Code	Title	Credit Hours
Required Courses		
DANC 100	Foundations of Dance	3
DANC 203	Repertory	3
or DANC 204	Repertory	

or DANC 206	Repertory	
or DANC 207	Repertory	
or DANC 208	Repertory	
or DANC 209	Repertory	
or DANC 210	Repertory	
DANC 472	Internship	3
Select a minimum of 9 credit hours from the following:		9
DANC 101	Ballet I	
or DANC 102	Ballet II	
or DANC 250	Dance Conditioning	
or DANC 301	Jazz Dance I	
or DANC 355	Directed Research	
or DANC 378	Hist Of Danc & Black Experienc	
or DANC 401	African/Caribbean Dance Forms	
or DANC 402	African/Caribbean Dance Forms	
or DANC 404	Somatic Movement And Theater	
Total Credit Hours		**18**

Health, Physical Education, and Recreation, Minor in Health Science

(HPER Majors)

All courses for the Minor must be completed with a minimum grade of C in each course, and a minimum overall grade-point average of 2.0. A Minor Request Form must be completed with proper signatures and filed in the Registrar's Office. Successful completion of the Minor is indicated on the transcript.

Students in any college at Virginia State University may declare the Community Health Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

Code	Title	Credit Hours
Required Courses		
HLTH 210	Foundations of Health Science	3
HLTH 343	Cultural Diversity HLTH Counse	3
HLTH 349	Scientific Readings In Health	3
HLTH 472	Internship	3
Select a minimum of 6 semester hours from the following:		6
HLTH 311	Special Topics in Health	
HLTH 330	Drug Use & Drug Abuse Educatio	
HLTH 337	Health Practicum	
HLTH 340	Community Health	
HLTH 342	Contemporary Health Issues	
HLTH 346	School & Community Health Prog	
HLTH 348	Directed Research	
HLTH 440	Human Reproduction/Sexual Deve	
HLTH 441	HLTH Teach Methods & Materials	
HLTH 443	Epidemiology & Biostatistics	3
HLTH 451	Independent Study I	
HPER 170	Health And Wellness	
Total Credit Hours		**21**

Health, Physical Education, and Recreation, Minor in Public Health

HPER Majors

All courses for the Minor must be completed with a minimum grade of C in each course, and a minimum overall grade-point average of 2.0. A Minor Request Form must be completed with proper signatures and filed in the Registrar's Office. Successful completion of the Minor is indicated on the transcript.

Students in any college at Virginia State University may declare the Health Science Minor and satisfy the requirements by completing a minimum of 21 semester hours as indicated below.St

Code	Title	Credit Hours
Required Courses: 15 Semester Hours		**15**
HLTH 210	Foundations of Health Science	
HLTH 342	Contemporary Health Issues	
HLTH 340	Community Health	
HLTH 443	Epidemiology & Biostatistics	
HLTH 472	Internship	
Select a minimum of 6 semester hours from the following:		**6**
HLTH 311	Special Topics in Health	
HLTH 330	Drug Use & Drug Abuse Educatio	
HLTH 337	Health Practicum	
HLTH 343	Cultural Diversity HLTH Counse	
HLTH 348	Directed Research	
HLTH 447	Needs Assess & Plan HLTH Promo	
Total Credit Hours		**21**

Students are strongly encouraged to consult with their advisor regarding enrolling in HLTH 471 Internship Seminar to prepare for HLTH 472 Internship.

Health, Physical Education, and Recreation, Minor in Recreation

(HPER Majors)

All courses for the Minor must be completed with a minimum grade of C in each course, and a minimum overall grade-point average of 2.0. A Minor Request Form must be completed with proper signatures and filed in the Registrar's Office. Successful completion of the Minor is indicated on the transcript.

Students in any college at Virginia State University may declare the Community Health Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

Code	Title	Credit Hours
Required Courses		
RECR 100	Found of Recreation & Leisure	3
RECR 231	Industrial And Commercial Recr	3
RECR 472	Internship	3
Select a minimum of 9 semester hours from the following:		9

RECR 200	Introd Therapeutic Recreation	
RECR 301	Special Topics in Recreation	
RECR 321	Leisure Program Development	
RECR 354	Recreational Areas & Facilitie	
RECR 402	Directed Research in Recreatio	
RECR 453	Theory & Philosophy Recreation	
Total Credit Hours		**18**

[1] Students are strongly encouraged to consult with their advisor regarding enrolling in RECR 471 to prepare for RECR 472.

Health, Physical Education, and Recreation, Minor in Sport Management

(HPER Majors)

All courses for the Minor must be completed with a minimum grade of C in each course, and a minimum overall grade-point average of 2.0. A Minor Request Form must be completed with proper signatures and filed in the Registrar's Office. Successful completion of the Minor is indicated on the transcript.

Students in any college at Virginia State University may declare the Community Health Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

Code	Title	Credit Hours
Required Courses		
PESM 200	Foundations of Sport Mgmt	3
PESM 330	Sport Marketing	3
PESM 472	Internship	3
Select a minimum of 9 semester hours from the following:		9
PESM 301	Special Topics in Sport Mgmt	
PESM 350	Sport Facilty & Event Mgmt	
PESM 402	Directed Research	
PESM 405	Sport in American Society	
PESM 406	Sport Law	
PESM 408	Finc Aspects Recr & Sport Mgmt	
PESM 472	Internship	
Total Credit Hours		**18**

Department of Teaching and Learning

Chairperson: Dr. C. Adrainne Thomas
Location: Alfred W. Harris Academic Commons Building, Room 2215
Contact Information: (804) 524-6917 | cathomas@vsu.edu

Department Overview

The Department of Teaching and Learning in the College of Education at Virginia State University offers dynamic and engaging academic programs that lead to a **Bachelor of Science in Education (B.Ed.) degree in Elementary Education**, **Special Education**, **Middle School Education**, and **Innovative Technology Education**. These programs are designed to equip future educators with the knowledge, skills, and dispositions necessary to effectively prepare the next generation of learners. Additionally, the department offers a **Bachelor of Science (B.S.) degree in Interdisciplinary Studies** with a **minor in Community-Based Education**. Our education programs provide safe and effective learning environments in VSU's state-of-the-art facilities, while also exposing students to real-world teaching environments as part of the degree.

All education degree programs are designed to equip pre-service teachers with the skills to assess student learning, implement effective instructional strategies, integrate technology to enhance student engagement, and monitor academic progress. These programs prepare graduates to serve diverse student populations, including those from varied ethnic and cultural backgrounds. Students benefit from early field experiences, student teaching, and internship opportunities that provide hands-on learning in real-world educational settings. Coursework is aligned with state licensure requirements and the Interstate Teacher Assessment and Support Consortium (InTASC) standards to ensure graduates are well-prepared for professional practice.

Mission Statement

The mission of the College of Education at Virginia State University is to promote quality programs, using current research and technology-based learning to prepare effective reflective practitioners who are competent, caring and culturally-responsive.

The conceptual framework reflects the shared vision for preparing quality educators. The overall goal of the College of Education at Virginia State University, given its underlying vision, mission, and philosophy, is to facilitate the development of reflective practitioners who analyze the emotions, experiences, and actions of others to create an unbiased learning environment and serve as advocates for educational justice for all. This goal undergirds the development of successful candidates who are competent, caring, and culturally responsive. Through reflective inquiry, candidates use professional knowledge to enhance learning for all students.

Accreditation Information

All endorsement programs are approved by the Virginia Department of Education (VDOE) and are accredited by the Council for the Accreditation of Educator Preparation (CAEP).

Department Goals

The department's goals are research-based and grounded in the following basic tenets:

- To provide candidates with the tools necessary to become reflective practitioners who are competent, caring, and effective.
- To prepare candidates who exhibit adequate knowledge of subject-specific content.

- To develop candidates that foster a respect for diversity and cultural differences, including gender, ethnicity, race, socioeconomics, and exceptionalities, that will assist in meeting the needs of all people for an evolving global community.
- To cultivate candidates who promote the application of research and evidence-based practices in their postgraduate careers.
- To prepare candidates who will be able to use educational and informational technology to enhance student learning and use technology-based assessments for data-driven decision making.
- To produce candidates who will demonstrate a commitment to professionalism and respect for the accepted legal and ethical norms in education, schools, and communities.
- To develop candidates who are critical thinkers committed to service and value lifelong learning.

Program Listings

Bachelor of Science Education (B.S.Ed.)
Elementary Education
The Bachelor of Science Education in Elementary Education equips pre-service teachers with the knowledge, skills, and dispositions necessary to teach foundational concepts to children and youth. The program is designed to fulfill three primary objectives: (1) provide elementary-aged students with a strong foundation in core academic subjects; (2) help students develop an understanding of their social and cultural environment; and (3) foster an active interest in their roles within society through a variety of instructional activities.

Special Education
The Bachelor of Science Education in Special Education prepares pre-service teachers to become effective special education professionals in PK–12 school settings. This program emphasizes the development of knowledge, skills, and dispositions essential for teaching and supporting children and youth with exceptionalities. Pre-service teachers will be equipped to address both the academic and behavioral needs of students with disabilities, from ages five through twenty-one. The program offers a comprehensive pathway for future educators to deliver specialized services that promote access to and success within the general education curriculum.

Middle School Education
The Bachelor of Science Education in Middle School Education prepares pre-service teachers to serve in grades 6–8 classrooms. The program offers concentration areas in Mathematics, Science, English, and History/Social Science. Through this program, students acquire the knowledge and skills necessary to plan and deliver instruction that supports the academic and social development of middle school learners in both school and community settings. Students enrolled in a teaching concentration will be equipped to apply their knowledge and skills in both educational and community-based environments. The program emphasizes real-world teaching experiences, exposing students to a variety of instructional settings that involve working with children and adolescents.

Innovative Technology Education
The Bachelor of Science in Education in Innovative Technology Education (Career and Technical Education) prepares pre-service teachers to develop strong academic, technical, and critical thinking skills necessary for solving real-world problems through the application of technological principles. Candidates will explore the societal impact of technology and gain proficiency in using digital tools for effective communication. The program also emphasizes how technology can be integrated to enhance teaching and promote academic achievement across all content areas.

Bachelor of Science in Interdisciplinary Studies (B.I.S) with a minor in Community Based Education
The Community-Based Education minor is a non-licensure program designed to equip students with the knowledge and skills to support children, youth, and older adults in various educational and community settings. The program emphasizes strategies for developing collaborative partnerships and planning effective educational programs within community-based agencies. Through coursework and applied experiences, students will acquire practical tools to contribute meaningfully to lifelong learning initiatives that extend beyond traditional classroom environments.

Major(s)

- Elementary Education, Bachelor of Science in Education (B.S.E.D.) (p. 212)
- Innovative Technology Education, Bachelor of Science in Education (B.S.E.D.) (p. 213)
- Middle School Education, Bachelor of Science in Education with a Concentration in English Education (B.S.E.D.)
- Middle School Education, Bachelor of Science in Education with a Concentration in History and Social Science Education (B.S.E.D.) (p. 216)
- Middle School Education, Bachelor of Science in Education with a Concentration in Mathematics Education (B.S.E.D.)
- Middle School Education, Bachelor of Science in Education with a Concentration in Science Education (B.S.E.D.) (p. 218)
- Special Education, Bachelor of Science in Education (B.S.E.D.) (p. 219)
- Interdisciplinary Studies, Bachelor of Science in Interdisciplinary Studies with a Minor in Community Based Education (B.S.) (p. 221)
- Interdisciplinary Studies, Bachelor of Science in Interdisciplinary Studies with a Minor in Elementary Education (B.S.) (p. 222)
- Interdisciplinary Studies, Bachelor of Science in Interdisciplinary Studies with a Minor in Special Education (B.S.) (p. 223)

Minor(s)

- Minor in Secondary Education (p. 225)

CBED 200 INTRO TO COMMUNITY BASED EDUCATION (FE) - 3 Semester Hours

This course presents the role, function and operation of community-based programs in agency and alternative school settings. Students learn about instruction, technology and assessment for 1) children and youth, 2) adults and 3) the elderly. An emphasis is placed on curriculum, developmental needs, collaboration and developing resources for the educational needs of these populations.

CBED 250 EMERGENT LITERACY (FE)- 3 Semester Hours

This course provides a curriculum where communication skills including reading, writing, viewing and listening are incorporated for literacy training. Students learn the foundations of literacy and develop an understanding about the nature of reading. They also explore the factors that influence learning for children, youth, adults and elderly populations.

Literature resources are reviewed and reading needs assessments are explored.

CBED 351 COMMUNITY BASED EDUCATION PROGRAMS FOR THE ELDERLY (FE) 3 Semester Hours

This course examines the principles used in planning and developing educational programs for the elderly. All types of Community Based Programs are explored for this population. Students determine how to meet the instructional needs of this population through programming and evaluation.

CBED 352 COMMUNICATING WITH THE HEARING IMPAIRED - 3 Semester Hours

This course provides information and strategies to develop effective communication skills with deaf and hard of hearing individuals in the community. Topics covered will include information regarding hearing loss, Deaf culture and Community, education for the deaf and hard of hearing, and development of expressive and receptive sign language skills.

CBED 447 PROGRAM PLANNING IN COMMUNITY BASED EDUCATION – 3 Semester Hours

Effective use of the principles of program planning in community based educational environments is explored. A series of key topics include needs assessment, collaboration, strategic planning, program implementation, collecting/analyzing data and reflection. Additionally, aspects of program coordination, program promotion in community settings, audience analysis and task analysis are discussed for an effective action plan.

CBED 402 COMMUNITY BASED FIELD EXPERIENCE (FE) - 3 Semester Hours

Opportunities are provided to apply competencies in educational programming in a community based or alternative educational program environment. Students utilize the components of educational leadership and curriculum practice to demonstrate and present methods of meeting the real-life educational needs of their field-based learner population.

EDUC 201 SEMINAR IN EDUCATION - 2 Semester Hours

This course is designed to provide a snapshot of teaching as a profession. It will focus on historical and contemporary topics relevant to an understanding of the knowledge, skills and dispositions required of classroom teachers. Pre-candidates will have the opportunity to reflect on professional practice in preK12 classroom settings and in alternative educational program sites. This course will also provide the opportunity for pre-candidates to begin the development of a working portfolio. Pre-candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

EDUC 202 FOUNDATIONS OF EDUCATION - 3 semester hours

This course is a continuation of EDUC 201 Introduction to Teaching and is designed to provide a snapshot of teaching as a profession. The course will extend the focus on historical and contemporary topics relevant to an understanding of the knowledge, skills and dispositions required of classroom teachers. Pre-candidates will have the opportunity to research and reflect on professional practices in preK-12 classroom settings and in alternative educational program sites. This course will also provide the opportunity for pre-candidates to continue the development of a working portfolio. Pre-candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

EDUC 315 DATA DRIVEN INSTRUCTIONAL DESIGN - 3 Semester Hours

This course is designed to address the skills that contribute to an understanding of the relationship among assessment, instruction and monitoring student progress. Assessments include student performance measures in grading practices and the ability to construct and interpret valid assessments using a variety of formats. In order to measure student attainment of essential skills in a standards-based environment, assessment data will be used to make decisions about how to improve instruction and student performance. Pre-candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

Prerequisites: EDUC 201, EDUC 202, Admission to the Teacher Education Program

EDUC 401 STUDENT TEACHING SEMINAR - 3 Semester Hours

This course is aligned with EDUC 402 Student Teaching. Candidates reflect on the knowledge, skills, and dispositions implemented in the classroom experience. In this course, candidates prepare for the final performance assessment of competencies acquired in the Professional Education Program.

Prerequisites: All coursework and required State assessments for the major.

EDUC 402 STUDENT TEACHING (FE) - 9 Semester Hours

This course is the capstone experience for prospective teachers and emphasizes learning through application, analyses, synthesis, evaluation, and reflection. It provides the opportunity for student teachers to demonstrate acquired knowledge of the Standards of Learning, skills, and dispositions, in supervised classrooms. Emphasis will be placed on planning, implementing, and assessing instruction which meets the needs of students in these classrooms. Additional participation in appropriate school activities is required.

Prerequisites: All coursework and required State assessments for the major.

EDUC 424 CULTURALLY RESPONSIVE PEDAGOGY - 2 Semester Hours

This course will cover critical issues in educational reform that include applying multicultural curricula (such as, race ethnicity, gender, socioeconomic status, exceptionalities, language, and geographical locations of all students) and integrating school staff in acknowledging the importance of families and family language, as it relates to current educational issues. Candidates will be required to complete a Field experience requirement of 15 hours as a part of this course.

Prerequisites: Admission to the Teacher Education Program or Admission to Community Based Education Program for CBED minors

EDUC 427 READING IN THE SUBJECT AREA - 3 Semester Hours

This course provides pre-service teachers with the competencies necessary to teach reading in the subject areas. Emphasis is placed on the commonalities of reading skills as related to specific content. The application of knowledge gained, skills developed, techniques acquired,

and materials used for teaching the content and specific disciplines are considered. Special attention is given to techniques and materials for student assessment and for meeting instructional needs.

Prerequisites: Admission to the Teacher Education Program

ELED 328 CURRICULUM AND INSTRUCTION - 3 Semester Hours

This course is designed to address the skills that contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; selection and use of materials, including media computers; and evaluation of pupil performance. It will also address teaching methods appropriate for exceptional students, including second language learners, gifted and talented and those with disabling conditions. Teaching methods shall be tailored to promote student academic progress and effective preparation for the Standards of Learning assessments. Methods of improving communication between schools and families and ways of increasing family involvement in student learning shall be included. Demonstrated proficiency in the use of educational technology for instruction also shall be included. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

Prerequisites: Admission to the Teacher Education Program; EDUC 315 Data Driven Instructional Design

ELED 429 LANGUAGE ACQUISITION AND READING I - 3 Semester Hours

This course provides preparation for beginning reading instruction, including the body of research on emergent literacy, language acquisition, schema theory, and phonemic awareness. Emphasis will be placed on the nature of reading and the development of decoding and comprehension skills and strategies. Decoding skills and strategies will include language development, phonemic awareness, explicit phonics instruction, and other word recognition skills. Literature-based instruction and formal and informal diagnostic and assessment procedures will be included. Reading instruction for all children, including children with learning disabilities will be provided. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

Prerequisite: Admission to the Teacher Education Program

ELED 430 LANGUAGE ACQUISITION AND READING II - 3 Semester Hours

This course is designed to be a continuation of Language Acquisition and Reading I. This course enhances beginning reading skills and emphasizes comprehension skills in content. Special attention is given to the assessment of reading skills and how assessment results drive instruction. Implementation of literature- based instruction is further explored to enhance reading comprehension skills for students. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

Prerequisites: Admission to the Teacher Education Program

EDUC 200 TECHNOLOGY IN THE CLASSROOM - 3 Semester Hours

A variety of instructional media, such as DVD Disc, Digital imagery, Computer Assisted Instruction and personal productivity tools are presented in this course. The emphasis will be on systematically enhancing the teaching-learning process with multi-media instruction and effective computer usage. The course will focus on the basic operation of the computer and the utilization of computers to aid instruction and productivity in the classroom. Candidates will be given the opportunity to reflect upon the most effective and efficient uses of various technologies for individual students, groups of students, and for their own personal use in the classroom. They will be expected to create certain types of software, presentations and materials to achieve instructional goals and objectives. The course is intended for juniors in the School of Education

SPED 323 CHARACTERISTICS OF EXCEPTIONAL LEARNERS -3 semester hours

This course is designed to provide students with in-depth knowledge of the theories, characteristics, etiology, and educational implications of students with exceptional learning needs. These include related disabilities such as attention deficit disorders; specific age-span and developmental issues; cognitive functioning including intelligence, perception, neurobiology, linguistics, memory and thinking, levels of severity; multi-cultural influences; and medical aspects including medication, nutrition, genetics, and neurology. The course will describe deficits in academic, cognitive, socioemotional behaviors; educational, technological, and medical interventions; placement options; 162 curriculum design and current research on instructional approaches, and technology use.

Prerequisite(s): Admission to Teacher Education Program.

SPED 325 - SURVEY OF EXCEPTIONAL CHILDREN - 3 Semester Hours

This course provides an introduction to the philosophical, historical, and legal foundations of special education. The course highlights the characteristics of children and youth with disabilities relative to age and severity levels; medically related etiological perspectives of various disabilities; special education laws, etc. Developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning are addressed. An understanding of ethical issues and the practice of accepted standards of professional behavior is also addressed. Current regulations governing alternatives placements/ programs in schools are highlighted. Strategies to promote successful integration of students with disabilities with their non-disabled peers will be taught. The structure and organization of general education classrooms and other instructional settings representing the continuum of special education will be addressed. An overview of continuum of services, assessment procedures, curriculum planning, and instructional strategies are provided. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

SPED 328 - READING & LANGUAGE DEVELOPMENT FOR EXCEPTIONAL LEARNERS - 3 Semester Hours

Through this course, the student will develop the skills required to 1) assess and develop the language and reading skills of exceptional learners from Pre K through adolescence, with emphasis given to reading, 2) distinguish between the influence of cultural differences and disability in the acquisition and development of skills, 3) develop IEPs based on appropriate use of the general education curriculum and the SOLs, 4) design, select, implement, and evaluate language and reading programs, and 5) use technology in language and reading instruction.

Prerequisite(s): Admission to Teacher Education Program.

SPED 402 - DIAGNOSIS OF EDUCATIONAL NEEDS - 3 Semester Hours

This course is designed to provide an understanding and application of the foundation of assessment and evaluation related to best educational practice such as legal provisions, regulations, and guidelines regarding assessment of individuals with disabilities. The course will discuss the impact of cultural, linguistic, and other variables on assessment findings and placement decisions. Students will select, administer, score, and interpret various formal and informal individual and group instruments and summarize findings for eligibility, placement, and instructional decisions.

Prerequisite(s): Admission to Teacher Education Program. STAT 210, Elementary Statistics

SPED 403 - CLASSROOM MANAGEMENT IN EDUCATIONAL SETTINGS – 3 Semester Hours

This course is designed to address the skills that contribute to an understanding and application of classroom management techniques and individual interventions, including techniques that promote emotional well- being and teach and maintain behavior conduct and skills consistent with norms standards, and rules of the educational environment. This course shall address diverse approaches based upon behavioral, cognitive, affective, social, and ecological theory and practice in a classroom setting.

Prerequisite(s): Admission to Teacher Education Program.

SPED 423 - CURRICULUM AND INSTRUCTION FOR EXCEPTIONAL LEARNERS - 3 Semester Hours

This course, offered in a field-based setting, conveys knowledge of a wide range of assessment procedures for students with exceptional learning needs to assist in instruction and life-planning. These include: use of assessment procedures to identify individual instructional needs in areas including reading, receptive and expressive language, written language and mathematics; ability to interpret educational assessment results to parents, students and other professionals. This course makes use of assessment, evaluation, and other information to develop and implement individualized educational programs (IEP) and group instruction for individuals with exceptional learning needs within the 163 continuum of services. These services include: pragmatic language and social skills; providing explicit instruction of reading and spelling in a systematic and cumulative manner based upon understanding the structure and development of the English language and its components; use of multi-sensory approaches, cognitive learning strategies, study skills, accommodations for diverse learning styles, and technology; and designing alternative ways to teach content, including adaptations and modifications of curricula, and the selection of specialized instructional materials appropriate to the needs of the student with exceptional learning needs.

Prerequisite(s): Admission to Teacher Education Program.

SPED 425 - TRANSITIONAL EDUCATION FOR STUDENTS WITH DISABILITIES - 2 Semester Hours

This course is designed to prepare candidates to work with families to promote successful student transitions throughout the educational experience, including post-secondary training, employment, and independent living. This course addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy and self-determination, guardianship, and legal considerations.

Prerequisite(s): Admission to Teacher Education Program.

SPED 442- COMMUNICATING AND COLLABORATING WITH EDUCATORS AND PARENTS - 3 Semester Hours

This course will prepare students to acquire knowledge and skills in authentic consultation, collaboration and case management. The course will provide opportunities to discuss approaches, demonstrate methods, and utilize activities that aim at involving parents in educational and multidisciplinary conferences, working with paraprofessionals, community agencies, service providers, etc. Team approaches and collaborative work environments will be utilized.

Prerequisite(s): Admission to Teacher Education Program.

Elementary Education, Bachelor of Science in Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
EDUC 201	Seminar in Education	3
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 131 or MATH 150	Algebra And Functions or Precalculus	3
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
AGRI 100 or BIOL 116 or PHYS 100	General Earth Science or Biological Science or Physical Science	4
	Credit Hours	**31**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
CBED 352	Comm Skills Hearing Impaired	3
PSYC 212	Human Growth & Development	3
ENGL 201	Introduction To Literature	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
POLI 150	United States Government	3
EDUC 200	Technology in the Classroom	3
SPEE 214	Introduction To Public Speakin	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
STAT 210	Elementary Statistics I	3
	Credit Hours	**36**
Junior Year		
ENGL 310	Advanced Communications Skills	3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3

BIOL 427	Science Process Skills (LAB)	1
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
Restricted Electives- Choose 3 of the following courses:		9
CBED 200	Introd Community Based Ed	
CBED 250	Emergent Literacy	
SPED 425	Transitional Education	
SPED 402	Diagnosis Of Educational Needs	
SPED 323	Charc Excep'L Learners (Fb)	
SPED 442	Comm & Colla With Parents (Fe)	
ELED 429	Language Acquisition & Reading	3
	Credit Hours	**27**
Senior Year		
Courses require admission into Teacher Education:		12
EDUC 315	Data Driven Instructional Desi	
ELED 328	Curr & Instr Elem & Middle Gra	
ELED 430	Lang Acquisition & Reading II	
SPED 403	Classroom Mgmt Ed Setting (FE)	
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**26**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**41**

Code	Title	Credit Hours
BIOL 427	Science Process Skills	3
ELED 429	Language Acquisition & Reading	3
ELED 437	Teaching Social Studies K-5	2
MAED 460	Teach Math Primary & Elem Grad	3
MATH 230	Geometry And Measurement	3
CBED 352	Comm Skills Hearing Impaired	3
ENGL 310	Advanced Communications Skills	3
POLI 150	United States Government	3
SPEE 214	Introduction To Public Speakin	3
STAT 210	Elementary Statistics I	3
Total Credit Hours		**29**

Code	Title	Credit Hours
Restricted Electives (Choose from the following list.)		**18**
CBED 200	Introd Community Based Ed	
CBED 250	Emergent Literacy	
SPED 323	Charc Excep'L Learners (Fb)	
SPED 402	Diagnosis Of Educational Needs	
SPED 425	Transitional Education	
SPED 442	Comm & Colla With Parents (Fe)	
Total Credit Hours		**18**

Code	Title	Credit Hours
General Education		33
Core Requirements		41
Major/Concentration Requirements		29
Electives		18
Total Credit Hours		**121**

Innovative Technology Education, Bachelor of Science in Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
ENGL 201	Introduction To Literature	3
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 120	College Algebra	3

AGRI 100 or BIOL 116 or PHYS 100	General Earth Science or Biological Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
	Credit Hours	**31**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
Unrestricted Elective		3
ENGL 202 or ENGL 201	Intro African American Lit or Introduction To Literature	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
PHYS 100 or BIOL 116 or AGRI 100	Physical Science or Biological Science or General Earth Science	4
EDUC 200	Technology in the Classroom	3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**34**
Junior Year		
ENGR 101	Introduction to Engineering I	2
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
ENGR 102	Introduction to Engineering II	2
ELED 429	Language Acquisition & Reading	3
Technology Courses	Determined with Academic Advisor	11
	Credit Hours	**29**
Senior Year		
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 430	Lang Acquisition & Reading II	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**26**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**41**

Code	Title	Credit Hours
Major Required Courses		
MATH 230	Geometry And Measurement	3
SPEE 214	Introduction To Public Speakin	3
MAED 460	Teach Math Primary & Elem Grad	3
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
PHYS 100	Physical Science	4
or BIOL 116	Biological Science	
or AGRI 100	General Earth Science	
Concentration Requirements		
ENGR 101	Introduction to Engineering I	2
ENGR 102	Introduction to Engineering II	2
BIOL 427	Science Process Skills	1-3
Technology Courses	Determined with Academic Advisor	11
Total Credit Hours		**34-36**

Code	Title	Credit Hours
Unrestricted Elective		3
Unrestricted Elective		3
Total Credit Hours		**6**

Code	Title	Credit Hours
General Education Requirements		33
Core Requirements		45
Major/Concentration Requirements		36
Electives		6
Total Credit Hours		**120**

Middle School Education, Bachelor of Science in Education with a Concentration in English Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
EDUC 201	Seminar in Education	3
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 113 or MATH 150	Basic Mathematics II or Precalculus	3-4
AGRI 100 or BIOL 116 or PHYS 100	General Earth Science or Biological Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
	Credit Hours	**31-32**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
Unrestricted Elective		3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
ENGL 422	History Of The English Languag	3
EDUC 200	Technology in the Classroom	3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**33**
Junior Year		
Unrestricted Elective		3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills	1
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
ENED 431	Teaching Composition	3
ENED 371	Teaching Engl Secondary School	3
ENED 432	Reading & Literature	3
ELED 429	Language Acquisition & Reading	3
	Credit Hours	**27**
Senior Year		
EDUC 315	Data Driven Instructional Desi (*)	3
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 430	Lang Acquisition & Reading II (*)	3
SPED 403	Classroom Mgmt Ed Setting (FE) (*)	3
EDUC 424	Culturally Responsive Pedagogy (*)	2
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
ENED 402	Student Teaching In English	3
	Credit Hours	**29**
	Total Credit Hours	**120-121**

*Professional studies courses require admission into Teacher Education

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**38**

Code	Title	Credit Hours
Major Required Courses		
MATH 230	Geometry And Measurement	3
SPEE 214	Introduction To Public Speakin	3
MAED 460	Teach Math Primary & Elem Grad	3
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills (LAB)	1
PSYC 212	Human Growth & Development	3
Concentration Required Courses		

ENED 371	Teaching Engl Secondary School	3
ENED 431	Teaching Composition	3
ENED 432	Reading & Literature	3
ENGL 422	History Of The English Languag	3
ENED 402	Student Teaching In English	3
Total Credit Hours		**36**

Code	Title	Credit Hours
Unrestricted Electives		13
Total Credit Hours		**13**

Code	Title	Credit Hours
General Education		33
Core Requirements		38
Major/Concentration Requirements		36
Electives		13
Total Credit Hours		**120**

Middle School Education, Bachelor of Science in Education with a Concentration in History and Social Science Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
EDUC 201	Seminar in Education	3
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 131 or MATH 150	Algebra And Functions or Precalculus	3-4
AGRI 100 or BIOL 116 or PHYS 100	General Earth Science or Biological Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
	Credit Hours	**31-32**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
Unrestricted Elective		3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
POLI 150	United States Government	3
EDUC 200	Technology in the Classroom	3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**33**
Junior Year		
Unrestricted Elective		3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills (LAB)	1
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
GEOG 210	World Geography	3
HIST 431	History Of Virginia	3
HIST 482	Methods/Materials Teach HIST	3
ELED 430	Lang Acquisition & Reading II	3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
EDUC 315	Data Driven Instructional Desi (*)	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 427	Reading In The Subject Area (*)	3
SPED 403	Classroom Mgmt Ed Setting (FE) (*)	3
EDUC 424	Culturally Responsive Pedagogy (*)	2
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
HIST 402	Student Teaching For History	3
	Credit Hours	**29**
	Total Credit Hours	**123-124**

*Professional studies courses require admission into Teacher Education

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3

EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**38**

Code	Title	Credit Hours
Major Requirements		
MATH 230	Geometry And Measurement	3
SPEE 214	Introduction To Public Speakin	3
MAED 460	Teach Math Primary & Elem Grad	3
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
ELED 430	Lang Acquisition & Reading II	3
BIOL 427 & 427	Science Process Skills and Science Process Skills	4
BIOL 116 or AGRI 100 or PHYS 100	Biological Science General Earth Science Physical Science	4
PSYC 212	Human Growth & Development	3
Concentration Requirements		
GEOG 210	World Geography	3
HIST 431	History Of Virginia	3
HIST 482	Methods/Materials Teach HIST	3
POLI 150	United States Government	3
HIST 402	Student Teaching For History	3
Total Credit Hours		**43**

Code	Title	Credit Hours
Unrestricted Electives		6
Total Credit Hours		**6**

Code	Title	Credit Hours
General Education		33
Core Requirements		38
Major/Concentration Requirements		43
Electives		6
Total Credit Hours		**120**

Middle School Education, Bachelor of Science in Education with a Concentration in Mathematics Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 130	Number And Operations	3
MATH 131 or MATH 150	Algebra And Functions or Precalculus	3-4
AGRI 100 or BIOL 116 or PHYS 100	General Earth Science or Biological Science or Physical Science	4
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
HPER 170	Health And Wellness	2
ECON 100	Basic Economics	3
EDUC 201	Seminar in Education	3
	Credit Hours	**31-32**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
Unrestricted Elective		3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
EDUC 200	Technology in the Classroom	3
SPEE 214	Introduction To Public Speakin	3
MATH 120	College Algebra	3
PSYC 212	Human Growth & Development	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**33**
Junior Year		
Unrestricted Elective		3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills (LAB)	1
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
STAT 210 or STAT 330	Elementary Statistics I or Probability and Statistics I	3
MAED 473	Teach Math Secondary Schools I	3
MATH 340	Euclidean & Noneuclid Geomet I	3
Unrestricted Elective		3
ELED 429	Language Acquisition & Reading	3
	Credit Hours	**30**
Senior Year		
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 430	Lang Acquisition & Reading II	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
MAED 402	Student Teaching In Mathematic	3
	Credit Hours	**29**
	Total Credit Hours	**123-124**

*Professional studies courses require admission into Teacher Education

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**41**

Code	Title	Credit Hours
Major Required Courses		
MATH 230	Geometry And Measurement	3
SPEE 214	Introduction To Public Speakin	3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427 & 427	Science Process Skills and Science Process Skills	4
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
AGRI 100	General Earth Science	1-4
or BIOL 116	Biological Science	
or PHYS 100	Physical Science	
PSYC 212	Human Growth & Development	3
Concentration Courses		
MAED 473	Teach Math Secondary Schools I	3
MATH 120	College Algebra	3
MATH 340	Euclidean & Noneuclid Geomet I	3
STAT 210	Elementary Statistics I	3
Total Credit Hours		**34-37**

Code	Title	Credit Hours
Restricted Elective		3
Unrestricted Elective		6
Total Credit Hours		**9**

Code	Title	Credit Hours
General Education		33
Core Requirements		45
Major/Concentration Requirements		33
Electives		9
Total Credit Hours		**120**

Middle School Education, Bachelor of Science in Education with a Concentration in Science Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
EDUC 201	Seminar in Education	3
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 131 or MATH 150	Algebra And Functions or Precalculus	3-4
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
	Credit Hours	**31-32**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
BIOL 120 & BIOL 121	Principles Of Biology I and Principles Of Biology II	4
EDUC 200	Technology in the Classroom	3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3

MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**31**
Junior Year		
BIOL 121	Principles Of Biology II	1
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills (LAB)	1
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
CHEM 105	Introductory Chemistry	4
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 447	Seminar In Biology	1
ELED 429	Language Acquisition & Reading	3
Unrestricted Elective		3
	Credit Hours	**27**
Senior Year		
• Courses Require Admission into Teacher Education		
EDUC 315	Data Driven Instructional Desi *	3
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 430	Lang Acquisition & Reading II *	3
SPED 403	Classroom Mgmt Ed Setting (FE) *	3
EDUC 424	Culturally Responsive Pedagogy *	2
*** Passing the Praxis II for Middle School is Required before being admitted into student teaching courses.		
EDUC 401	Student Teaching Seminar ***	3
EDUC 402	Student Teaching FE ***	9
BIOL 402	Student Teaching In Biology ***	3
	Credit Hours	**29**
	Total Credit Hours	**118-119**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**41**

Code	Title	Credit Hours
Major Required Courses		
MATH 230	Geometry And Measurement	3
SPEE 214	Introduction To Public Speakin	3
MAED 460	Teach Math Primary & Elem Grad	3
ELED 437	Teaching Social Studies K-5	2
ELED 429	Language Acquisition & Reading	3
BIOL 116	Biological Science	4
or AGRI 100	General Earth Science	
or PHYS 100	Physical Science	
PSYC 212	Human Growth & Development	3
Concentration Required Courses		
BIOL 120 & BIOL 121	Principles Of Biology I and Principles Of Biology II	4
BIOL 402	Student Teaching In Biology	3
BIOL 427	Science Process Skills	3
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 447	Seminar In Biology	1
CHEM 105	Introductory Chemistry	1-4
Total Credit Hours		**36-39**

Code	Title	Credit Hours
Unrestricted Elective		3
Total Credit Hours		**3**

Code	Title	Credit Hours
General Education Courses		33
Core Requirements		45
Major/Concentration Requirements		39
Electives		3
Total Credit Hours		**120**

Special Education, Bachelor of Science in Education (B.S.E.D.)

Course	Title	Credit Hours
Freshman Year		
EDUC 201	Seminar in Education	3
FRST 101	Freshman Studies	0
ENGL 110	Composition I	3

MATH 130	Number And Operations	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 131 or MATH 150	Algebra And Functions or Precalculus	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science or General Earth Science or Physical Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ECON 100	Basic Economics	3
	Credit Hours	**31**
Sophomore Year		
EDUC 202	Foundations of Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MATH 230	Geometry And Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
POLI 150	United States Government	3
EDUC 200	Technology in the Classroom	3
PSYC 212	Human Growth & Development	3
SPEE 214	Introduction To Public Speakin	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**30**
Junior Year		
ENGL 310	Advanced Communications Skills	3
MAED 460	Teach Math Primary & Elem Grad	3
BIOL 427	Science Process Skills	3
BIOL 427	Science Process Skills (LAB)	1
ELED 437	Teaching Social Studies K-5	2
EDUC 427	Reading In The Subject Area	3
SPED 425	Transitional Education	3
Unrestricted Electives		9
ELED 429	Language Acquisition & Reading	3
	Credit Hours	**30**
Senior Year		
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 430	Lang Acquisition & Reading II	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 424	Culturally Responsive Pedagogy	2
Passing the Praxis Teaching Reading Elementary (5205) is REQUIRED before being admitted into student teaching courses.		
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**26**
	Total Credit Hours	**117**

Substitutions must be approved by College Dean and Department Chair

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
ELED 430	Lang Acquisition & Reading II	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**41**

Code	Title	Credit Hours
ELED 429	Language Acquisition & Reading	3
MAED 460	Teach Math Primary & Elem Grad	3
MATH 230	Geometry And Measurement	3
BIOL 427	Science Process Skills	3
BIOL 116 or AGRI 100 or PHYS 100	Biological Science General Earth Science Physical Science	4
ELED 437	Teaching Social Studies K-5	2
ENGL 310	Advanced Communications Skills	3
STAT 210	Elementary Statistics I	3
POLI 150	United States Government	3
CBED 352	Comm Skills Hearing Impaired	3
ECON 100	Basic Economics	3

SPEE 214	Introduction To Public Speakin	3
Total Credit Hours		**36**

Code	Title	Credit Hours
Choose 4 of the following:		**12**
SPED 323	Charc Excep'L Learners (Fb)	
CBED 200	Introd Community Based Ed	
CBED 250	Emergent Literacy	
SPED 425	Transitional Education	
SPED 402	Diagnosis Of Educational Needs	
SPED 442	Comm & Colla With Parents (Fe)	
Total Credit Hours		**12**

Code	Title	Credit Hours
General Education		33
Core Requirements		41
Major/Concentration Requirements		34-36
Electives		12
Total Credit Hours		**120-122**

Interdisciplinary Studies, Bachelor of Science with a Minor in Community Based Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
MATH 130	Number And Operations	3
BIOL 116	Biological Science	4
Unrestrictive Elective		3
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
HPER 170	Health And Wellness	2
ENGL 111	Composition II	3
MATH 131	Algebra And Functions	3
AGRI 100	General Earth Science	4
ECON 100	Basic Economics	3
	Credit Hours	**31**
Sophomore Year		
EDUC 201	Seminar in Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
HPER Elective		1
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
PHYS 100	Physical Science	4
PSYC 212	Human Growth & Development	3
CBED 200	Introd Community Based Ed	3
EDUC 200	Technology in the Classroom	3
GEOG 210	World Geography	3
PHIL 140	Philosophy	3
STAT 210	Elementary Statistics I	3
	Credit Hours	**32**
Junior Year		
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
CBED 351	Community Based Ed Progr Elder	3
ENGL 310	Advanced Communications Skills	3
POLI 150	United States Government	3
MATH 230	Geometry And Measurement	3
CBED 250	Emergent Literacy	3
CBED 352	Comm Skills Hearing Impaired	3
SPEE 214	Introduction To Public Speakin	3
Unrestrictive Elective		6
	Credit Hours	**30**
Senior Year		
HLTH 346	School & Community Health Prog	2
EDUC 424	Culturally Responsive Pedagogy	2
CBED 447	Program Planning Comm Based Ed	3
Unrestrictive Elective		9
Restrictive Elective		2
CBED 402	Community Based Field Experien	3
SPED 325	Survey Ed Of Except Child (Fe)	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
	Credit Hours	**27**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Requirements

Code	Title	Credit Hours
BIOL 116	Biological Science	4
EDUC 201	Seminar in Education	3
ENGL 214 or ENGL 215	World Literature I World Literature II	3
ENGL 310	Advanced Communications Skills	3
GEOG 210	World Geography	3
HLTH 346	School & Community Health Prog	2
HIST 431	History Of Virginia	3
EDUC 200	Technology in the Classroom	3
MATH 230	Geometry And Measurement	3

MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
PHYS 100	Physical Science	4
POLI 150	United States Government	3
PSYC 212	Human Growth & Development	3
PSYC 314	Educational Tets & Measurement	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPEE 214	Introduction To Public Speakin	3
STAT 210	Elementary Statistics I	3
Total Credit Hours		**52**

Minor Requirements

Code	Title	Credit Hours
CBED 200	Introd Community Based Ed	3
CBED 250	Emergent Literacy	3
CBED 351	Community Based Ed Progr Elder	3
CBED 352	Comm Skills Hearing Impaired	3
CBED 447	Program Planning Comm Based Ed	3
Total Credit Hours		**15**

Field Experiences (FE)

Code	Title	Credit Hours
CBED 402	Community Based Field Experien	3
EDUC 424	Culturally Responsive Pedagogy	2
Total Credit Hours		**5**

Code	Title	Credit Hours
EDUC 202	Foundations of Education	3
Total Credit Hours		**3**

Electives

Code	Title	Credit Hours
Unrestrictive Elective		9
HPER Elective		1
Science Elective		4
Total Credit Hours		**14**

Interdisciplinary Studies, Bachelor of Science with a Minor in Elementary Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 130	Number And Operations	3
MATH 131	Algebra And Functions	3
BIOL 116	Biological Science	4
AGRI 100	General Earth Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
HPER 170	Health And Wellness	2
ECON 100	Basic Economics	3
Unrestricted Elective		3
	Credit Hours	**31**
Sophomore Year		
EDUC 201	Seminar in Education	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
GE Wellness/Health Electives (p. 147)		1
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
PHYS 100	Physical Science (AND LAB)	4
PSYC 212	Human Growth & Development	3
CBED 200	Introd Community Based Ed	3
EDUC 200	Technology in the Classroom	3
GEOG 210	World Geography	3
PHIL 140	Philosophy	3
STAT 210	Elementary Statistics I	3
	Credit Hours	**32**
Junior Year		
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
CBED 351	Community Based Ed Progr Elder	3
ENGL 310	Advanced Communications Skills	3
POLI 150	United States Government	3
MATH 230	Geometry And Measurement	3
CBED 250	Emergent Literacy	3
CBED 352	Comm Skills Hearing Impaired	3
SPEE 214	Introduction To Public Speakin	3
Restricted Elective	Advisor Approval Required	3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
HLTH 346	School & Community Health Prog	2
EDUC 424	Culturally Responsive Pedagogy	2
CBED 447	Program Planning Comm Based Ed	3
CBED 402	Community Based Field Experien	3
SPED 325	Survey Ed Of Except Child (Fe)	3
MUSI 200	Blacks in American Music	3
Unrestricted Electives		12
	Credit Hours	**28**
	Total Credit Hours	**121**

Substitutions must be approved by College Dean and Department Chair

[1] Courses do not count toward graduation requirements. Courses are only taken when Core Academic Skills for Educators Math 5732 score is less than 150 or VCLA scores are less than 470.

Other Requirements

The following assessments must be met:

- Passing scores on Core Academic Skills for Educators
- Passing scores on VCLA
- Passing scores on Praxis Teaching Reading Elementary (5205)

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Requirements

Code	Title	Credit Hours
BIOL 116	Biological Science (and Lab)	4
BIOL 427	Science Process Skills (and Lab)	3
STAT 210	Elementary Statistics I	3
MATH 230	Geometry And Measurement	3
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 310	Advanced Communications Skills	3
GEOG 210	World Geography	3
HIST 431	History Of Virginia	3
POLI 150	United States Government	3
PHYS 100	Physical Science	4
EDUC 200	Technology in the Classroom	3
MUSI 200	Blacks in American Music	3
or ARTS 199	Art Appreciation	
PSYC 212	Human Growth & Development	3
PSYC 314	Educational Tets & Measurement	3
SPEE 214	Introduction To Public Speakin	3
SPED 325	Survey Ed Of Except Child (Fe)	3
Total Credit Hours		**50**

Minor Requirements: Professional Studies [1]

Code	Title	Credit Hours
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
ELED 328	Curr & Instr Elem & Middle Gra	3
ELED 429	Language Acquisition & Reading	3
EDUC 424	Culturally Responsive Pedagogy	2
ELED 430	Lang Acquisition & Reading II	3
EDUC 401	Student Teaching Seminar	3
Total Credit Hours		**23**

[1] These courses also meet General Education requirements.

Field Experiences (FE)

Code	Title	Credit Hours
EDUC 402	Student Teaching FE	9
SPED 403	Classroom Mgmt Ed Setting (FE)	3
Total Credit Hours		**12**

Restricted Electives

Code	Title	Credit Hours
HPER	Electives	1
Free Elective	Electives	3
Total Credit Hours		**4**

[1] Courses do not count toward graduation requirements. Note courses are only taken when Core Academic Skills for Educators MATH 5732 (score 150) are not met.

Interdisciplinary Studies, Bachelor of Science with a Minor in Special Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 130	Number And Operations	3
MATH 131	Algebra And Functions	3
BIOL 116	Biological Science	4
AGRI 100	General Earth Science	4
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
HPER 170	Health And Wellness	2
HPER Elective		1
ECON 100	Basic Economics	3
	Credit Hours	**29**
Sophomore Year		
EDUC 201	Seminar in Education	3
SPED 325	Survey Ed Of Except Child (Fe)	3
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
GEOG 210	World Geography	3
CBED 352	Comm Skills Hearing Impaired (Or LANG Elective)	3
PHYS 100	Physical Science	4
IDST 200	Digital Media Teacher Educatio	3
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
PHIL 140	Philosophy	3

PSYC 212	Human Growth & Development	3
STAT 210	Elementary Statistics I	3
	Credit Hours	**34**
Junior Year		
EDUC 315	Data Driven Instructional Desi	3
ELED 429	Language Acquisition & Reading	3
SPED 328	Read/Lang Develop Except'L Lea	3
SPED 323	Charc Excep'L Learners (Fb)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
SPED 425	Transitional Education	3
SPED 402	Diagnosis Of Educational Needs	3
ENGL 201 or ENGL 202	Introduction To Literature or Intro African American Lit	3
MUSI 200 or ARTS 199	Blacks in American Music or Art Appreciation	3
ENGL 310	Advanced Communications Skills	3
MATH 230	Geometry And Measurement	3
	Credit Hours	**33**
Senior Year		
EDUC 424	Culturally Responsive Pedagogy	2
HIST 431	History Of Virginia	3
POLI 150	United States Government	3
SPED 442	Comm & Colla With Parents (Fe)	3
SPED 423	Curr/Instr Excep'L Ch (Fb)	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**26**
	Total Credit Hours	**122**

Substitutions must be approved by College Dean and Department Chair

[1] Course do not count toward graduation requirements. Courses are only taken when Core Academic Skills for Educators Math 5732 score is less than 150 or VCLA scores are less than 470.

Other Requirements

The following assessments must be met:

- Passing scores on Core Academic Skills for Educators - Math 5732
- Passing scores on VCLA
- Passing scores on RVE
- Restricted Electives (3 Hours)

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Major Requirements

Code	Title	Credit Hours
Interdisciplinary Studies (Academic Core Courses)		
BIOL 116	Biological Science	4
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 310	Advanced Communications Skills	3
GEOG 210	World Geography	3
MUSI 200	Blacks in American Music	3
or ARTS 199	Art Appreciation	
HIST 431	History Of Virginia	3
HPER Elective		1
EDUC 200	Technology in the Classroom	3
CBED 352	Comm Skills Hearing Impaired (or LANG Elective)	3
MATH 230	Geometry And Measurement	3
PHYS 100	Physical Science	1-4
POLI 150	United States Government	3
PSYC 212	Human Growth & Development	3
STAT 210	Elementary Statistics I	3
Total Credit Hours		**39-42**

[1] These courses also meet General Education requirements.

Minor Requirements (Professional Studies)

Code	Title	Credit Hours
EDUC 201	Seminar in Education	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 401	Student Teaching Seminar	3
EDUC 424	Culturally Responsive Pedagogy	2
ELED 429	Language Acquisition & Reading	3
SPED 325	Survey Ed Of Except Child (Fe)	3
SPED 328	Read/Lang Develop Except'L Lea	3
SPED 402	Diagnosis Of Educational Needs	3
SPED 425	Transitional Education	3
Total Credit Hours		**26**

Field Experiences (FE)

Code	Title	Credit Hours
EDUC 402	Student Teaching FE	9
SPED 323	Charc Excep'L Learners (Fb)	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
SPED 423	Curr/Instr Excep'L Ch (Fb)	3

SPED 442	Comm & Colla With Parents (Fe)	3
Total Credit Hours		**21**

Teaching and Learning, Minor in Secondary Education

All Candidates who are completing an Endorsement in Secondary Education must complete the following minor coursesfrom the Department of Teaching and Learning. The following curriculumsfor the secondary majors are located in the catalog under their respective School/College: Agriculture 6- 12, Biology 6-12, Chemistry 6-12, English 6-12, Family and Consumer Sciences 6-12, Health and Physical Education Pre K-12, History and Social Sciences 6-12, Mathematics 6-12, Music Education-Choral PreK-12, Music Education-Instrumental PreK-12. Health and Physical Education majors do not have the 18 hour restriction on Professional Studies Courses.

Code	Title	Credit Hours
Minor Requirements (Professional Studies)		
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
EDUC 401	Student Teaching Seminar	3
Restricted Electives		
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 402	Student Teaching FE	9
Total Credit Hours		**29**

Other Requirements

The following assessments must be met:

- Passing scores on Core Academic Skills for Educators - Math 5732
- Passing scores on PRAXIS II (with the exception of Agriculture 6-12)
- Passing scores on VCLA

College of Engineering and Technology

Dean
Dr. Dawit Haile
Location
Engineering & Technology Building, Room 315
Contact Information
804-524-1141 | dhaile@vsu.edu

Overview of the College of Engineering and Technology

The College of Engineering and Technology is committed to providing a dynamic and stimulating learning environment where a combination of classroom instruction and laboratory work prepares students for the global nature of the engineering and mathematics professions. The College houses undergraduate programs which educate students to become professionals who are able to adapt to societal change, to communicate effectively and to be highly trainable. Whether students major in Engineering, Computer Science, Technology, Mathematics, or Economics, they benefit from a curriculum that features in-depth major courses and substantial training in mathematics, social sciences and the humanities.

Mission of the College

The mission of the College of Engineering and Technology is to provide quality undergraduate and graduate education in engineering, engineering technology, mathematics, computer science, economics and industrial technology to produce graduates who are well prepared to practice in their field of study and/or to pursue advanced education.

Objectives of the College

The primary objectives of the college are:

- To maintain and continually strive to improve the quality of instruction in all academic areas.
- To prepare students to enter professional careers in the public and private sectors or to continue their education beyond the baccalaureate level in professional or graduate school.

The College of Engineering and Technology is comprised of the following departments:

- • Computer Science
- • Engineering
- • Mathematics and Economics
- • Applied Engineering Technology

Department of Computer Science

Chairperson: Dr. Joon-Suk Lee
Location: Hunter McDaniel Building, Room 1S
Contact Information: (804) 524-5425 | jlee@vsu.edu

Department Overview

The Department of Computer Science offers two (2) degree programs: a **Bachelor of Science in Computer Science** and a **Master of Science in Computer Science**. The department also offers two (2) minors: **Computer Science** and **Cybersecurity**. An undergraduate concentration in Information Security is also available. The curriculum blends theoretical foundations with hands-on experience in programming, software development, and data security, while emphasizing artificial intelligence, machine learning, and cybersecurity. Students gain applied knowledge in algorithm design, database systems, computer architecture, programming languages, operating systems, and advanced topics such as AI-driven security, data analytics, and ethical hacking.

Mission Statement

The mission of the Department of Computer Science is to provide excellent education and research opportunities to a diverse student body in order to prepare them for productive careers in industrial,

governmental, and academic settings in the rapidly evolving fields of computing.

Degree Highlight Information

The program offers hands-on learning in algorithm design, software development, AI, machine learning, and cybersecurity. Students gain experience with ethical hacking, data analytics, and modern computing tools.

Student Organizations

- the **Association of Computing Machinery (ACM)**
- the **Institute of Electrical and Electronics Engineers (IEEE)**
- the **National Society of Black Engineers (NSBE)**
- the **Society of Women Engineers (SWE)**

Accreditation Information

The Computer Science (Bachelor of Science) program is accredited by the Computing Accreditation Commission of ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-computer-science/www.abet.org), under the commission's General Criteria and Program Criteria for Computer Science and Similarly Named Computing Programs.

Department Goals

The Program Educational Objectives for the computer science program are as follows:

1. Advance in their profession as globally competitive leaders or pursue advanced study in computing sciences or related field of interest.
2. Practice the profession ethically and responsibly throughout their careers, and contribute to the welfare of local, national, and global communities.
3. Ideate, convey and share scientific concepts to enhance individual and organizational productivity.
4. Engage in professional development throughout their careers to broaden their knowledge for significant contributions to technological innovation.

Program Listings

Bachelor of Science (B.S.) in Computer Science

The Bachelor of Science (B.S.) in Computer Science requires 120 credit hours and includes core coursework in programming, data structures, operating systems, databases, and cybersecurity. Students must earn at least a 'C' in all CSCI, MATH, and STAT courses. A concentration in **Information Security** is available by substituting six (6) CSCI elective hours with CSCI 451 and CSCI 496 and selecting CJUS 116.

Minors:

Minor in Computer Science (19 credits)

Minor in Cybersecurity (18–19 credits)

Extensive course offerings span from CSCI 100 (Intro to Computers) through CSCI 485 (Programming Languages), preparing students for graduate study, research, and competitive tech careers.

Major(s)

- Computer Science, Bachelor of Science (B.S.) (p. 229)

Minor(s)

- Minor in Computer Science (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-computer-science/computer-science-minor/)
- Minor in Cybersecurity (p. 231)

COMPUTER SCIENCE
Course Descriptions

INTRODUCTORY COURSES

CSCI 100 INTRODUCTION TO COMPUTERS - 3 semester hours
Brief history of computers. Computer architecture: Processing, Input/Output and Communication Devices. Software: operating systems and applications. The Internet, networking and mobile computing. Introduction to basic application programs

CSCI 120 INTRODUCTION TO PROGRAMMING - 3 semester hours
An introduction to basic programming concepts using visual, graphical programming environments, and simple game design approach

CORE COURSES

CSCI 101 INTRODUCTION TO THE COMPUTER SCIENCE PROFESSION - 2 semester hours
This course introduces students to the range of professions and research fields within computer science, addresses misconceptions about the field, and describes the distinction between computer science and other computing fields such as information systems and computer engineering. In addition, this course familiarizes students with the requirements and expectations for computing career paths including the importance of obtaining relevant research or career experiences, preparing personal statements, obtaining letters of reference, preparing successful applications, and following a professional code of ethics. Students will be introduced to the curriculum by completing introductory projects aligned with each of the core computer science courses. When completing the course projects, students will be guided to develop essential skills that a computer science professional will need in order to keep pace with the rapid changes in this evolving field. Such skills as improving organization, prioritizing and scheduling work tasks, working effectively in teams, applying effective methodologies for learning and reading, and using resources effectively will be discussed in the context of continued professional development and self-growth.
Prerequisites(s): Major/Minor in Computer Science Co-requisites: CSCI 150, CSCI 151

CSCI 150 PROGRAMMING I - 3 semester hours
Introduces fundamental concepts of programming from an object-oriented perspective. Emphasizes problem solving, basic software design principles, and programming skills in a programming language that supports the object-oriented paradigm. Coverage includes simple data

types, control structures, array and string data structures, basic testing and debugging. Students must be co-enrolled in CSCI 151.
Co-requisites: CSCI 101, CSCI 151

CSCI 151 PROGRAMMING I LAB - 1 semester hour
Hands-on programming exercises on topics covered in CSCI 150. Students must be co-enrolled in CSCI 150.
Co-requisites: CSCI 101, CSCI 151

CSCI 250 PROGRAMMING II - 3 semester hours
Continuation of CSCI 150. Builds on knowledge of fundamentals of programming to include more advanced object-oriented concepts, file I/O, basic sorting and searching, exception handling, and classic data structures such as arrays and lists. A programming-intensive course to develop software design and implementation skills. Students must be co-enrolled in CSCI 251.
Co-requisite: CSCI 251
Prerequisite: CSCI 150, CSCI 151

CSCI 251 PROGRAMMING II LAB - 1 semester hour
Hands-on programming exercises on topics covered in CSCI 250. Students must be co-enrolled in CSCI 250.
Co-requisite: CSCI 250
Prerequisites: CSCI 150; CSCI 151

CSCI 281 DISCRETE STRUCTURES - 3 semester hours
Recursion and Solutions of recurrence relations, Introduction to Graph Theory, Trees, Language and Grammars, Finite State Machines.
Prerequisite: MATH 280

CSCI 287 DATA STRUCTURES - 3 semester hours
This course emphasizes the implementation of programs that make use of lists, stacks, queues, trees, and hash tables in a variety of application settings. Several common algorithmic paradigms (such as recursion, searching, sorting, dynamic programming, divide and conquer) and their applications are also discussed.
Prerequisites: CSCI 250, CSCI 251

CSCI 296 WEB PROGRAMMING - 3 semester hours
A programming intensive course that introduces the essential knowledge for website development. The course begins with web server installation and the fundamental web technologies (HTML, CSS, XML). It focuses on front-end and back-end web development which exposes students to the techniques used in dynamic, interactive website building.
Prerequisites: CSCI 250, CSCI 251

CSCI 303 COMPUTER ORGANIZATION AND ARCHITECTURE - 3 semester hours
A treatment of computer organizations and architectures. Digital logic, data representation at logical and machine level, assembly level organization, memory systems, interfacing and communications as well as performance enhancements architecture elements. Discussion of different computer architecture and organizations. Programming in the assembly language.
Prerequisites: CSCI 250, CSCI 251

CSCI 356 DATABASE SYSTEMS - 3 semester hours
Database Design, Entity-Relationship and Relational Model, Relational Algebra, Query Language SQL, Storage and File Structures, Query Processing, System Architectures.
Prerequisites: CSCI 250, CSCI 251

CSCI 358 INTRODUCTION TO INFORMATION ASSURANCE - 3 semester hours
Introduction to the confidentiality, availability and integrity goals of information systems. Topics covered include introduction to principles of information security from the perspective of the World Wide Web, identification/authentication, computer/network security, dependability, access control, security evaluation and other issues.
Prerequisite: CSCI 250, CSCI 251

CSCI 392 ALGORITHMS AND ADVANCED DATA STRUCTURES - 3 semester hours
Design, analysis and implementation of advanced data structures and related algorithms including trees, graphs, B-trees, advanced sorting algorithms, hashing. It is also a treatment of object-oriented concepts and objected-oriented design. Basic software engineering skills and teaming.
Prerequisites: CSCI 287, CSCI 281

CSCI 400 COMPUTER SCIENCE SEMINAR - 2 semester hours
The focus of this course is to discuss practical skills required for research, broadly defined. The practical skills include but are not limited to skills on research process, skills on experimental methods, reading, writing, graphing, and presentation skills that are pertinent to computer scientists or software engineers. The course includes discussions of current research and developments in computer science that are facilitated by students, faculty members, or industry representatives. The current research and 192 developments are used as examples for the discussion of the practical skills. Students are strongly encouraged to complete this course in advance of beginning CSCI 493 SENIOR PROJECT I.
Prerequisites: ENGL 342 or GEEN 310, and junior status or permission of instructor

CSCI 445 COMPUTER COMMUNICATION NETWORKS - 3 semester hours
ISO model for communications. Protocols for physical, data link and network communications. Sockets. TCP/IP. Applications. Protocol correctness and efficiency. Error detection and recovery. Local-area and Wide-area networks.
Prerequisites: CSCI 250, CSCI 251

CSCI 470 PARALLEL AND DISTRIBUTED PROGRAMMING - 3 semester hours
The course covers the practical aspects of designing and developing software that runs on parallel and distributed systems. The topics covered in this course include client-server programming, multithreaded programming, message passing, shared memory, load-balancing, synchronization, and parallel GPU programming.
Prerequisite(s): CSCI 445

CSCI 485 PROGRAMMING LANGUAGES - 3 semester hours
Concepts for structuring data, computation, and whole programs. Object-oriented languages, functional languages, logic- and rule-based languages. Data Types, type checking, exception handling, concurrent processes, synchronization, modularity, encapsulation, interfaces, separate compilation, inheritance, polymorphism, dynamic binding, sub typing, overloading, beta-reduction, unification.
Prerequisite: CSCI 287

CSCI 487 SOFTWARE DESIGN AND DEVELOPMENT - 3 semester hours
A formal approach to current techniques in software design and development. Students work in teams in the organization, management, and development of a large software project.
Prerequisite: CSCI 287

CSCI 489 OPERATING SYSTEMS - 3 semester hours

This course introduces basic concepts in operating systems. This course will be focused on process management, implementation of mutual exclusion and synchronization, deadlock and starvation, memory management, scheduling, I/O, and file management. Students will also understand how operating systems have developed historically and future trends, as well as shell command line usage in modern operating systems.
Prerequisite: CSCI 287, CSCI 303

CSCI 493 SENIOR PROJECT I - 3 semester hours
This class is the first in the two-course senior project sequence. In this course, students will begin a substantial research- oriented individual project. The student will perform project identification and planning, software design, implementation, and testing using an agile development approach. At the completion of this course students must complete a working prototype of the project. Projects from this course must be completed during the following semester in CSCI 494.
Prerequisites: Senior status or permission of instructor

CSCI 494 SENIOR PROJECT II - 3 semester hours
This is the second course in the two-course senior project sequence. The students will complete a well-tested implementation of the project that they began in CSCI 493. Additional related work research, presentations, and reporting of the project will be performed. The class culminates in a demo day, where students present their projects to faculty, students, and external visitors.
Prerequisites: CSCI 493 193 ELECTIVE COURSES

CSCI 298 INTERNSHIP IN COMPUTER SCIENCE I - 1 semester hour
The internship allows students to obtain practical work experience related to computer science under closely the Computer Science faculty's supervision. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than 3 times.
Prerequisite: Permission of Department Advisor

CSCI 312 INTRODUCTION TO ROBOTICS - 3 semester hours
A basic treatment of robotics systems in practice and research. It surveys selected topics in vision, kinematics and inverse kinematics, motion planning, trajectory generation, localization, sensors, programming and design, and artificial intelligence. Laboratory and projects are integral components of the course.
Prerequisite: CSCI 250 or equivalent Co-requisite: MATH 325 or permission of instructor

CSCI 361 EMBEDDED SYSTEMS: DESIGN AND APPLICATIONS - 3 semester hours
The fundamentals of embedded system hardware and software design will be explored. Issues such as embedded programming, firmware design, development tools, and host communication will be discussed. Microcontrollers will be studied through a series of projects using a microprocessor evaluation board. These projects will expose students to programming tasks to work with physical sensors (such as GPS, medical sensor, etc.) and write applications for smart phones, robots, unmanned vehicles and spacecraft.
Prerequisites: CSCI 250, CSCI 251

CSCI 389 HUMAN COMPUTER INTERACTION - 3 semester hours
Facts, theories, and issues about human sensation, perception, and interaction for developing information processing systems interacted with humans. Other related human factors such as workplace, environmental, ethical and legal issues will be discussed. Software applications with rich human interface are to be designed, implemented and tested by teams of students.
Prerequisites: CSCI 250, CSCI 251

CSCI 396 ADVANCED WEB PROGRAMMING - 3 semester hours
A continuation of Web Programming (CSCI 296). This course aims to provide the necessary foundations for building a complete web application, focusing on utilizing front-end and back-end frameworks. Front-end development will encompass familiarity with JavaScript frameworks such as AngularJS, creating single page applications using various features such as services, components and directives, deploying responsive applications, and using observables. Back-end development will cover server platforms such as NodeJS, transfer protocols, server-side concepts such as REST and CRUD, building and configuring web server and Databases. Moreover, the course presents issues relating to security and the importance of authentication.
Prerequisite(s): CSCI 296

CSCI 398 INTERNSHIP IN COMPUTER SCIENCE II - 3 semester hours
The internship allows students to obtain practical work experience related to computer science under the Computer Science faculty's supervision. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than 2 times.
Prerequisite: Permission of Department Advisor

CSCI 402 INTRODUCTION TO ARTIFICIAL INTELLIGENCE - 3 semester hours
Basic problem-solving strategies, heuristic search, problem reduction AND/OR graphs, knowledge representation, expert systems, generating explanations, uncertainty reasoning, game playing, planning, 194 machine learning, computer vision, and programming systems such as Lisp or Prolog.
Prerequisite: CSCI 287

CSCI 445 COMPUTER COMMUNICATION NETWORKS - 3 semester hours
ISO model for communications. Protocols for physical, data link and network communications. Sockets. TCP/IP. Applications. Protocol correctness and efficiency. Error detection and recovery. Local-area and Wide-area networks.
Prerequisites: CSCI 250, CSCI 251

CSCI 450 COMPUTER FORENSICS - 3 semester hours
Introduction to principles of computer forensics methodology and emerging investigation techniques related to the identification, collection and preservation of digital crime scene evidence. Popular hardware and software tools recognized in the computer forensics field will be introduced.
Prerequisite: CSCI 358

CSCI 451 COMPUTER SECURITY - 3 semester hours
This course focuses on communication security in computer systems and networks. It is intended to provide students with a comprehensive introduction to the field of network security. The course covers critical network security services such as authentication and access control, integrity and confidentiality of data, routing, firewalls, virtual private networks, and web security. Where appropriate, we examine threats and vulnerabilities to specific architectures and protocols.
Prerequisite: CSCI 358

CSCI 452 INTRODUCTION TO CRYPTOGRAPHY - 3 semester hours
This course introduces cryptography and encryption concepts and how they are applied in real-world situations in order to implement strong and reliable security safeguards. This course will survey the various

cryptography and encryption methods used in today's information technology and communications environments as well as to review the considerations for selecting commercial products that support encryption technology.
Prerequisites: CSCI 358, CSCI 287

CSCI 453 DIGITAL IMAGE PROCESSING - 3 semester hours
Introduction to the fundamentals of digital image processing. It emphasizes general principles of image processing, rather than specific applications. It covers topics such as image acquisition and display, properties of the human visual system, color representations, sampling and quantization, point operations, linear image filtering and correlation, transforms and nonlinear filtering, contrast and color enhancement, digital image file formats etc.
Prerequisites: CSCI 287

CSCI 456 ADVANCED DATABASE APPLICATIONS - 3 semester hours
Applications of advanced database systems. Students will work on a series of projects using industry standard software.
Prerequisite: CSCI 356

CSCI 460 COMPUTABILITY AND FORMAL LANGUAGE THEORY - 3 semester hours
Formal models of computation such as finite state automata, pushdown automata and Turing machines. Formal definitions of languages, problems, and language classes including recursive, recursively enumerable, regular, and context free languages. Halting problems, undecidable problems, recursive functions, Chomsky hierarchy, Church's thesis and the limits of computability. Proofs of program properties including correctness.
Prerequisite: CSCI 281

CSCI 462 COMPILER CONSTRUCTION - 3 semester hours
Exploration of the design of programming language translators. Includes parsing, run-time storage management, error recovery, and code generation and optimization.
Prerequisites: CSCI 485, CSCI 460

CSCI 480 COMPUTER GRAPHICS - 3 semester hours
Techniques of modeling objects for the purpose of computer rendering: boundary representations, constructive solids geometry, hierarchical scene descriptions: mathematical techniques for curve and surface representation. Basic elements of computer graphics rendering pipeline; architecture of modern graphics display devices; Geometrical transformations such as rotation, scaling, translation, and their matrix representations. Homogenous coordinates, projective and perspective transformations: Algorithms for clipping, hidden surface removal, rasterization, and anti-aliasing. Scan-line based and ray rendering algorithms. Lighting models for reflection, refraction, transparency.
Prerequisites: CSCI 287, MATH 360, MATH 325

CSCI 482 MATRIX COMPUTATIONS - 3 semester hours
This course is fundamental for students who will pursue graduate studies of applications of computers to science and engineering. Vector and matrix Norms. Numerical Linear Algebra, condition number, singular values. Householder and Givens transformations. Orthogonalization and least Squares methods. The eigenvalue problem. Basic iterative methods: Jacobi Gauss-Seidel and SOR.
Prerequisites: CSCI 250, CSCI 251, MATH 325

CSCI 488 ADVANCED SYSTEMS ARCHITECTURE - 3 semester hours
Fundamentals of uniprocessors and multiprocessors, scheduling, speculation, and multithreading.
Prerequisite: CSCI 489 or its equivalent

CSCI 492 ALGORITHMS AND COMPLEXITY - 3 semester hours
Recommended for students pursuing a graduate degree in Computer Science, definitions of algorithm and its complexity, proof of correctness of an algorithm, notion of time and space complexity, the complexity hierarchy, average and worst-case complexity, complexity of search and sorting algorithms, recurrence relations arising from basic algorithms, linear and non-linear recurrences, divide and conquer algorithms, dynamic programming.
Prerequisite: CSCI 287

CSCI 495 TOPICS IN COMPUTER SCIENCE - 3 semester hours
Topics vary depending upon needs of students and current interest of the instructor. Students interested in the specific content of this course as offered in a particular term should consult the instructor.
Prerequisite: Consent of instructor

CSCI 496 WEB DESIGN AND CYBER SECURITY - 3 semester hours
An introduction to Web design and site management. Topics include JavaScript, PHP, database, and web security such as identifying and avoiding web vulnerabilities, detecting and preventing phishing, hacking and etc.
Prerequisites: CSCI 358, CSCI 287

Computer Science Major, Bachelor of Science (B.S.)

Course	Title	Credit Hours
Freshman Year		
CSCI 101	Intro the Cmptr Sci Profession	2
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
MATH 260	Calculus I	4
ENGL 110	Composition I	3
GE Wellness/Health Electives (p. 147)		2
CSCI 250	Programming II	3
CSCI 251	Programming II Lab	1
MATH 261	Calculus II	4
ENGL 111	Composition II	3
GE History Electives (p. 146)		3
GE Social Science Electives (p. 147)		3
	Credit Hours	**32**
Sophomore Year		
CSCI 287	Data Structures	3
CSCI 303	Computer Org & Architecture	3
MATH 280	Discrete Math Computer Science	3
ENGL 342 or ENGL 310	Technical Communication or Advanced Communications Skills	3
CSCI 281	Discrete Structures	3
GE Global Studies Electives (p. 146)		3
CSCI 296	Web Programming	3
CSCI 356	Database Systems	3
PHIL 275 or PHIL 450	Ethics ((Humanities Elective)) or Applied Ethics	3
GE Literature Electives (p. 147)		3
	Credit Hours	**30**
Junior Year		
STAT 340	Probability Stat Cmptr Scienti	3
CSCI 392	Algorithms & Adv Data Structur	3
CSCI 487	Software Design And Developmen	3
CSCI 445	Computer Communication Network	3

BIOL/CHEM/PHYS Laboratory Science **		4
Unrestricted Elective		3
CSCI/MATH/STAT Elective		3
CSCI 489	Operating Systems	3
CSCI 400	Computer Science Seminar	2
CSCI 358	Introd Information Assurance	3
	Credit Hours	**30**
Senior Year		
CSCI 493	Senior Project I	3
CSCI Elective (330-level or higher)		3
CSCI 471	Parallel & Distributed Program	3
Unrestricted Elective		3
BIOL/CHEM/PHYS Laboratory Science **		4
CSCI 485	Programming Languages	3
CSCI 494	Senior Project II	3
CSCI Elective (330-level or higher)		3
MATH Restricted Elective*		3
	Credit Hours	**28**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CSCI 101	Intro the Cmptr Sci Profession	2
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
CSCI 250	Programming II	3
CSCI 251	Programming II Lab	1
CSCI 281	Discrete Structures	3
CSCI 287	Data Structures	3
CSCI 296	Web Programming	3
CSCI 303	Computer Org & Architecture	3
CSCI 356	Database Systems	3
CSCI 358	Introd Information Assurance	3
CSCI 392	Algorithms & Adv Data Structur	3
CSCI 400	Computer Science Seminar	2
CSCI 445	Computer Communication Network	3
CSCI 471	Parallel & Distributed Program	3
CSCI 485	Programming Languages	3
CSCI 487	Software Design And Developmen	3
CSCI 489	Operating Systems	3
CSCI 493	Senior Project I	3
CSCI 494	Senior Project II	3
Total Credit Hours		**54**

Code	Title	Credit Hours
MATH 260	Calculus I	4
MATH 261	Calculus II	4
MATH 280	Discrete Math Computer Science	3
STAT 340	Probability Stat Cmptr Scienti	3
Total Credit Hours		**14**

Code	Title	Credit Hours
Unrestricted Electives		**6**
Restricted Electives		**13**
CSCI Electives Menu		
CSCI 312	Introduction to Robotics	
CSCI 361	Embedded Syst: Design/Applic	
CSCI 389	Human-Computer Interaction	
CSCI 396	Advanced Web Programming	
CSCI 298	Internship Computer Science I	
CSCI 398	Internship Computer Science II	
CSCI 402	Introd Artificial Intelligence	
CSCI 450	Computer Forensics	
CSCI 451	Computer Security	
CSCI 452	Introd to Cryptography	
CSCI 453	Digital Image Processing	
CSCI 456	Advanced Database Applications	
CSCI 457	Introduction to Data Mining	
CSCI 460	Computability & Formal Lang Th	
CSCI 462	Compiler Construction	
CSCI 480	Computer Graphics	
CSCI 482	Matrix Computations	
CSCI 488	Advanced Systems Architecture	
CSCI 492	Algorithms And Complexity	
CSCI 495	Topics In Computer Science	
CSCI 496	Web Design & Cyber Security	
MATH Electives Menu		
MATH 292	Introduction to Number Theory	
MATH 317	Stochastic Processes	
MATH 321	Combinatorics	
MATH 325	Linear Algebra	
MATH 335	Mathematical Modeling	
MATH 340	Euclidean & Noneuclid Geomet I	
MATH 348	Introduction to Game Theory	
MATH 350	Differential Equations	
MATH 352	Intro to Mathematical Biology	

MATH 360	Calculus III
MATH 392	Introduction Linear Programmin
MATH 415	Matrix Theory
MATH 417	Numerical Linear Algebra
MATH 425	Abstract Algebra I
MATH 452	Numerical Analysis
MATH 473	Discrete Wavelet Transfor/Appl
MATH 490	Graph Theory
STAT 380	Probability & Statistics II
BIOL/CHEM/PHYS Laboratory Courses	**Courses must be intended for science and engineering majors. Select from the following list and get the approval from the student's academic advisor.**
PHYS 105	Introduction to Physics I
PHYS 106	Introduction to Physics II
PHYS 112	General Physics I
PHYS 113	General Physics II
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator
BIOL 120	Principles Of Biology I
BIOL 121	Principles Of Biology II
Total Credit Hours	**19**

Code	Title	Credit Hours
General Education		33
Core Requirements		54
Major/Concentration Requirements		14
Electives		19
Total Credit Hours		**120**

Computer Science, Minor in Cybersecurity

Code	Title	Credit Hours
CJUS 116	Intro To Criminal Justice	3
CSCI 358	Introd Information Assurance	3
CSCI 450	Computer Forensics	3
CSCI 451	Computer Security	3
CSCI 495	Topics In Computer Science	3
Restricted Elective	**Choose a course from the list below:**	**3**
ENGT 301	Computer Programming	
ENGR 203	Introduction to Programming	
CISY 330	Computer Programming I	
MISY 330	Introd to Java Programming	
CSCI 250 & CSCI 251	Programming II and Programming II Lab	
Total Credit Hours		**18**

Department of Engineering and Technology

Chairperson: Nasser Ghariban
Location: Engineering and Technology Building, Room 301
Contact Information: (804) 524-1105 | nghariban@vsu.edu

Department Overview

The Department of Engineering offers three undergraduate degrees: **Bachelor of Science (B.S.) in Computer Engineering**, **Bachelor of Science (B.S.) in Manufacturing Engineering**, and **Bachelor of Science (B.S.) in Mechanical Engineering**. The department also offers graduate level degree: **Master of Science in Data Analytics** (refer to the Graduate Catalog for more information).

Mission Statement

The mission of the Department of Engineering is to provide excellent education and research opportunities to a diverse student body in order to prepare them for productive careers at industrial, governmental, and academic settings in the rapidly evolving fields of science and engineering.

Student Organizations

- American Society of Mechanical Engineers (ASME)
- Institute of Electrical and Electronics Engineers (IEEE)
- Society of Manufacturing Engineers (SME)
- National Society of Black Engineers (NSBE)
- Society of Women Engineers (SWE)

Accreditation Information

The Computer Engineering (Bachelor of Science) program is accredited by the Engineering Accreditation Commission of ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-engineering-computer-science/www.abet.org), under the commission's General Criteria and Program Criteria for Electrical, Computer, Communications, Telecommunication(s), and Similarly Named Engineering Programs. The Manufacturing Engineering (Bachelor of Science) program is accredited by the Engineering Accreditation Commission of ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-engineering-computer-science/www.abet.org), under the commission's General Criteria and Program Criteria for Manufacturing and Similarly Named Engineering Programs. ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-engineering-computer-science/www.abet.org) requires that the programs have published Program Educational Objectives (PEOs) that are consistent with the Institution's mission, the various constituencies' needs, and other ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-engineering-

computer-science/www.abet.org) criteria. It also requires that each program has documented and publicly stated Student Outcomes (SOs) that minimally include those defined by the organization.

According to ABET (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-engineering-computer-science/www.abet.org), "Program Educational Objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Student Outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program."

Department Goals

The **Computer Engineering Program Educational Objectives** are as follows:

- Advance in their profession as globally competitive leaders in their selected career field.
- Practice the profession ethically and responsibly throughout their careers, and contribute to the welfare of local, national, and global communities.
- Present and produce documents or media to enhance individual and organizational productivity.
- Engage in professional development throughout their careers to broaden their knowledge for significant contributions to technological innovation.

The **Manufacturing Engineering Program Educational Objectives** are as follows:

- Advance in their profession as globally competitive leaders in their selected career field.
- Practice the profession ethically and responsibly throughout their careers, and contribute to the welfare of local, national, and global communities.
- Present and produce papers or media to enhance individual and organizational productivity.
- Engage in professional development throughout their careers to broaden their knowledge for significant contributions to technological innovation.

The **Mechanical Engineering Program Educational Objectives** are as follows:

- Advance in their profession as globally competitive leaders in their selected career field.
- Practice the profession ethically and responsibly throughout their careers, and contribute to the welfare of local, national, and global communities.
- Present and produce papers or media to enhance individual and organizational productivity.
- Engage in professional development throughout their careers to broaden their knowledge for significant contributions to technological innovation.

Program Listings

Bachelor of Science (B.S.) in Computer Engineering

Computer engineers design computer based real-time data acquisition systems. They analyze and design of computer hardware and software systems and consider tradeoffs. In addition, computer engineers are used in an ever-growing number of positions involved with the applications of computers and digital technology. Our program prepares students by providing a strong background in mathematics, statistics, sciences and engineering, with emphasis in computer hardware, software, interfacing, and design. It also grants elective flexibility for specialization in all aspects of computer engineering and related areas. In addition, our students participate in undergraduate research, summer internships, professional societies, and leadership skills development.

The Student Outcomes for the Computer Engineering program are as follows:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- an ability to communicate effectively with a range of audiences
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Bachelor of Science (B.S.) in Manufacturing Engineering

Manufacturing engineers plan, direct, and coordinate new products from the design stage to the production and delivery to customers. Our program prepares students with a strong technical foundation in conventional manufacturing engineering and provides them with the tools to face the challenges of globalized marketplaces, and ecologically conscious and interdisciplinary business environments. Our curriculum is developed to provide a balanced knowledge of product design; materials; manufacturing processes; manufacturing systems; manufacturing automation and robotics; quality assurance; and project management. Students experience hands-on activities in our advanced laboratories. Besides laboratory experiences, we offer our students a rich educational experience in interdisciplinary research through senior projects, manufacturing design implementation, extracurricular activities, and interaction with our exceptional faculty at the forefront of their fields.

The Student Outcomes for the Manufacturing Engineering program are as follows:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- an ability to communicate effectively with a range of audiences
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Bachelor of Science (B.S.) in Mechanical Engineering

Mechanical engineering is a diverse subject that takes a product from an idea to the marketplace. In order to accomplish this, the mechanical engineer needs to acquire particular skills and knowledge. The most common skill in the mechanical engineer's exclusive domain is the ability to analyze and design objects and systems with motion. They use basic science and mathematics to design complex engineering systems, which requires the application of physical and mechanical principles to the development of machines, energy conversion systems, materials and equipment for guidance and control.

The mechanical engineering curriculum is based on a common core of engineering courses taken in the first two years. Students spend their third and fourth studying fundamental courses in controls and systems analysis, fluid mechanics, heat transfer, mechanical design and thermodynamics. This curriculum students to play key roles in a wide range of industries including automotive, aerospace, biotechnology, computers, electronics, microelectromechanical systems, energy conversion, robotics and automation, and manufacturing.

The Student Outcomes for the Mechanical Engineering program are as follows:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- an ability to communicate effectively with a range of audiences
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Major(s)

- Computer Engineering, Bachelor of Science (B.S.) (p. 238)
- Manufacturing Engineering, Bachelor of Science (B.S.) (p. 239)
- Mechanical Engineering, Bachelor of Science (B.S.) (p. 240)

CPEG 207. Introduction To Digital System. (3 Credits)
Boolean algebra and logic design of combinational and sequential circuits. Gate and flip-flop characteristics for TTL technology adders, multipliers, register transfer language, general-purpose processor design, basic computer organization, machine level programming, relationships between software and hardware. Prerequisite: ENGR 102 Introduction to Engineering II. Co-requisite: CPEG 227 Digital Systems Laboratory.

CPEG 208. Microprocessors. (3 Credits)
CPEG 208 Microprocessors - 3 semester hours Sp Principles of operation of modern microprocessors, including, internal architecture, timing analysis, and interfacing techniques. Special emphasis will be placed on hardware-software interactions using assembly language programming and utilization of programmable peripheral devices. Corequisite(s): CPEG 228 Microprocessors Laboratory.

CPEG 227. Digital Systems Laboratory. (1 Credit)
Design and implement digital systems. Build combinational and sequential logic circuits. Measure/ troubleshoot the logic circuits using general electronic test equipment. Reinforce the concepts learned in CPEG 207 Introduction to Digital Systems. Co-requisite: CPEG 207 Digital Systems.

CPEG 228. Microprocessors Laboratory. (1 Credit)
CPEG 228 Microprocessors Laboratory - 1 semester hour Sp Microprocessor-based laboratory utilizing computer programming language. Emphasis is on writing and running programs on modern microprocessor systems. Lab includes both software and hardware. Corequisite(s): CPEG 208 Microprocessors Laboratory.

CPEG 303. Introduction To Electronics. (3 Credits)
Basic semiconductor physics, theory of p-n junctions; diodes, field effect transistors, and bipolar transistors; modeling of diode and transistor devices; analysis and design of diode switching and rectifier circuits; basic transistor switching circuits and single stage amplifiers; multistage transistor amplifier biasing; op amps, and output stages; electronic simulation using PSPICE. Prerequisite: ENGR 201 Circuit Analysis and PHYS 113 General Physics II Co-requisite: CPEG 323 Introduction to Electronics Laboratory. Co-requisite: CHEM 151 General Chemistry I.

CPEG 305. Operating Systems. (3 Credits)
Functions and components of an operating system, including process synchronization, job scheduling, memory management, file systems protection, and deadlocks. Related system software, such as loaders, linkers, assemblers, and windowing systems. Prerequisite: ENGR 203 Introduction to Programming.

CPEG 306. Computer Architecture I. (3 Credits)
Hardware and software structures found in modern digital computers. Instruction set architecture, hardwired design of the processor, microprogramming, I/Q and memory units, analysis of instruction usage, and hardware complexity. Prerequisite: CPEG 208 Microprocessors.

CPEG 307. Linear System Analysis. (3 Credits)
Transient response of linear time-invariant, continuous-time and discrete-time dynamic systems by various methods including Laplace transform, and z-transform; properties of sampling; input-output characteristics; frequency response analysis. Prerequisites: ENGR 201 Circuit Analysis Co-requisite: MATH 350 Differential Equations.

CPEG 308. Analog Comm Amplitude Freq Mod. (3 Credits)
Filter design, noise, signal-to-noise ratio, amplitude modulation, frequency modulation. Prerequisites: CPEG 303 Introduction to Electronics and PHYS 113 General Physics II.

CPEG 309. Advanced Digital Systems Desig. (3 Credits)
Design of digital systems using programmable logic devices and high-level design techniques. Emphasizes the application of state-of-the-art hardware devices as well as design and simulation tools. Prerequisite: CPEG 207 Introduction to Digital Systems Co-requisite: CPEG 329 Advanced Digital System Design Laboratory.

CPEG 320. Integrated Circuit Device Desi. (3 Credits)
Introduction to VLSIC semiconductor device physics, operation, design and physical layout techniques for semiconductor devices. Prerequisites: CPEG 303 Introduction to Electronics (or Consent of Instructor)

CPEG 323. Introd Electronic Laboratory. (1 Credit)
Prototype bread-board electronic circuits using diodes, bipolar junction transistors, MOSFETS with DC biasing configurations and with superimposition of AC signals. Operational and differential amplifier and active filter circuits. Co-requisite: CPEG 303 Introduction to Electronics.

CPEG 329. Adv Digital System Design Lab. (1 Credit)
System design using programmable logic devices and high-level design techniques. Application of state- of-the-art hardware devices as well as design and simulation tools. Co-requisite: CPEG 309 Advanced Digital System Design.

CPEG 403. Engineering Computations. (3 Credits)
Linear algebra, complex analysis and phasor calculus; algorithms for roots of equations. Programming in C and use of the application language, such as, MATLAB. Prerequisite: Senior standing.

CPEG 404. Real-Time Data Acquis Contr Sy. (3 Credits)
CPEG 404 Real-Time Data Acquisition and Control System - 3 semester hours Advanced course in design of data acquisition systems with real time control applications. Emphasis is placed on sensors in control systems; signal conditioning; actuators; controllers; and data acquisition using A/D conversion. Corequisite(s): None.

CPEG 406. Computer Architecture II. (3 Credits)
Pipelined control and ALU designs, parallel processor organizations including SIMD and shared memory MIMD, message passing MIMD, data-flow processing, cache memory design, and processor-memory interconnections. Prerequisite: CPEG 306 Computer Architecture I.

CPEG 407. Linear Control System Design. (3 Credits)
Classical and modern techniques for design and compensation of linear feedback control systems. Includes Bode design, root locus design, state variable pole placement design. Prerequisites: CPEG 307 Linear System Analysis and PHYS 112 General Physics I.

CPEG 410. Digital Communication. (3 Credits)
Discrete Fourier Transforms. Binary and M-ary Signaling, Digital Communication in the Presence of Noise, Matched Filtering and Equalization, Introduction to Information Theory. Prerequisite: CPEG 307 Linear System Analysis and CPEG 308 Analog Communication.

CPEG 411. Communication System Design. (3 Credits)
Application of communication theory to system design. Development of communication system specifications. System simulation utilizing a graphical programming language. Hardware and software design and simulation. Design of a complete analog or digital transmitter and receiver or significant subsystems. Prerequisite: CPEG 410 Digital Communication.

CPEG 412. Org & Design Digital Syst Comp. (3 Credits)
Considerations for hardware organization of computer and digital systems; includes ALU and CPU structures, control unit organization, storage systems, and the I/O channels. Microprogramming the control unit and different interrupt structures. Prerequisite: CPEG 208 Microprocessors.

CPEG 413. Digital Signal Process Filter. (3 Credits)
Discrete-time signals and systems, sampling, discrete Fourier transforms, analog filter characteristics, non- recursive and recursive filter design, and CAD tools for filter design. Prerequisite: CPEG 307 Linear System Analysis Co-requisite: CPEG 423 Digital Signal Processing and Filter Design Laboratory.

CPEG 414. Introduction Pattern Recogniti. (3 Credits)
Design of learning and adaptive machines. Elementary decision theory, perception algorithm, Bayes Classification rule, learning algorithms, elements of syntactic pattern recognition, adaptive classifiers. Prerequisite: Senior standing in CPEG. Non majors require consent of instructor.

CPEG 415. Introd Digital Image Processin. (3 Credits)
Basic methods for digitizing, storing, processing, and displaying images. Computational procedures for image enhancement, restoration, coding, and segmentation. Prerequisite: Senior standing in CPEG. Non majors require consent of instructor.

CPEG 416. Embedded Controllers. (3 Credits)
CPEG 416 Embedded Controllers - 3 semester hours F Project oriented course in design of a special purpose computing system with hardware/software trade-offs which encapsulates all the devices such as processor, memory, interface and control in single package. Corequisite(s): CPEG 426 Embedded Controllers Laboratory.

CPEG 420. Nanotechnology Fabrication Pri. (3 Credits)
Introduction to semiconductor fabrication principles and technology, including crystal growth, oxidation, diffusion, ion implantation, photolithography, chemical vapor deposition, physical vapor deposition, plasma reactive ion etching, chemical mechanical polishing and other nanotechnology manufacturing techniques.

CPEG 422. Adv Integrated Circuit Design. (3 Credits)
Advanced designed topics will be addressed, including digital design circuits, propagation delay, noise margins, power dissipation, various design styles and architectures as well as the issues that designers must face, such as the influence of technology scaling on circuit performance and the impact of interconnect parasitic for optimizing the speed, area or power. CAD Tools for layout, extraction and simulation will be used for assignments.

CPEG 423. Digital Signal Proc/Filter Lab. (1 Credit)
Implement digital signal processing algorithms including: sampling, digital filtering, and simulation. Develop and test Finite Impulse Response (FIR) filters, Infinite Impulse Response (IIR) filters, and Digital Signal Processor (DSP) applications on DSP microprocessors. Reinforce the concepts learned in CPEG 413 Digital Signal Processing and Filter Design. Co-requisite: CPEG 413 Digital Signal Processing and Filter Design.

CPEG 426. Embedded Controllers Lab. (1 Credit)
CPEG 426 Embedded Controllers Laboratory - 1 semester hour F Project oriented laboratory course in the areas of embedded controllers and systems. Prerequisite: Co-requisite(s): CPEG 416 Embedded Controllers.

CPEG 461. Senior Design I. (2 Credits)
Capstone design projects that focus on the early stages of project development: design methodology, literature review, specifications development, design alternatives, project plan, and project management. Written and oral communications. Team building. Ethics and professionalism. Prerequisite: Senior standing.

CPEG 462. Senior Design II. (2 Credits)
Hardware and Software implementation of the capstone design projects proposed in CPEG 461 SENIOR DESIGN I. Design prototyping, testing, evaluation, project reports and project presentation. Prerequisite: CPEG 461.

CPEG 499. Special Topics. (3 Credits)
Topics relating to basic design and current practice. Maximum three hours. Prerequisite: Completion of all junior CPEG courses or consent of instructor.

ENGR 101. Introduction to Engineering I. (2 Credits)
Introduction to the engineering profession, Introduction to problem solving using analytical, graphical, and computer tools including scientific word processors, spreadsheets and database packages, mathematical computation software. Introduction to logic. Engineering ethics and professional responsibilities. This course includes lab sessions.

ENGR 102. Introduction to Engineering II. (2 Credits)
Introduction to problem solving using analytical, graphical, and computer tools including scientific word processors, spreadsheets and database packages, mathematical computation software. Introduction to engineering analyses. Engineering ethics and professional responsibilities. This course includes lab sessions. Prerequisite: ENGR 101 Introduction to Engineering I.

ENGR 200. Engineering Graphics. (3 Credits)
Fundamentals laws of circuit analysis. Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, circuits containing independent and dependent voltage and current sources, resistance, conductance, capacitance and inductance analyzed using mesh and nodal analysis, superposition and source transformations, and Norton's and Thevenin's Theorems. Steady state analysis of DC and AC circuits. Complete solution for transient analysis for circuits with one and two storage elements. Prerequisite: MATH 260 Calculus I. Co-requisite: ENGR 221 Analog Circuits Laboratory.

ENGR 201. Circuit Analysis. (3 Credits)
Fundamentals laws of circuit analysis. Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, circuits containing independent and dependent voltage and current sources, resistance, conductance, capacitance and inductance analyzed using mesh and nodal analysis, superposition and source transformations, and Norton's and Thevenin's Theorems. Steady state analysis of DC and AC circuits. Complete solution for transient analysis for circuits with one and two storage elements. Prerequisite: MATH 260 Calculus I. Co-requisite: ENGR 221 Analog Circuits Laboratory.

ENGR 203. Introduction to Programming. (3 Credits)
An introduction to the computer, the algorithmic process, and computer programming using standard control structures.

ENGR 204. Intro to Object Oriented Progr. (3 Credits)
Advanced program design and implementation in a programming language. Object-oriented programming with concepts including class structure and behavior, objects, inheritance and reuse, virtual functions and polymorphism, exception handling, and templates.

ENGR 210. Statics & Strength Materials. (3 Credits)
The first part of this course covers the application of the principles of engineering mechanics to problems involving equilibrium of particles and solids. Topics include resultants, equilibrium, friction, trusses, center of gravity and moments of inertia. The second part of this course introduces the principles of mechanics necessary for the solution of engineering problems relating to strength, stiffness and material selection. Topics covered include stress, strain, torsion, beams, columns and combined stresses at a point. Prerequisite: ENGR 101 Introduction to Engineering I. Co-requisite: MATH 261 Calculus II.

ENGR 221. Analog Circuits Laboratory. (1 Credit)
Measurement techniques and experiments on fundamental laws. Circuit analysis techniques including: Ohm's Law, Kirchhoff's current and voltage laws, the law of conservation of energy, Norton's and Thevenin's Theorems, mesh and nodal analysis, superposition, and source transformations. Reinforce the concepts learned in ENGR 201 Circuit Analysis. Co-requisite: ENGR 201 Circuit Analysis.

ENGR 301. Engineering Statistics. (3 Credits)
Engineering applications of the concepts of probability, statistical distributions, statistical analysis, regression and correlation analysis, analysis of variance and covariance, design of experiments. Prerequisite: MATH 260 Calculus I.

ENGR 304. Mechatronic System. (3 Credits)
An introduction to designing a mechatronics system that includes the integration of electrical and mechanical engineering principles within a unified framework. Topics include low-level interfacing of software with hardware, use of programming tools to implement real-time computation; digital logic; analog interfacing; measurement and sensing; and controllers.

ENGR 305. Materials Engineering. (3 Credits)
Structure of matter. Physical and mechanical properties of materials including metals, polymers, ceramics, composites, and electronic materials. Equilibrium diagrams. Heat treatments, material selection and testing and corrosion phenomena. Prerequisite: CHEM 151.

ENGR 310. Engineering Economics. (3 Credits)
Analysis of the time value of money as applied to the manufacturing environment. Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation and income taxes. Sensitivity, uncertainty, and risk analysis. Application of basic principles and tool of analysis using case studies. Prerequisite: MATH 260 Calculus I.

ENGR 313. Thermal Engineering. (3 Credits)
Basic concepts and definitions, properties of pure substance, work and heat, first law of thermodynamics, second law of thermodynamics, and introduction to conductive, convective, and radiative heat transfer. Prerequisite: PHYS 112 General Physics I. Co-requisite: MATH 350 Differential Equations.

ENGR 315. Dynamics. (3 Credits)
Kinematics of particles and rigid bodies. Rectilinear motion, Curvilinear motion, Coordinates systems, velocity, acceleration, relative motion. Newton's second law. Kinetics of particles, Angular momentum, Work-energy methods, Impulse and momentum. Vector mathematics where appropriate. Prerequisite: PHYS 112 General Physics I and ENGR 210 Statics/Strength of Materials.

ENGR 430. Quality Engineering. (3 Credits)
An analysis of the basic principles of quality control, including Total Quality Management and design and analysis of process control charts and sampling plans. Prerequisite: ENGR 301 Engineering Statistics.

MANE 205. Manufacturing Process I. (3 Credits)
The types and properties of engineering materials including metals and polymers as employed in contemporary practice. The traditional manufacturing processing methods by which this materials are shaped into products such as machining, casting, forming, and fabricating techniques. Several experiments will be conducted. Prerequisite: ENGR 102 Introduction to Engineering II.

MANE 210. Manufacturing Process II. (3 Credits)
Modern manufacturing processes and related topics. Includes ceramics, composites, powder metallurgy, property enhancing and surface processing operations, rapid prototyping, and micro-fabricating.
An introductory review of manufacturing support system including production planning and control, quality control, and measurement and inspection. Prerequisite: MANE 205 Manufacturing Process I.

MANE 307. Manufacturing Processes. (3 Credits)
Introduction to operation and design of materials forming, materials removal processes, additive manufacturing, and joining in manufacturing, including product properties, process capabilities, processing equipment design, and economics. Prerequisite: ENGR 305 Materials Engineering.

MANE 310. Cad/Cam. (1-3 Credits)
Design components and assemblies using wire-frame, surface and solid model generation. Manual NC part programming. Benefits, limitations, and selection of CAD and CAM systems. CAD as an input to CAM, and graphics-based NC programming. Configuration of CAD/CAM software, post-processor generation. Prerequisite: ENGR 200 Engineering Graphics and MANE 210 Manufacturing Process II.

MANE 315. Manufacturing Automation. (3 Credits)
Design of integrated production systems including flexible, programmed automatic control for fabrication, assembly, packaging, movement, and storage. Introduction to numerical control, industrial robotics, programmable logic controllers, and computer integrated manufacturing. Several experiments will be conducted. Prerequisite: ENGR 201 Circuit Analysis, ENGR 315 Dynamics and MANE 210 Manufacturing Process II.

MANE 317. Manufacturing Systems. (3 Credits)
Basic principles of systems analysis and modeling applied to manufacturing processes and operations; numerical control, programmable controllers, flexible manufacturing systems, group technology, process planning and control, modeling and simulation of factory operations. Prerequisite: MANE 307 Manufacturing Processes.

MANE 400. Senior Seminar. (1 Credit)
Engineering design, literature searches, industry verses graduate school career options, ethics, professionalism and safety. The Fundamentals of Engineering (FE) Exam will be reviewed for students seeking certification as an Engineer-in-Training and subsequently as Professional Engineer. A departmental assessment examination on fundamental of engineering will be administrated. Prerequisite: Senior standing in MANE.

MANE 410. Prod Planning & Inventory Cont. (3 Credits)
Analysis and design of systems for planning, scheduling and controlling production, inventory and service operations and activities using operations research and dynamic systems method. Inventory analysis and control for single and multi-item systems. Production control methods like MRP, MRP-II, JIT, and Kanban. Manufacturing Strategy and competitiveness.

MANE 415. Project Engineering & Manageme. (3 Credits)
This course introduces Project Management skills needed to define, plan, monitor and complete projects as well as to identify the tools and techniques to resolve problems associated with bringing projects in on time and within an established budget and with high quality. Discussion will include application of network flow and sensitivity analysis in managing, scheduling and controlling a project with GANTT, CPM and PERT method. We will combines theories, techniques, group activities, and computer tools such as Microsoft Project.

MANE 420. Simulation. (3 Credits)
An introduction to discrete event simulation methods with emphasis on applications in manufacturing. The operations research topic of queuing theory is used to illustrate the importance of simulation as a problem- solving tool. Concepts and techniques of simulation modeling are covered as well as the statistical concepts and techniques required to obtain representative data, apply it to the model, and evaluate the results. A current high-level simulation language will be used to code the model for funning on the computer. Prerequisites: ENGR 301Engineering Statistics and ENGR 203 Introduction to Programming.

MANE 440. Off-Line Quality Control. (3 Credits)
A study of development of economic production systems for discrete products in a competitive manufacturing environment. Emphasis is on the interrelationships between product design and production process selection. Concepts of design for manufacture and assembly, tool engineering, and manufacturing systems design are included. Prerequisite: Senior standing in MANE.

MANE 450. Manufacturing Design Implement. (1-3 Credits)
A mix of industry and in-house structured group projects, using process, toll, computer control, quality knowledge, and societal considerations. Projects will progress through a complete manufacturing cycle from design through implementation. Field trips to manufacturing centers. Prerequisite: Senior standing.

MANE 461. Senior Project I. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MANE.

MANE 462. Senior Project II. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MANE.

MANE 499. Special Topics. (3 Credits)
A course of independent study covering topics in Manufacturing Engineering as technical elective. Goal is to enhance student skills and knowledge in relevant topic. Prerequisite: Permission of the instructor.

MEEG 205. Statics. (3 Credits)
The theory and application of engineering vector mechanics to the design and analysis of rigid structures. Application of the principle of equilibrium to particles, rigid bodies, and simple structures are included. Friction, distributed forces, center of gravity, centroids, and moment of inertia are introduced. U.S. engineering and metric systems of units and applications are used. Prerequisite: PHYS 112 Physics I. Co-requisite: MATH 261 Calculus II.

MEEG 210. Dynamics. (3 Credits)
Kinematics of particles and rigid bodies. Rectilinear motion, Curvilinear motion, Coordinates systems, velocity, acceleration, relative motion. Newton's second law. Kinetics of particles, Angular momentum, Work-energy methods, Impulse and momentum. Vector mathematics where appropriate. Prerequisite: MATH 261 Calculus II and MEEG 205 Statics.

MEEG 225. Thermodynamics. (3 Credits)
Fundamental concepts of thermodynamics in which first and second law of thermodynamics are studied. Topics include properties of a simple pure substance, equations of state, work and heat; chemical reactions, internal energy, specific heats, enthalpy, and the application work and heat to a system or a control volume, entropy and equilibrium, and power cycles. Prerequisite: PHYS 112 Physics I. Co-requisite: MATH 261 Calculus II.

MEEG 305. Mechanics of Deformable. (3 Credits)
Introduction to analysis of deformable bodies solids. Topics include stress, strain, stress-strain relations, torsion, beam bending and shearing stresses, stress transformations, beam deflections, statically indeterminate problems, energy methods, column buckling; fatigue; failure theory; analysis and design of bar-type members. Prerequisite: MATH 261 Calculus II and MEEG 205 Statics.

MEEG 306. Solid Mechanics Lab. (1 Credit)
Experimental studies on several engineering fundamentals of material behavior under mechanical loads. Topics include testing materials for tensile, compression, bending and torsional loads, hardness, fatigue, and fracture toughness. Co-Requisite: MEEG 305 Mechanics of Deformable.

MEEG 325. Fluid Mechanics. (3 Credits)
Introduction to the concepts and applications of fluid mechanics and dimensional analysis. Topics include, fluid properties, fluid statics, Bernoulli and Navier-Stokes equations, layer theory, internal and external flows, friction factors in pipes and packed beds, drag coefficients; compressible flow; flow measurements, and turbo machinery. Prerequisite: MEEG 225 Thermodynamics Co-requisite: MATH 350 Differential Equations.

MEEG 335. Heat Transfer. (3 Credits)
Introduction to the principal concepts and methods of heat transfer. Topics includes steady and transient conduction in one- two- and three dimension, external and internal laminar and turbulent convection, radiation. Application of heat transfer in designing heat exchangers, fins, electronic packages will be discussed. Prerequisite: MEEG 225 Thermodynamics and MEEG 325 Fluid Mechanics.

MEEG 336. Thermal Science Lab. (1 Credit)
Introduction to the principal concepts and methods of heat transfer. Topics includes steady and transient conduction in one- two- and three dimension, external and internal laminar and turbulent convection, radiation. Application of heat transfer in designing heat exchangers, fins, electronic packages will be discussed. Co-requisite: MEEG 335 Heat Transfer.

MEEG 405. Machine Design. (3 Credits)
Fundamentals of mechanical design process and Basic principles of applied mechanics and materials employed for the design of machine elements and mechanical systems. Design and application of machine components such as brakes, bet drives, gears, mechanisms, bearings, ways, sleeves, and bushings. Prerequisite: ENGR 200 Graphics and MEEG 305 Mechanics of Deformable.

MEEG 406. Machine Desing Lab. (1 Credit)
Fundamental of planar mechanisms design and analysis and simulation. The laboratory experience provides open-ended projects to reinforce the design process. Co-requisite: MEEG 405 Machine Design.

MEEG 410. Computer Aided Engineering. (3 Credits)
Introduction to the use of modern computational tools used for design and analysis. Emphasis is places on product design with solid modeling and finite-element analysis. Software such as NX/NASTRAN, ANSYS, and MATHLAB that are representative of that found in industry. Prerequisite: ENGR 200 Graphics and MEEG 305 Mechanics of Deformable.

MEEG 425. Thermal System Design. (3 Credits)
Design and analysis of thermofluid systems using principles of thermodynamics, fluid mechanics and heat transfer. Topics include computer simulation, engineering economics, thermal component sizing, steady-state model, and optimization techniques applied to the design and performance analysis of thermal systems. Prerequisite: MEEG 225 Thermodynamics, MEEG 325 Fluid Mechanics, and MEEG 335 Heat Transfer.

MEEG 455. Systems and Controls. (3 Credits)
An introduction to linear systems, transfer functions, and Laplace transforms. It covers stability and feedback, and provides basic design tools for specifications of transient response and frequency-domain techniques. Prerequisite: ENGR 201 Circuit Analysis and MATH 350 Differential Equations.

MEEG 461. Senior Project I. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions, and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MEEG.

MEEG 462. Senior Project II. (2 Credits)
Faculty supervised projects typical of problems which graduates encounter in their professions, and which involve costs, planning scheduling and research. Formal written reports suitable for reference library, that include discussions of methodology, results, and conclusions. Prerequisite: Graduating Senior standing in MEEG.

PHYS 100. Physical Science. (1-4 Credits)
This physical science course is designed for non-science majors. It covers basic physical science areas relating to motion, momentum, angular momentum, energy, gravity, and thermodynamics. Co-requisite: PHYS 100.

PHYS 105. Introduction to Physics I. (1-3 Credits)
A study of the basic concepts of physics including vector algebra, motion, momentum, angular momentum, energy, gravity and thermodynamics. This course is designed for science students not majoring in physics. Lab Laboratory experiments in measurement techniques, mechanics, heat, and vibrations and waves emphasizing proper methods of data and error analysis designed to complement PHYS 105.

PHYS 106. Introduction to Physics II. (1-3 Credits)
A continuation of PHYS 105 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles. Pre-requisite: PHYS 105 Introduction to Physics I Lab A continuation of PHYS 105 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles. Pre-requisite: PHYS 105 Introduction to Physics I.

PHYS 112. General Physics I. (1-4 Credits)
A calculus-based study of the basic concepts of physics. Topics include vector algebra, kinematics, dynamics of single and many-particle systems, gravitation, energy, momentum, conservation laws, circular and rigid body motion, elasticity, fluid mechanics, thermal equilibrium, temperature, and the laws of thermodynamics with applications to ideal gases and thermodynamic processes. Co-requisite: MATH 200 Calculus I Lab Laboratory experiments in mechanics, fluids, and heat designed to compliment PHYS 112. Co-requisite: PHYS 112 General Physics I.

PHYS 113. General Physics II. (1-4 Credits)
A continuation of PHYS 112 treating electromagnetism and optics. Pre-requisite: PHYS 112 General Physics I Co-requisite: MATH 201 Calculus II Lab Laboratory experiments in electromagnetism and optics designed to complement PHYS 113. Pre-requisite: PHYS 112 General Physics I Laboratory Co-requisite: PHYS 113 General Physics II.

Computer Engineering Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
MATH 260	Calculus I	4
ENGL 110	Composition I	3
GE Social Science Electives (p. 147)		3
GE History Electives (p. 146)		3
ENGR 101	Introduction to Engineering I	2
GE Wellness/Health Electives (p. 147)		2
	Credit Hours	**17**
2nd Semester		
MATH 261	Calculus II	4
ENGL 111	Composition II	3
Restricted Elective		3
ENGR 102	Introduction to Engineering II	2
ENGR 203	Introduction to Programming	3
	Credit Hours	**15**
Sophomore Year		
1st Semester		
PHYS 112	General Physics I (and Lab)	4
ENGL 342	Technical Communication	3
CPEG 207	Introduction To Digital System	3
CPEG 227	Digital Systems Laboratory	1
ENGR 204	Intro to Object Oriented Progr	3
Open Elective		3
	Credit Hours	**17**
2nd Semester		
PHYS 113	General Physics II (and Lab)	4
ENGR 201	Circuit Analysis	3
ENGR 221	Analog Circuits Laboratory	1
MATH 350	Differential Equations	3
CPEG 208	Microprocessors	3
CPEG 228	Microprocessors Laboratory	1
	Credit Hours	**15**
Junior Year		
1st Semester		
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
MATH 284	Discrete Mathematics I	3
MATH/SCI Elective		3
CPEG 303	Introduction To Electronics	3
CPEG 323	Introd Electronic Laboratory	1
CPEG 307	Linear System Analysis	3
	Credit Hours	**17**
2nd Semester		
CPEG 305	Operating Systems	3
CPEG 309	Advanced Digital Systems Desig	3
CPEG 329	Adv Digital System Design Lab	1
ENGR 310	Engineering Economics	3
GEEN 310		3
Restricted	Elective [2]	3
	Credit Hours	**16**
Senior Year		
1st Semester		
CPEG 416	Embedded Controllers	3
CPEG 426	Embedded Controllers Lab	1
ENGR 301	Engineering Statistics	3
CPEG 461	Senior Design I	2
GE Social Science Electives (p. 147)		3
Restricted	Elective [3]	3
	Credit Hours	**15**
2nd Semester		
CPEG 404	Real-Time Data Acquis Contr Sy	3
CPEG 413	Digital Signal Process Filter	3
CPEG 423	Digital Signal Proc/Filter Lab	1
CPEG 462	Senior Design II	2
PHIL 450	Applied Ethics	3
GE Literature Electives (p. 147)		3
	Credit Hours	**15**
	Total Credit Hours	**127**

1. 100 level and above courses from CPEG, MANE, ENGR, ENGT, IFLT, CSCI, and MISY.

2. 200 level and above courses from CPEG, MANE, ENGR, ENGT, IFLT, CSCI, and MISY.

3. 300 level and above courses from CPEG, MANE, ENGR, ENGT, IFLT, CSCI, MISY, and MATH

4. General Elective

[123]Requires prior approval

Earn at least a "C" or higher in major courses (ENGR, CPEG, and restricted electives), MATH 260, and MATH 261.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		

GE Literature Electives (p. 147)	
GE Science Electives (p. 147)	
GE Social Science Electives (p. 147)	
GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CPEG 207	Introduction To Digital System	3
CPEG 208	Microprocessors	3
CPEG 227	Digital Systems Laboratory	1
CPEG 228	Microprocessors Laboratory	1
CPEG 303	Introduction To Electronics	3
CPEG 305	Operating Systems	3
CPEG 307	Linear System Analysis	3
CPEG 309	Advanced Digital Systems Desig	3
CPEG 323	Introd Electronic Laboratory	1
CPEG 404	Real-Time Data Acquis Contr Sy	3
CPEG 413	Digital Signal Process Filter	3
CPEG 416	Embedded Controllers	3
CPEG 423	Digital Signal Proc/Filter Lab	1
CPEG 426	Embedded Controllers Lab	1
CPEG 461	Senior Design I	2
CPEG 462	Senior Design II	2
Total Credit Hours		**36**

Code	Title	Credit Hours
ENGL 342	Technical Communication	3
PHYS 113	General Physics II	4
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
MATH 350	Differential Equations	3
MATH 284	Discrete Mathematics I	3
Total Credit Hours		**17**

Code	Title	Credit Hours
Restricted Elective		3
Restricted Elective		3
Restricted Elective		3
Free Elective		3
Total Credit Hours		**12**

Code	Title	Credit Hours
General Education		35
Core Requirements		57
Major/Concentration Requirements		17
Electives		12
Total Credit Hours		**121**

Manufacturing Engineering Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
MATH 260	Calculus I	4
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
ENGR 101	Introduction to Engineering I	2
GE Social Science Electives (p. 147)		3
	Credit Hours	**15**
2nd Semester		
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
MATH 261	Calculus II	4
ENGL 111	Composition II	3
GE Wellness/Health Electives (p. 147)		2
ENGR 102	Introduction to Engineering II	2
ENGR 200	Engineering Graphics (with Lab)	3
	Credit Hours	**18**
Sophomore Year		
1st Semester		
PHYS 112	General Physics I	4
GE Global Studies Electives (p. 146)		3
ENGR 210	Statics & Strength Materials	3
MANE 205	Manufacturing Process I	3
Elective		3
	Credit Hours	**16**
2nd Semester		
PHYS 113	General Physics II (with Lab)	4
GE Literature Electives (p. 147)		3
MATH 350	Differential Equations	3
MANE 210	Manufacturing Process II	3
ENGR 315	Dynamics	3
	Credit Hours	**16**
Junior Year		
1st Semester		
MANE 310	Cad/Cam	3
ENGR 305	Materials Engineering	3
ENGR 203	Introduction to Programming	3
ENGR 301	Engineering Statistics	3
ENGR 201	Circuit Analysis	3
	Credit Hours	**15**
2nd Semester		
ENGR 313	Thermal Engineering	3
MATH 392	Introduction Linear Programmin	3
GE Mathematics Electives (p. 147)		3
ENGL 342	Technical Communication	3
MANE 315	Manufacturing Automation	3
	Credit Hours	**15**
Senior Year		
1st Semester		
MANE 410	Prod Planning & Inventory Cont	3
MANE 461	Senior Project I	2
Restricted Elective		3
MANE 420	Simulation	3

ENGR 310	Engineering Economics	3
MANE 415	Project Engineering & Manageme	3
	Credit Hours	**17**
2nd Semester		
ENGR 430	Quality Engineering	3
MANE 462	Senior Project II	2
Restricted Elective		3
PHIL 275 or PHIL 450	Ethics or Applied Ethics	3
Restricted Elective		3
MANE 400	Senior Seminar	1
	Credit Hours	**15**
	Total Credit Hours	**127**

Earn at least a "C" or higher in major courses (ENGR, MANE and restricted electives), MATH 260 and MATH 261.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGR 101	Introduction to Engineering I	2
ENGR 102	Introduction to Engineering II	2
ENGR 200	Engineering Graphics	3
ENGR 201	Circuit Analysis	3
ENGR 203	Introduction to Programming	3
ENGR 210	Statics & Strength Materials	3
ENGR 301	Engineering Statistics	3
ENGR 305	Materials Engineering	3
ENGR 310	Engineering Economics	3
ENGR 313	Thermal Engineering	3
ENGR 315	Dynamics	3
ENGR 430	Quality Engineering	3
MANE 205	Manufacturing Process I	3
MANE 210	Manufacturing Process II	3
MANE 310	Cad/Cam	3
MANE 315	Manufacturing Automation	3
MANE 400	Senior Seminar	1
MANE 410	Prod Planning & Inventory Cont	3
MANE 415	Project Engineering & Manageme	3
MANE 420	Simulation	3
MANE 461	Senior Project I	2
MANE 462	Senior Project II	2
Total Credit Hours		**60**

Code	Title	Credit Hours
ENGL 342	Technical Communication	3
PHYS 113	General Physics II	4
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
MATH 350	Differential Equations	3
MATH 392	Introduction Linear Programmin	3
Total Credit Hours		**17**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		3
Total Credit Hours		**15**

Code	Title	Credit Hours
General Education		35
Core Requirements		60
Major/Concentration Requirements		17
Electives		15
Total Credit Hours		**127**

Mechanical Engineering, Bachelor of Science (B.S.)

Course	Title	Credit Hours
Freshman Year		
MATH 260	Calculus I	4
GE History Electives (p. 146)		3
ENGL 110	Composition I	3
ENGR 101	Introduction to Engineering I	2
PHYS 112	General Physics I	4
MATH 261	Calculus II	4
ENGL 111	Composition II	3
ENGR 102	Introduction to Engineering II	2
ENGR 200	Engineering Graphics	3
GE Social Science Electives (p. 147)		3
	Credit Hours	**31**
Sophomore Year		
PHYS 113	General Physics II	4
MATH 350	Differential Equations	3
MEEG 205	Statics	3
GE Literature		3
GE Global Studies		3
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
ENGR 201	Circuit Analysis	3

ENGR 203	Introduction to Programming	3
MEEG 210	Dynamics	3
MEEG 225	Thermodynamics	3
	Credit Hours	**32**
Junior Year		
ENGR 304	Mechatronic System	3
ENGR 305	Materials Engineering	3
MEEG 325	Fluid Mechanics	3
MEEG 335	Heat Transfer	3
HPER 170	Health And Wellness	2
ENGL 342	Technical Communication	3
ENGR 301	Engineering Statistics	3
ENGR 310	Engineering Economics	3
MEEG 305	Mechanics of Deformable	3
MEEG 306	Solid Mechanics Lab	1
MEEG 336	Thermal Science Lab	1
	Credit Hours	**28**
Senior Year		
MATH 360	Calculus III	4
MEEG 410	Computer Aided Engineering	3
MEEG 455	Systems and Controls	3
MEEG 461	Senior Project I	2
PHIL 275	Ethics	3
MEEG 405	Machine Design	3
MEEG 425	Thermal System Design	3
MEEG 462	Senior Project II	2
Restricted Elective		3
Restricted Elective		3
	Credit Hours	**29**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGR 101	Introduction to Engineering I	2
ENGR 102	Introduction to Engineering II	2
ENGR 200	Engineering Graphics	3
ENGR 201	Circuit Analysis	3
ENGR 203	Introduction to Programming	3
ENGR 301	Engineering Statistics	3
ENGR 304	Mechatronic System	3
ENGR 305	Materials Engineering	3
ENGR 310	Engineering Economics	3
MEEG 205	Statics	3
MEEG 210	Dynamics	3
MEEG 225	Thermodynamics	3
MEEG 305	Mechanics of Deformable	3
MEEG 306	Solid Mechanics Lab	1
MEEG 325	Fluid Mechanics	3
MEEG 335	Heat Transfer	3
MEEG 336	Thermal Science Lab	1
MEEG 405	Machine Design	3
MEEG 410	Computer Aided Engineering	3
MEEG 425	Thermal System Design	3
MEEG 455	Systems and Controls	3
MEEG 461	Senior Project I	2
MEEG 462	Senior Project II	2
Total Credit Hours		**61**

Code	Title	Credit Hours
ENGL 342	Technical Communication	3
PHYS 113	General Physics II	1-4
CHEM 151	General Chemistry I	3
CHEM 153	General Chemistry I Laboratory	1
MATH 350	Differential Equations	3
MATH 360	Calculus III	4
Total Credit Hours		**15-18**

Code	Title	Credit Hours
MEEG/ENGR/CPEG/CSCI		3
MEEG/ENGR/CPEG/CSCI		3
Total Credit Hours		**6**

Code	Title	Credit Hours
General Education		35
Core Requirements		61
Major/Concentration Requirements		18
Electives		6
Total Credit Hours		**120**

Department of Mathematics and Economics

Chairperson: Francis Erebholo
Location: Hunter McDaniel, Room 213S
Contact Information: (804) 524-5661| ferebholo@vsu.edu

Department Overview

The Department of Mathematics and Economics at Virginia State University offers course work leading to the **Bachelor of Science degree in Mathematics** and the **Bachelor of Science degree in Economics and Finance**. The department, in conjunction with the Center for Undergraduate Professional Education Programs, offers a teaching endorsement in Mathematics (6-12). The Mathematics curriculum offers concentrations in Pure/Applied Mathematics, Statistics, Actuarial Science and Secondary Education.

The Economics and Finance program at Virginia State University (VSU) is under the Department of Mathematics and Economics. It is one of the oldest academic programs at VSU which is designed to provide students with theoretical and analytical tools needed for analyzing and solving real-world micro and macroeconomic problems. The Department offers two curricula of study or concentrations leading to the Bachelor of Science Degree (B.S.) in Economics and Finance. It offers comprehensive knowledge on financial and economic theories, principles, and models that underline the operations and behavior of consumers, business firms, financial institutions, and governments in a domestic and global environment. Familiarity with these principles equip graduates to understand, predict, control, and react rationally to today's dynamic and complex business and economic environment.

Students develop critical thinking and quantitative skills that prepare them for careers as economic, financial and business analysts; researchers; consultants; and middle level managers in government, consulting, trade associations, and other private sector positions. They are also prepared to pursue graduate studies in economics, law, data analytics, financial management, business and public administration programs.

Mission Statement

The mission of the department is to provide academic programs that promote rigorous and relevant instruction, research, and advanced study, designed to develop a diverse, productive, and ethical population of graduates and lifelong learners equipped to effectively participate and compete in the national and global workforce and society.

Department Goals

The **Mathematics Program** objectives are as follows:

- **Experiential Learning**: It is anticipated that graduates of the VSU Mathematics Program will become involved in lifelong learning and interested in professional development opportunities, thus building a background for more advanced mathematics study.
- **Employment**: A VSU Mathematics Program graduate is expected to be engaged in professional practice or in pursuit of advanced study in successful careers as mathematicians, statisticians and engineers in industry, private business and government service, or teach mathematics using technological pedagogical content knowledge.
- **Scholarly Activities**: It is also anticipated that many of the graduates of the VSU Mathematics Program will attempt to promote research by offering technical and professional assistance and engaging in research activities for the advancement of science, technology, engineering and mathematics (STEM), and the improvement of teaching.

The **Economics and Finance Program** objectives are as follows**:**

- Graduates will engage in experiential learning activities such as internships and undergraduate research that will provide them a strong foundation for career development
- Graduates will acquire knowledge and skills to pursue graduate studies in Economics and other related fields.
- Graduates will be able to communicate orally and in writing, learn to access, disseminate, and analyze economic concepts and issues.
- Graduates will have comprehension of economic concepts and the ability to apply problem solving skills

Student Organizations

The Department offers several student-oriented organizations:

- The Walter Johnson Mathematics Club, which provides emphasis on topics and activities of interest to mathematics students,
- The Kappa Mu Epsilon Mathematics National Honor Society (Virginia Alpha Chapter), which provides recognition for academic achievement in mathematics,
- A student chapter of the Mathematical Association of America (MAA),
- Actuarial Science Club,
- The VSU International Diplomacy & Economics Club, and
- Omicron

The Department also offers student membership in Omicron Delta Epsilon, the International Honor Society for Economics. Membership is open to all Economics majors with a minimum grade point average of 3.0.

Program Listings

Bachelor of Science (B.S.) in Mathematics

The Department offers four curricula of study or concentrations leading to the Bachelor of Science Degree (B.S.) in Mathematics.

- The **Pure/Applied Mathematics** concentration provides students with a foundation of pure and applied mathematics enabling employment opportunities or graduate study in mathematics.
- The **Statistics** concentration develops the proficiency in probability and statistics.
- The **Actuarial Science** concentration develops the background necessary for students to pursue opportunities as actuaries in the insurance industry, investment companies, banking, financial management and consulting firms. Emphasis is placed on the understanding of mathematical concepts and the application of statistical and probability procedures employed in the financial sectors.

- The Concentration in **Secondary Education** Program prepares students to obtain a teaching endorsement in mathematics at the secondary school level.

Students who wish to double major need to follow the VSU double major procedure and will need to meet with the coordinator of the undergraduate mathematics program.

Minor in Mathematics
The minor in mathematics consists of five courses offered by the Department of Mathematics and Economics. The calculus sequence; MATH 260, MATH 261, and MATH 360 is required. In addition two more courses at the 300 level or above may be selected from mathematics courses. Students must earn a grade of "C" or better in all courses pursued towards fulfillment of the requirement.

Minor in Economics
The minor in Economics is designed to give students from other programs in the University the opportunity to diversify and complement their educational experience through a minor in economics. It consists of a minimum of 18 credit hours: (12 credit from core course –ECON 210, ECON 211, ECON 310, ECON 320 and 6 elective credits from ECON 321, ECON 330, ECON 313, ECON 350, ECON 438 and ECON 452).

Bachelor of Science (B.S.) in Economics and Finance

- **The Applied Economics concentration**: provides students with a foundation courses to understand the operations and behavior of consumers, business firms, financial institutions, and governments in a domestic and global environment, and widen graduates' opportunities for gainful employment or graduate study in Economics
- **The Economics and Financial Analytics concentration:** provide students with financial economics and data analytics courses to enable students understand, predict and react rationally to today's dynamic and complex business and economic environment.

Students with associate degrees from community colleges are admitted to the VSU BS in Economics program. These students are exempted from all General Education core courses; the 6 credit hours for the basic Micro and Macroeconomics courses they have taken at the community colleges will be considered to their undergraduate degrees; and they are allowed for the fast-track MA program in Economics after their successful completion of their undergraduate program with an accepted GPA score.

Student Outcomes:

The Student Outcomes for the Economics program are as follows:

- Apply core economics concepts in microeconomics and macroeconomics to analyze regional and global economic issues
- Demonstrate the ability to use qualitative and quantitative analytical skills to solve societal problems using modern tools
- Develop capacity for logical inquiry, thinking, reasoning and critical analysis on economic matters
- Demonstrate an ability to communicate effectively.
- Demonstrate an ability to innovate, acquire leadership skills and to engage in knowledge-based economic activities.

Minor in Economics & Finance

The minor program in economics is designed to give students for other programs in the University the opportunity to diversify and complement their education experience in economics. It consists 18 credit hours, including 4 core economics courses (ECON 210; ECON 211; ECON 310 and ECON 320 and two electives from Economics electives at 300 and 400 levels. Students must earn a grade of "C" or better in all required by the program courses.

Major(s)

- Economics, Bachelor of Science (B.S.) (p. 249)
- Mathematics. Bachelor of Science with a Minor in Secondary Education (B.S.) (p. 251)
- Mathematics, Bachelor of Science (B.S.) (p. 252)
- Mathematics, Bachelor of Science with a concentration in Statistics (B.S. (p. 253))
- Mathematics, Bachelor of Science with a concentration in Actuarial Science (B.S.) (p. 255)

Minor(s)

- Minor in Mathematics (p. 256)
- Minor in Economics (p. 256)

MATH 112. Basic Mathematics I. (3 Credits)
Problem solving, real numbers, algebraic expressions, linear equations, systems of linear equations, proportions, geometry, graphs of linear functions, mathematics of finance.

MATH 113. Basic Mathematics II. (3 Credits)
The second part of a basic mathematics sequence. Sets, logic, probability and statistics. Prerequisite: MATH 112.

MATH 120. College Algebra. (3 Credits)
Functions and their graphs, transformation of functions, polynomial, rational, exponential and logarithmic functions, systems of equations; applications of these algebraic concepts to other disciplines.

MATH 121. Trigonometry. (3 Credits)
Trigonometric functions and their graphs, Trigonometric identities, inverse trigonometric functions, analytic trigonometry, and applications of trigonometry.

MATH 122. Finite Mathematics. (3 Credits)
Systems of linear equations and inequalities, introduction to matrices and linear programming, mathematics of finance, sets, counting and probability.

MATH 130. Number And Operations. (3 Credits)
ONLY for students seeking certification to reach PreK - 3/PreK - 6 Number systems and operations, elementary number theory, concepts of integers and rational number, proportions, computational algorithims, current techniques in a problem-solving environment. Including student investigations and hands-on activities.

MATH 131. Algebra And Functions. (3 Credits)
ONLY for students seeking certification to teach PreK - 3/PreK - 6 Basic algebraic operations, linear and quadratic equations, linear systems of equations and inequalities, algebraic functions in the context of modeling and various representations of functions (graphical, tabular, and symbolic). Will include student investigations and hands-on activities. Prerequisites: MATH 130.

MATH 150. Precalculus. (4 Credits)
Functions, Polynomial and rational functions, Inverse functions, exponential logarithmic functions, trigonometric functions and their inverses, transformations, polynomial division, roots of polynomials, partial fraction decomposition. Students successfully completing this course cannot take MATH 120 or MATH 121 for credit.

MATH 212. Business Calculus. (3 Credits)
Limits, continuity, derivatives and its applications in business, introduction to integrations. This course cannot be taken as a Mathematics elective by Mathematics majors. Prerequisites: MATH 120.

MATH 230. Geometry And Measurement. (3 Credits)
A basic study of properties and relationships of polygons and polyhedral, transformation geometry, coordinate geometry, construction, deductive and inductive reasoning, the processes of measurement through geometric investigations, and an introduction to non-Euclidean geometries. This course does not satisfy the requirements of MATH 340. ONLY for students seeking certification to reach PreK - 3/PreK - 6 Prerequisites: MATH 131.

MATH 260. Calculus I. (4 Credits)
Analytic geometry, limits, continuity, derivatives and its applications, introduction to integrations. Prerequisite: MATH 150 or MATH 121.

MATH 261. Calculus II. (4 Credits)
Techniques and applications of integrations, improper integrals, sequences and series, differentiation and integration of power series, Prerequisites: MATH 260.

MATH 280. Discrete Math Computer Science. (3 Credits)
Fundamental techniques in discrete mathematics for application in computer science. Sets, mathematical logic, proof techniques, relations, functions, mathematical induction, counting principle, and analysis of algorithms. Prerequisites: MATH 150.

MATH 284. Discrete Mathematics I. (3 Credits)
Logical statements, truth tables and logical equivalences, Boolean algebra, predicates and quantifies, proof techniques such as direct proof, by cases, by contraposition, and by contradiction, mathematical induction and recursion, proofs with sets and an introduction to counting. Prerequisite: MATH 150.

MATH 285. Discrete Mathematics II. (3 Credits)
Duality, mathematical induction and contradiction, recurrence relations, posets and sorting, vectors and matrices, planar and non-planar graphs, networks, error propagation, combinatorics, circuits, lattices, algebraic systems and machines, algorithms for flowcharting and programming. Prerequisite: MATH 284 Discrete Mathematics I or MATH 280 Discrete Mathematics for Computer Scientists.

MATH 290. Foundations Of Mathematics. (3 Credits)
A study of the development of mathematical concepts and of the great mathematicians who introduced these concepts; development of integral and differential calculus, development of concepts in modern algebra and the use of rigorous set theory as the foundation for analysis, algebra and topology. Prerequisite: MATH 261 Calculus II or concurrent with MATH 261.

MATH 292. Introduction to Number Theory. (3 Credits)
Divisibility theory and prime numbers, Euclidean algorithm, unique factorization, congruences, linear Diophantine equations, and quadratic reciprocity. Prerequisites: MATH 150.

MATH 294. Mathematics of Finance I. (3 Credits)
Interest rates, accumulated and discount function, annuities, forborne and deferred, perpetuities, amortization. Prerequisite: MATH 261.

MATH 295. Mathematics Of Finance II. (3 Credits)
Financial markets and derivatives, hedging and arbitrage pricing. Binomial model. Introduction to stochastic processes and their calculus. The Black-Scholes equations and solutions. Models with continuous dividends. Prerequisite(s): MATH 294, STAT 330 or STAT 340.

MATH 298. Internship in Mathematics I. (1 Credit)
The internship allows students to obtain practical work experience related to mathematics under closely supervised conditions for approximately 45 clock hours. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than 3 times. Prerequisite: Junior standing and permission of department.

MATH 299. Introd Problem Solving Seminar. (3 Credits)
A seminar-based approach which examines areas including the appropriate uses of technology, cooperative learning projects, problem-solving, and mathematics content on the state mandated licensing examination for secondary mathematics. Mathematical topics will include algebra and number theory, measurement, trigonometry, functions, and calculus and basic probability theory. Prerequisite: MATH 261.

MATH 300. Foundation of Mathematics. (3 Credits)
Review of proof techniques and sets, functions and relations, posets, equivalence relations, quotient sets, cardinal numbers, recurrence relations, and introduction to graph theory. Prerequisite: MATH 280 or MATH 284.

MATH 317. Stochastic Processes. (3 Credits)
Conditional probability and conditional expectations, continuous and discrete time stochastic processes including random walks. Markov chains, Poissons process, Brownian motion, and Gaussian processes. Prerequisites: MATH 360, STAT 330 or STAT 340.

MATH 321. Combinatorics. (3 Credits)
Techniques for counting and enumeration including recurrence relations, binominal coefficients, the principle of inclusion and exclusion, graph theory, and networks. Prerequisites: MATH 280 or MATH 284.

MATH 325. Linear Algebra. (3 Credits)
Systems of linear equations, matrices, determinants, vector spaces, bases, dimensions, linear independence, eigenvalues and eigenvectors, and linear transformations. Prerequisite: MATH 260.

MATH 335. Mathematical Modeling. (3 Credits)
Formulation and analysis of mathematical models with applications to Biology, Finance, Engineering and other areas of science. Prerequisite: MATH 261.

MATH 340. Euclidean & Noneuclid Geomet I. (3 Credits)
A study of the foundations of Euclidean geometry including transformations deductive and inductive reasoning and an introduction to non-Euclidean geometries. Prerequisite: MATH 260.

MATH 341. Euclidean & Noneucl Geometr II. (3 Credits)
Euclidean geometry, logic and incidence geometry, Hilbert's axioms, projective geometry, neutral geometry, parallel postulate - history and independence, Non-Euclidean geometry, geometric transformations, hyperbolic geometry and philosophical implications. Prerequisite: MATH 340.

MATH 348. Introduction to Game Theory. (3 Credits)
Introduction to game theory, the study of strategic behavior among parties having opposed, mixed or similar interests. Topics include social choice functions, May's Theorem, Pareto and Condorcet criteria, Arrow's Impossibility Theorem, zero-sum games, best responses and saddle points, mixed strategies, neutralizing strategies, bi-matrix games, solving 2-by-2 bi-matrix games, Nash equilibria, and the Prisoner's Dilemma. Prerequisite: MATH 325.

MATH 350. Differential Equations. (3 Credits)
Introduction to differential equations, initial value problems, modeling and solutions of first-order differential equations, solutions of higher-order differential equations, boundary value problems, series solutions, Laplace transform. Prerequisite: MATH 261.

MATH 352. Intro to Mathematical Biology. (3 Credits)
This course is designed to develop mathematical models in biology and study the behavior of such models using numerical techniques and review the mathematical concepts behind many important biological principles. Topics will be drawn from conversation biology, genetics, and physiology. Mathematics and computational methods to be reviewed include functions in biology, difference and differential equations, integration as needed, probability, numerical matrix algebra and curve fitting software. Students can receive credit either for MATH 352 or BIOL 352 but not for both. Prerequisites: MATH 260 Calculus I, BIOL 120 Principles of Biology I and BIOL 121 Principles of Biology II, or consent of instructor.

MATH 355. Dynamical Systems & Chaos. (3 Credits)
Existence and uniqueness for solutions of ordinary differential equations and difference equations, linear systems, nonlinear systems, stability, periodic solutions, bifurcation theory. Prerequisite: MATH 350.

MATH 360. Calculus III. (4 Credits)
Polar coordinates, parametric equations, calculus of vector-valued functions, partial derivatives, multiple integrals, line and surface integrals, Lagrange multipliers, Curl and divergence, Green's and Stokes' Theorems. Applications. Prerequisite: MATH 261.

MATH 380. Seminar in Actuarial Science. (3 Credits)
Application of the fundamental probability tools to problems encountered in actuarial science. Risk management and insurance, corporate finance, price theory, actuarial models, loss models, simulation and survival models. Course serves as the capstone course in the Actuarial Science track. Co-requisite: MATH 295.

MATH 392. Introduction Linear Programmin. (3 Credits)
Introduction to operation research, modeling with linear programming, the simplex method and sensitivity analysis, duality, degeneracy, and applications. Prerequisite: MATH 260.

MATH 395. Math Problem Solving Seminar. (3 Credits)
A capstone course designed to examine the appropriate uses of technology, cooperative learning projects, problem-solving, mathematics content on the state mandated licensing examination for Secondary Mathematics, and presentations by experienced mathematics educators and business leaders. Mathematical topics include data analysis, probability, matrix algebra and discrete mathematics. Students must register and take the state mandated licensing examination for secondary mathematics as a requirement of the course. (May not be used as a mathematics elective). Prerequisite: Admitted to Teacher Education Candidacy and MATH 299, STAT 330 or STAT 340.

MATH 398. Internship in Mathematics II. (3 Credits)
The internship allows students to obtain practical work experience related to mathematics under closely supervised conditions for approximately 135 clock hours. Students must complete a Memorandum of Agreement prior to commencing the internship. Course may be taken more than once for credit but no more than two times. Prerequisite: Junior standing and permission of department.

MATH 400. Advanced Calculus I. (3 Credits)
Reinforcing proofs with sets and functions, cardinality of sets, axiom of completeness, basic topology of real numbers, sequences, subsequences and limit theorems, properties of continuous functions, differentiation. Prerequisite: MATH 300 Foundations of Mathematics.

MATH 401. Advanced Calculus II. (3 Credits)
Differentiability, Riemann integrals, Riemann-Stieljes, improper integrals, fundamental theorem of calculus, sequence and series of functions, convergence of series, uniform convergence, power series of functions. Prerequisite: MATH 400.

MATH 415. Matrix Theory. (3 Credits)
Matrix algebra, matrix factorization, vector and matrix norms, condition numbers, singular values, diagonalization and similar matrices, Jordan canonical form. Unitary and orthogonal transformations, and the eigenvalue problems. Prerequisite: MATH 325.

MATH 417. Numerical Linear Algebra. (3 Credits)
Numerical methods for solution of linear systems, perturbation theory and linear least square problem, QR factorization, conditioning and stability of linear systems, iterative methods for linear systems, symmetric eigenvalue problems and singular value decomposition, non-symmetric eigenvalue problems. Prerequisite: MATH 325.

MATH 425. Abstract Algebra I. (3 Credits)
Groups, subgroups, cyclic groups, groups of symmetries, permutation groups, alternating group, cosets, normal subgroups, Lagrange's theorem, quotient groups, direct product of groups, group homeomorphisms and isomorphism. Prerequisite: MATH 300.

MATH 426. Abstract Algebra II. (3 Credits)
Rings, ring homeomorphisms, subrings, ideals, quotient rings, integral domains, polynomial extensions of rings, fields and field extensions. Prerequisite: MATH 425.

MATH 429. Approximation Theory. (3 Credits)
Best approximation in normal spaces, approximation by algebraic polynomials and Weierstrass theorem, trigonometric polynomials, uniform approximation by trigonometric polynomials, Chebyshev polynomials, characterization of the best approximation, and orthogonal polynomials. Prerequisite: MATH 400.

MATH 430. Optimizations Theory. (3 Credits)
Optimization fundamentals, unconstrained and constrained optimization. Lagrange multipliers, nonlinear programming algorithms and convex optimization. Prerequisite: MATH 360.

MATH 432. Complex Variables. (3 Credits)
Brief introduction of complex numbers and its properties, Elementary functions of Complex variable, Analytic functions and its basic properties, Contour integration, Cauchy's Theorem and Integral formula, Maximum modulus principles, Series representation of analytic functions, Taylor's Theorem, Classification of singularities, Laurent series, Calculation of residues. Prerequisite: MATH 360, MATH 400.

MATH 445. Introduction to Topology. (3 Credits)
Metric spaces, topological spaces, separation of axioms, connectedness, compactness, homeomorphisms and product spaces. Prerequisite: MATH 400.

MATH 452. Numerical Analysis. (3 Credits)
Error analysis, iterative methods for solving equations in one variable including bisection, fixed-point, Newton's and secant iterations, interpolation and polynomial approximation, numerical differentiation and integration, solutions of differential equations. Prerequisite: MATH 350.

MATH 470. History Of Mathematics. (3 Credits)
An introduction to the chronological history of mathematics and the mathematics who made significant contributions from ancient to modern time. Emphases will be given to development of mathematics from the 19th century BC to the 20th century AD. Prerequisite: MATH 300.

MATH 473. Discrete Wavelet Transfor/Appl. (3 Credits)
Introduction to digital images, complex numbers and Fourier series, convolution and filters, the Haar wavelet transformation, Daubechies wavelet transformations, wavelet shrinkage.

MATH 475. Introd to Difference Equations. (3 Credits)
Dynamics of first-order differences equations, equilibrium points and their stability, periodic points, cycles and their stability, difference equations associated to differential equations, Euler's method, differences calculus, linear differences equations, first and higher order, homogeneous with constant coefficients, non-homogeneous by the methods of undetermined coefficients, limiting behavior of solutions, nonlinear equations transformable to linear difference equations. Prerequisites: MATH 350.

MATH 490. Graph Theory. (3 Credits)
Basic definitions of graphs, Eulerian and Hamiltonian graphs, graph decompositions, matchings, trees, bipartite graphs, vertex colorings, network algorithms planar graphs, Kuratowski's theorem and the Four-color Theorem. Prerequisites: MATH 284 or MATH 280.

MATH 493. Topics in Mathematics. (3 Credits)
Topics in mathematics not covered in ordinary courses. The course may be repeated once for credit if content is different. Prerequisite: Consent of instructor.

MATH 495. Senior Project. (1-3 Credits)
Required of all senior mathematics majors. A capstone course designed to improve students' research skills, students will work on a research project chosen by the faculty in consultation with the students, write a paper and make a presentation at the end of the semester. Prerequisite: Senior academic standing.

MATH 499. Gre Mathematics Review. (3 Credits)
Whole numbers, fractions, decimals, percent's, signed numbers, averages and medians, powers, exponents and roots, algebraic expressions, equations, verbal problems, counting problems, ratio and proportions, sequence and progressions, inequalities, lines, polygons, tri-angles, quadrilaterals, circles, area and perimeter, coordinate geometry, tables, circle, line and bar graphs, cumulative graphs, analytical reasoning tactics, and logical reasoning tactics. A considerable part of the course will be devoted to practice tests similar to quantitative tests of GRE in order to develop the problem-solving and test-taking techniques required.

STAT 210. Elementary Statistics I. (3 Credits)
Presentation of data, frequency distributions, descriptive statistics, elementary concepts of probability, random variables, binomial and normal distributions, sampling procedures, student's t-test, linear correlation. Interpretation of data. This course cannot be taken as a mathematics elective by mathematics majors. Prerequisites: MATH 113 or MATH 120 or MATH 131.

STAT 211. Elementary Statistics II. (3 Credits)
Sampling of attributes, comparison of several samples, one-way analysis of variance, sign test, median test, Kruskal- Wallis test and test for randomness, simple regression analysis and Statistical software.. Prerequisite: STAT 210 or equivalent.

STAT 330. Probability and Statistics I. (3 Credits)
Basic probability rules, conditional probability, independence, B ayes' theorem, discrete and continuous probability distributions, probability density functions, binomial, Poisson, hypergeometric, negative binomial, geometric and normal distributions. Prerequisite: MATH 261.

STAT 340. Probability Stat Cmptr Scienti. (3 Credits)
Introduction to the concepts of probability, random variables, estimation, hypothesis testing, regression, and analysis of variance with emphasis on application. Prerequisites: MATH 261.

STAT 380. Probability & Statistics II. (3 Credits)
Mathematical derivations, computational formulas, and applications and interpretations associated with the techniques of probability theory and elementary statistical inference will be emphasized. Moment-generating functions, basic sampling distribution theory, t and chi-square distributions, one-sample estimation and tests of hypotheses. Prerequisites: MATH 360; STAT 330 or STAT 340.

STAT 382. Introduction To Sampling Metho. (3 Credits)
Random, stratified, systematic and cluster sampling, ratio and regression estimates, estimation of sample size, sampling methods in social, economic and biological surveys, sources of error in surveys. Prerequisite: STAT 380.

STAT 385. Analysis Of Variance. (3 Credits)
Theory, methodology, and practical applications of analysis of variance (ANOVA). Topics will include: one-factor and two-factor ANOVA; multiple comparisons; two-factor and three-factor balanced factorial designs with interactions; random, fixed and mixed-effect models; contrasts and confounding; and the regression approach to ANOVA. Prerequisite: STAT 380.

STAT 410. Advanced Statistical Methods. (3 Credits)
Research applications for social sciences, natural sciences, agriculture and education. Basic probability concepts, point and interval estimates, significance test for mean and proportion, two sample inferences, linear regression, analysis of variance, nonparametric statistics. Uses of statistical software is emphasized. Prerequisite: STAT 380.

STAT 480. Probability & Statistics III. (3 Credits)
Statistical techniques for the treatment of multiple samples. Joint discrete and continuous probability distributions, conditional and marginal distributions, covariance, independent random variables, t-distribution, one sample estimation and hypothesis testing of population parameters in the two-sample case, chi-square tests, and simple linear regression and correlation. Prerequisite: STAT 380.

STAT 481. Nonparametric Statistics. (3 Credits)
Statistical applied whether the relationship between the population and sample is unknown. Wilcoxon rank-sum test, Mann-Whitney U-test, sign test, Wilcoxon signed-rank test, tests for randomness, Spearman's correlation, Kolmogorov-Smirnov statistics, Turkey's quick test, Friedman and Cochran's test, statistical software. Prerequisite: STAT 380.

STAT 482. Applied Multivariate Statistic. (3 Credits)
Multivariate methods using matrix algebra and applied statistics to analyze several correlated measurements made on each experimental unit. Multivariate normal distribution, estimation and hypothesis testing in multiple regression, Hotelling's T, one-way multivariate analysis of variance, introduction to discriminant and factor analysis, principal components and canonical correlations and statistical software. Prerequisite: STAT 410.

STAT 484. Applied Probability. (3 Credits)
Probability theory applied to the study of phenomena in engineering, management science, operations research, and the natural sciences. Markov's inequality, conditional expectation, Markov chains, Chapman-Kolmogorov equation, interarrival and waiting time distributions. Prerequisite: STAT 480.

STAT 490. Probability Theory. (3 Credits)
A rigorous development and proofs of the theory of probability. Formal probability systems, conditional probability, sequences of events, independence of events, random variables, probability density and distribution functions, joint distributions, independence of random variables, functions and transformations of random variables, fundamental limit theorems. Prerequisites: At least two 400-level statistics courses or consent of the instructor.

MAED 402. Student Teaching In Mathematic. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary mathematics candidates. Prerequisite: Departmental Approval.

MAED 460. Teach Math Primary & Elem Grad. (3 Credits)
Methods, materials, and experiences to equip students to teach mathematics in a variety of settings, relevant to early childhood and elementary levels. The activities of the course will develop techniques and strategies of teaching concepts associated with sets, numeration systems, geometry, arithmetic operation, measurements, functions and relations, graphs, logic, number theory and patterns, probability and statistics. Concepts from the psychology of learning will be explored. Prerequisite: MATH 230.

MAED 464. Teaching Math In Middle Grades. (3 Credits)
A study of modern instructional strategies for teaching, planning and directing mathematics in the middle school. Prerequisites: EDUC 202 Introduction to Teaching II.

MAED 473. Teach Math Secondary Schools I. (3 Credits)
A study of modern instructional strategies for teaching, planning and directing mathematics learning in secondary schools. A comparative analysis of national and state mathematics teaching standards is conducted. (Students are strongly recommended to complete EDUC 201 and EDUC 202 before taking this course.) Prerequisite: MATH 299, MATH 360.

COGNATE COURSES

MATH 280 DISCRETE MATHEMATICS FOR COMPUTER SCIENTISTS - 3 semester hours
Fundamental techniques in discrete mathematics for application in computer science. Sets, mathematical logic, proof techniques, relations, functions, mathematical induction, counting principle, and analysis of algorithms.
Prerequisite: MATH 150

STAT 340 PROBABILITY AND STATISTICS FOR COMPUTER - 3 semester hours
Introduction to the concepts of probability, random variables, estimation, hypothesis testing, regression, and analysis of variance with emphasis on application.
Prerequisites: MATH 261

MATHEMATICS WITH A CONCENTRATION IN SECONDARY EDUCATION (6-12)

MAED 402 STUDENT TEACHING IN MATHEMATICS - 3 semester hours
This course is designed to provide supervision in the content area for pre-service secondary mathematics candidates.
Prerequisite: MATH 299, MATH 360

MAED 460 THE TEACHING OF MATH IN ELEMENTARY SCHOOLS - 3 semester hours
Methods, materials, and experiences to equip students to teach mathematics in a variety of settings, relevant to early childhood and elementary levels. The activities of the course will develop techniques and strategies of teaching concepts associated with sets, numeration systems, geometry, arithmetic operation, measurements, functions and relations, graphs, logic, number theory and patterns, probability and statistics. Concepts from the psychology of learning will be explored.
Prerequisite: MATH 230

MAED 473 THE TEACHING OF MATHEMATICS IN SECONDARY SCHOOLS - 3 semester hours
A study of modern instructional strategies for teaching, planning and directing mathematics learning in secondary schools. A comparative analysis of national and state mathematics teaching standards is conducted. (Students are strongly recommended to complete EDUC 201 and EDUC 202 before taking this course.)
Prerequisite: MATH 299, MATH 360

****Minor Electives (18 credits)**
Students can minor in any degree-granting discipline outside their major. A minor is not required for graduation. If a student who is a Mathematics major does not choose a minor, then those 18 credits can be replaced by any courses in the list of Restricted Electives. The minor is designed for students who are not majoring in mathematics and requires minimum credit hours as set by the academic department in which that discipline is housed. A student must formally declare the minor for it to appear on their official academic transcript. A student must go to the departmental office of their desired minor to receive written communication of the requirements for that discipline. The requirements for a student (i.e., a non-Mathematics major) who desires to minor in Mathematics are the completion of MATH 260, MATH 261, MATH 360, and any two additional mathematics or statistics courses at the 300-level or above. Minor request forms can be obtained online under the link to the Registrar's Office.

Secondary Education Concentration
IDST 200 (3 credits), **EDUC 201** (2 credits), **EDUC 202** (2 credits), **EDUC 424** (2 credits), **EDUC 315** (3 credits), **EDUC 427** (3 credits), **SPED 325** or (3 credits). To earn a concentration in Secondary Education, students must satisfy all of the following: **(i)** be accepted into the VSU Professional Teacher Education Program, **(ii)** complete the 18 credit hours of the minor, and **(iii)** pass the mandated professional examinations of the Virginia Department of Education. Upon graduation from the Virginia State University Mathematics program, all students who satisfy the requirements for successful completion of a concentration in Secondary Education will also receive the Commonwealth of Virginia certification and teaching endorsement in Secondary Education.

Free Electives (15 credit hours)**
Math/Stat/Actuarial: Choose any 15 credit hours from any discipline(s) or from the list of the restricted elective below.

Math Secondary Education: EDUC 201 (2 credits), **EDUC 202** (2 credits), **EDUC 424** (2 credits), **EDUC 402** (9 credits).

Restricted Electives (12 credit hours)
MATH 285, **MATH 292**, **MATH 294**, **MATH 295**, **Math 299** (for Secondary Education concentration only), **MATH 317**, **MATH 321**, **MATH 335**,

MATH 340, **MATH 341**, **MATH 348**, **MATH 355**, **MATH 380** (for Actuarial concentration only), **MATH 392**, **MATH 401**, **MATH 415**, **MATH 417**, **MATH 426**, **MATH 429**, **MATH 430**, **MATH 432**, **MATH 445**, **MATH 452**, **MATH 470**, **MAED 475**, **MAED 473**, **MATH 475**, **MATH 490**, **MATH 493**, **STAT 380**, **STAT 382**, **STAT 385**, **STAT 410**, **STAT 480**, **STAT 481**, **STAT 482**, **STAT 484**, **STAT 490**, and any 300 or 400 level courses from any of the following: **CSCI** electives, **MANE** electives, **CPEG** electives, **ELET** electives, **ENGR** electives.

Double Major in Mathematics

Students who wish to double major in mathematics will have to complete the following credits hours in which some will be cross-listed for both majors.

- All core courses in mathematics (36 credits)
- General Education (GE) requirements (33-37 credits)
- All core courses in the second major (36-42 credits)
- Restricted electives from the above list (minimum of 12 credits).

ECON 100. Basic Economics. (3 Credits)
It is designed to cover basic microeconomics and macroeconomics for those not planning further course work in the field. Basic microeconomic and macroeconomic theories are used to explain the economic system, the institutions that make up the system and their functions.

ECON 210. Principles Of Microeconomics. (3 Credits)
It analyzes the price system and its functions in a market economy of distributing goods and services and allocating resources. Concepts include the examination of markets as they range from highly competitive to monopolistic.

ECON 211. Principles Of Macroeconomics. (3 Credits)
It analyzes national and international economic problems, such as inflation, unemployment, productivity, economic growth, and the balance of trade. Particular attention is given to the role of government policy as it seeks to improve economic performance in these areas. Prerequisite: ECON 210 Principles of Microeconomics or Permission of the instructor.

ECON 310. Microeconomics. (3 Credits)
It provides a foundation for understanding the basic organization and operation of the economy. The subject is developed from three aspects: demand analysis, theory of the firm, and market interaction. Prerequisite: ECON 210 Principles of Microeconomics.

ECON 313. Managerial Economics. (3 Credits)
It focuses on the application of economic method to planning and decision making within the firm with respect to profit maximization, market structure, and forecasting. Prerequisite: ECON 210 Principles of Microeconomics.

ECON 320. Macroeconomics. (3 Credits)
It examines the determinants of aggregate income and output, interest rates, prices, employment and the balance of payments, and the use of monetary and fiscal policies. Prerequisite: ECON 211 Principles of Macroeconomic.

ECON 321. Financial Markets & Institutio. (3 Credits)
It presents an analysis of financial instruments, markets, and institutions. Topics include the commercial banking system and the money expansion process, the Federal Reserve System, monetary theory and policy; and international finance. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 330. Econometrics. (3 Credits)
Microeconomics and macroeconomics theories are presented in an analytical and researchable format. Econometric theories and procedures are introduced with an emphasis on application through explaining and predicting various economic phenomena using econometric software. Prerequisite: ISDS 260 Business Statistics or equivalent.

ECON 340. Labor Economics. (3 Credits)
Presents theories of the demand for labor, the supply of labor, unemployment, and wage determination. Related topics include investment in human capital, labor mobility, and unions and collective bargaining as they affect employment and earnings. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 350. Economic Development. (3 Credits)
Examines and analysis alternative theories of economic development in less developed countries. Special emphasis is placed on factors such as capital formation, population growth, institutions, policies and planning for development. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 366. Economics & Minority Groups. (3 Credits)
It examines and analyzes the economic problems and conditions of minority groups, including problems of the effects of numerous programs influencing that development; and strategies for economic and social changes. Prerequisite: One semester of Economics or permission of the instructor.

ECON 411. Industrial Organ & Regulation. (3 Credits)
It examines and analysis industrial organization and structure in terms of market strategies, pricing, and the determinants of the most efficient firm size. Analysis and investigation of the rationale for government regulation of firms and the resulting economic impact is also covered. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 423. Public Finance. (3 Credits)
Analyzes the economic effects of public expenditures, revenues, and indebtedness with reference to select tax and budgetary problems. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 438. Financial Economic Analysis. (3 Credits)
ECON 438 Financial Economic Analysis - 3 semester hours F This course introduces the theory and application of modern financial economic analysis and its application. Time-value of money, types of financial assets and markets, interest rates, risk and return, equity valuations, investment decisions, and portfolio theory are discussed. Prerequisite(s): ECON 321.

ECON 445. Analytical Economics. (3 Credits)
ECON 445 Analytical Economics - 3 semester hours SP Concepts and tools in economic analytics with focus on exploring and visualization of micro and macroeconomics data as well as descriptive and predictive analytics. Prerequisite(s): ECON 330.

ECON 451. International Economics. (3 Credits)
Deals with the study of the theories of causes of trade, directions of trade, and the gains from trade, balance of payments, foreign exchange, and current trade policies and problems including international financial reforms. Prerequisite: ECON 310 Microeconomics, or the approval of the instructor.

ECON 455. Comparative Economic Systems. (3 Credits)
Examines the economic life under alternative systems in the world today. Emphasis is placed on capitalism, socialism, communism and democratic socialism. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 465. Urban Economics. (3 Credits)
Focuses on the economic functions of cities, metropolitan decentralization, urban growth and development, transportation, housing markets, urban renewal, local government finance, and poverty. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 470. History Of Economic Thought. (3 Credits)
Surveys the development of economic thought and the advancement of economic analysis, including the physiocrats, classicists, marginalists, socialists, neoclassicists, institutionalists, and contemporary schools. Prerequisite: ECON 211 Principles of Macroeconomics.

ECON 490. Reading In Economics. (3 Credits)
Provides an opportunity for students to select topics not otherwise included in Economics course work. It requires intensive reading supervised by the instructor and reported on by the students. Prerequisite: ECON 211 Principles of Macroeconomics and approval of instructor.

ECON 498. Economics Internship. (3 Credits)
Provides an opportunity for students to observe and be exposed to the application of economic theories and methods to practical work experience in a closely supervised environment. Prerequisite: Junior standing and department approval.

ECON 499. Seminary In Economics. (3 Credits)
This is a capstone course which a student must demonstrate the ability to choose a well-defined research topic or a case review under faculty advising then proceed to search for essential information and correct procedures for analysis, write-up, and presentation. Prerequisite: Senior standing.

Economics Electives
The ECON electives include **ECON 313**, **ECON 340**; **ECON 350**; **ECON 411**; **ECON 423**; **ECON 451**; **ECON 455**; **ECON 465**; **ECON 470**; **ECON 490**, or any other economic courses approved by the department.

Minor in Economics & Finance
The minor program in economics is designed to give students for other programs in the University the opportunity to diversify and complement their education experience in economics. It consists 18 credit hours, including 4 core economics courses (**ECON 210**; **ECON 211**; **ECON 310** and **ECON 320** and two electives from Economics electives at 300 and 400 levels. Students must earn a grade of "C" or better in all required by the program courses.

Double Major in Economics
Students enrolled in Double Major Economics program are expecting to complete the following credit hours:

- General Education (GE) courses (33 credits)
- Six core courses and four electives in Economics (30 credits)
- The Economics and Double Major (including economics) students could apply in their senior year for Certificate Program in Project Management, taking at least 9 electives credits that could lead to their Certificate Program in PMJT and later on to their MA Program in economics degree with concentration in Project Management.

Technical electives (12 credits for students interested in double major): INLT 292; INLT 320; INLT 444; INLT 485; MISY 318; PADM 305; PADM 404 and other courses approved by academic faculty adviser.

Economics Major, Bachelor of Science (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
MATH 120	College Algebra	3
CISY 201	Microcomputer Concepts	3
GE History Electives (p. 146)		3
GE Global Studies Electives (p. 146)		3
GE Social Science Electives (p. 147)		3
ENGL 111	Composition II	3
MATH 122	Finite Mathematics	3
GE Wellness/Health Electives (p. 147)		2
GE Science Electives (p. 147)		4
GE Humanities Electives (p. 146)		3
	Credit Hours	**33**
Sophomore Year		
ACCT 200 or COBU 201	Introd Finc & Managerial Acct or Introductory Accounting I	3
ECON 210	Principles Of Microeconomics	3
STAT 210	Elementary Statistics I	3
Restricted Elective	Management Elective	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 201	Introduction To Literature	3
ECON 211	Principles Of Macroeconomics	3
MATH 212	Business Calculus	3
ENGL 310 or COBU 200	Advanced Communications Skills or Business Communications	3
	Credit Hours	**30**
Junior Year		
ECON 310	Microeconomics	3
ECON 321	Financial Markets & Institutio	3
MKTG 300	Principles Of Marketing	3
Unrestricted Elective	Upper Level	3
Unrestricted Elective	Upper Level	3
Unrestricted Elective	Upper Level	3
Unrestricted Elective	Upper Level	3
ECON 320	Macroeconomics	3
ECON 330	Econometrics	3
Restricted Elective	Finance Course	3
	Credit Hours	**30**
Senior Year		
ECON 451	International Economics	3
Restricted Elective	ECON Elective	3
Restricted Elective	ECON Elective	3
Restricted Elective	ECON Elective	3
Unrestricted Elective	Upper Level	3
Unrestricted Elective	Upper Level	3
Unrestricted Elective	Upper Level	3
ECON 498 or ECON 499	Economics Internship or Seminary In Economics	3
ECON 423 or ECON 438	Public Finance or Financial Economic Analysis	3
	Credit Hours	**27**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
ECON 310	Microeconomics	3
ECON 313	Managerial Economics	3
ECON 320	Macroeconomics	3
ECON 321	Financial Markets & Institutio	3
ECON 330	Econometrics	3
ECON 350	Economic Development	3
ECON 423	Public Finance	3
ECON 438	Financial Economic Analysis	3
ECON 451	International Economics	3
ECON 498	Economics Internship	3
or ECON 499	Seminary In Economics	
Total Credit Hours		**36**

Code	Title	Credit Hours
Major Required Courses		
STAT 210	Elementary Statistics I	3
ENGL 310	Advanced Communications Skills	3
or COBU 200	Business Communications	
COBU 201	Introductory Accounting I	3
CISY 201	Microcomputer Concepts	3
or COBU 155	Information Systems & Tech I	
Concentration Required Courses		
ECON 321	Financial Markets & Institutio	3
ECON 438	Financial Economic Analysis	3
ECON 445	Analytical Economics	3
Total Credit Hours		**21**

Code	Title	Credit Hours
Unrestricted Electives		24
Restricted Electives		12
Total Credit Hours		**36**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		24
Electives		36
Total Credit Hours		**120**

Economics, Bachelor of Science with a Concentration in Economics and Financial Analytics

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
MATH 120	College Algebra	3
CISY 201 or COBU 155	Microcomputer Concepts or Information Systems & Tech I	3
GE History Electives (p. 146)		3
GE Global Studies Electives (p. 146)		3
ENGL 111	Composition II	3
MATH 122	Finite Mathematics	3
GE Wellness/Health Electives (p. 147)		2
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3
	Credit Hours	**30**
Sophomore Year		
ACCT 200	Introd Finc & Managerial Acct	3
ECON 210	Principles Of Microeconomics	3
STAT 210	Elementary Statistics I	3
Restricted Elective	MGMT Course	3
Unrestricted Elective		3
GE Literature Electives (p. 147)		3
COBU 201	Introductory Accounting I	3
ECON 211	Principles Of Macroeconomics	3
MATH 212	Business Calculus	3
ENGL 310 or COBU 200	Advanced Communications Skills or Business Communications	3
	Credit Hours	**30**
Junior Year		
ECON 310	Microeconomics	3
ECON 321	Financial Markets & Institutio	3
Restricted Elective	MKTG Course	3
Unrestricted Electives		9
ECON 320	Macroeconomics	3
ECON 330	Econometrics	3
Restricted Elective	FINC Course	3
Restricted Elective	Upper Level ECON Course	3
	Credit Hours	**30**
Senior Year		
ECON 451	International Economics	3
ECON 438	Financial Economic Analysis	3
ECON 313	Managerial Economics	3

Unrestricted Electives		15
ECON 498 or ECON 499	Economics Internship or Seminary In Economics	3
ECON 445 or ECON 350	Analytical Economics or Economic Development	3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
ECON 310	Microeconomics	3
ECON 313	Managerial Economics	3
ECON 320	Macroeconomics	3
ECON 321	Financial Markets & Institutio	3
ECON 330	Econometrics	3
ECON 423	Public Finance	3
ECON 438	Financial Economic Analysis	3
ECON 451	International Economics	3
ECON 498 or ECON 499	Economics Internship or Seminary In Economics	3
Total Credit Hours		**33**

Code	Title	Credit Hours
Major Required Courses		
STAT 210	Elementary Statistics I	3
ENGL 310 or COBU 200	Advanced Communications Skills or Business Communications	3
COBU 201	Introductory Accounting I	3
CISY 201 or COBU 155	Microcomputer Concepts or Information Systems & Tech I	3
MATH 212	Business Calculus	3
ECON 445	Analytical Economics	3
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		27
Total Credit Hours		**39**

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		15
Electives		39
Total Credit Hours		**120**

Mathematics, Bachelor of Science with a Minor in Secondary Education (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
BIOL/CHEM/PHYS	Laboratory Science	4
ENGL 110	Composition I	3
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
MATH 260	Calculus I	4
	Credit Hours	**15**
2nd Semester		
MATH 261	Calculus II	4
ENGL 111	Composition II	3
Wellness/Health		2
History Elective		3
BIOL/CHEM/PHYS	Laboratory Science	4
	Credit Hours	**16**
Sophomore Year		
1st Semester		
EDUC 201	Seminar in Education	3
MATH 360	Calculus III	4
MATH 284	Discrete Mathematics I	3
PSYC 212	Human Growth & Development	3
STAT 330	Probability and Statistics I	3
	Credit Hours	**16**
2nd Semester		
EDUC 202	Foundations of Education	3
IDST 200	Digital Media Teacher Educatio	3
MATH 299	Introd Problem Solving Seminar	3
MATH 300	Foundation of Mathematics	3
Literature Elective		3
MATH/STAT	Elective	3
	Credit Hours	**18**
Junior Year		
1st Semester		
Foreign Language		3
EDUC 315	Data Driven Instructional Desi	3
MATH 325	Linear Algebra	3
MATH 395	Math Problem Solving Seminar	3

MATH 470	History Of Mathematics	3
	Credit Hours	**15**
2nd Semester		
MATH 340	Euclidean & Noneuclid Geomet I	3
MATH 350	Differential Equations	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
MATH/STAT	Elective (300 or higher)	3
Foreign Language		3
	Credit Hours	**15**
Senior Year		
1st Semester		
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
MAED 473	Teach Math Secondary Schools I	3
MATH 400	Advanced Calculus I	3
MATH 425	Abstract Algebra I	3
	Credit Hours	**14**
2nd Semester		
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
MAED 402	Student Teaching In Mathematic	3
	Credit Hours	**15**
	Total Credit Hours	**124**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MATH 284	Discrete Mathematics I	3
MATH 300	Foundation of Mathematics	3
MATH 325	Linear Algebra	3
MATH 350	Differential Equations	3
MATH 360	Calculus III	4
MATH 400	Advanced Calculus I	3
MATH 425	Abstract Algebra I	3
MATH 495	Senior Project	1-3
STAT 330	Probability and Statistics I	3
or MATH 340	Euclidean & Noneuclid Geomet I	
Total Credit Hours		**26-28**

Code	Title	Credit Hours
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
SCIENCE COURSE & LAB	AGRI/BIOL/CHEM/PHYS	4
Concentration Courses	Determined with Advisor	9
Total Credit Hours		**17**

Code	Title	Credit Hours
Unrestricted Elective		12
Restricted Elective		15-18
Total Credit Hours		**27-30**

Code	Title	Credit Hours
General Education		35
Core Requirements		32
Major/Concentration Requirements		17
Electives		36
Total Credit Hours		**120**

Mathematics Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 260	Calculus I	4
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
GE Science Electives (p. 147)		4
	Credit Hours	**15**
2nd Semester		
GE History Electives (p. 146)		3
ENGL 111	Composition II	3
MATH 261	Calculus II	4
MATH 284	Discrete Mathematics I	3
GE Science Electives (p. 147)	BIOL/CHEM/PHYS Laboratory Science	4
	Credit Hours	**17**
Sophomore Year		
1st Semester		
MATH 325	Linear Algebra	3
MATH 360	Calculus III	4
GE Literature Electives (p. 147)		3
GE Humanities Electives (p. 146)		3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**16**
2nd Semester		
STAT 330	Probability and Statistics I	3
GE Social Science Electives (p. 147)		3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
GE Wellness/Health Electives (p. 147)		2

GE Global Studies Electives (p. 146)		3
	Credit Hours	**17**
Junior Year		
1st Semester		
MATH 350	Differential Equations	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
MATH 300	Foundation of Mathematics	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**
2nd Semester		
MATH 400	Advanced Calculus I	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
Restricted Elective	MATH/STAT Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**
Senior Year		
1st Semester		
MATH 425	Abstract Algebra I	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3-6
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**12-15**
2nd Semester		
MATH 495	Senior Project	3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**12**
	Total Credit Hours	**119-122**

[1] MATH 280 could be taken in place of MATH 284

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MATH 284	Discrete Mathematics I	3
MATH 300	Foundation of Mathematics	3
MATH 325	Linear Algebra	3
MATH 350	Differential Equations	3
MATH 360	Calculus III	4
MATH 400	Advanced Calculus I	3
MATH 425	Abstract Algebra I	3
MATH 495	Senior Project MATH 395 for Secondary Education concentration	1-3
STAT 330	Probability and Statistics I	3
or MATH 340	Euclidean & Noneuclid Geomet I	
Total Credit Hours		**26-28**

Code	Title	Credit Hours
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
MATH Related Courses	Determined under Advisor's guidance	21
BIOL/CHEM/PHYS Laboratory Science	Determined under Advisor's guidance	4
Total Credit Hours		**29**

Code	Title	Credit Hours
Unrestricted Electives		12
Restricted Electives	Determined under Advisor's guidance	15-18
Total Credit Hours		**27-30**

Code	Title	Credit Hours
General Requirements		35
Core Requirements		28
Major/Concentration Requirements		29
Electives		27-30
Total Credit Hours		**119-122**

Mathematics, Bachelor of Science with a Concentration in Statistics (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 260	Calculus I	4
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
GE Science Electives (p. 147)		4
	Credit Hours	**15**
2nd Semester		
GE History Electives (p. 146)		3
ENGL 111	Composition II	3
MATH 261	Calculus II	4
MATH 284	Discrete Mathematics I	3

GE Science Electives (p. 147)	BIOL/CHEM/PHYS Laboratory Science	4
	Credit Hours	**17**
Sophomore Year		
1st Semester		
MATH 325	Linear Algebra	3
MATH 360	Calculus III	4
GE Literature Electives (p. 147)		3
GE Humanities Electives (p. 146)		3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**16**
2nd Semester		
STAT 330	Probability and Statistics I	3
GE Social Science Electives (p. 147)		3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
GE Wellness/Health Electives (p. 147)		2
GE Global Studies Electives (p. 146)		3
	Credit Hours	**17**
Junior Year		
1st Semester		
MATH 350	Differential Equations	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
MATH 300	Foundation of Mathematics	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**
2nd Semester		
MATH 400	Advanced Calculus I	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
Restricted Elective	MATH/STAT Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**
Senior Year		
1st Semester		
MATH 425	Abstract Algebra I	3
Unrestricted Elective	MATH/STAT Course	3
Restricted Elective	or Minor Related Course	3-6
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**12-15**
2nd Semester		
MATH 495	Senior Project	3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**12**
	Total Credit Hours	**119-122**

[1] MATH 280 could be taken in place of MATH 284

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MATH 284	Discrete Mathematics I	3
MATH 300	Foundation of Mathematics	3
MATH 325	Linear Algebra	3
MATH 350	Differential Equations	3
MATH 360	Calculus III	4
MATH 400	Advanced Calculus I	3
MATH 425	Abstract Algebra I	3
MATH 495	Senior Project	1-3
STAT 330	Probability and Statistics I	3
or MATH 340	Euclidean & Noneuclid Geomet I	
Total Credit Hours		**26-28**

Code	Title	Credit Hours
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
Concentration Related Courses	Determined under Advisor's guidance	21
BIOL/CHEM/PHYS Laboratory Science	Determined under Advisor's guidance	4
Total Credit Hours		**29**

Code	Title	Credit Hours
Unrestricted Electives		12
Restricted Electives		15-18
Total Credit Hours		**27-30**

Code	Title	Credit Hours
General Education		35
Core Requirements		32
Major/Concentration Requirements		17
Electives		36
Total Credit Hours		**120**

Mathematics, Bachelor of Science with a Concentration in Actuarial Science (B.S.)

Freshman Year

1st Semester		Credit Hours
ENGL 110	Composition I	3
MATH 260	Calculus I	4
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
GE Science Electives (p. 147)		4
	Credit Hours	**15**
2nd Semester		
GE History Electives (p. 146)		3
ENGL 111	Composition II	3
MATH 261	Calculus II	4
MATH 284	Discrete Mathematics I	3
GE Science Electives (p. 147)	BIOL/CHEM/PHYS Laboratory Science	4
	Credit Hours	**17**

Sophomore Year

1st Semester		
MATH 325	Linear Algebra	3
MATH 360	Calculus III	4
GE Literature Electives (p. 147)		3
GE Humanities Electives (p. 146)		3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**16**
2nd Semester		
STAT 330	Probability and Statistics I	3
GE Social Science Electives (p. 147)		3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
GE Wellness/Health Electives (p. 147)		2
GE Global Studies Electives (p. 146)		3
	Credit Hours	**17**

Junior Year

1st Semester		
MATH 350	Differential Equations	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
MATH 300	Foundation of Mathematics	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**
2nd Semester		
MATH 400	Advanced Calculus I	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
Restricted Elective	MATH/STAT Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**15**

Senior Year

1st Semester		
MATH 425	Abstract Algebra I	3
Unrestricted Elective	or Minor Related Course	3
Restricted Elective	MATH/STAT Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**12**
2nd Semester		
MATH 495	Senior Project	1-3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
Unrestricted Elective	or Minor Related Course	3
	Credit Hours	**10-12**
	Total Credit Hours	**117-119**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MATH 260	Calculus I	4
MATH 261	Calculus II	4
MATH 284	Discrete Mathematics I	3
MATH 300	Foundation of Mathematics	3
MATH 325	Linear Algebra	3
MATH 350	Differential Equations	3
MATH 360	Calculus III	4
MATH 400	Advanced Calculus I	3
MATH 425	Abstract Algebra I	3
MATH 495	Senior Project MATH 395 for Secondary Education concentration	1-3
STAT 330	Probability and Statistics I	3
or STAT 340	Probability Stat Cmptr Scienti	
Total Credit Hours		**34-36**

Code	Title	Credit Hours
Science Course & Lab	AGRI/BIOL/CHEM/PHYS	4
CSCI 150	Programming I	3
CSCI 151	Programming 1 Lab	1
MATH 294	Mathematics of Finance I	3
MATH 295	Mathematics Of Finance II	3
MATH 380	Seminar in Actuarial Science	3
Total Credit Hours		**17**

Code	Title	Credit Hours
Restricted Electives		15-18
Unrestricted Electives		18
Total Credit Hours		**33-36**

Code	Title	Credit Hours
General Education		33
Core Requirements		17
Major/Concentration Requirements		36
Electives		33-36
Total Credit Hours		**119-122**

Mathematics and Economics, Minor in Economics

Code	Title	Credit Hours
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
ECON 310	Microeconomics	3
ECON 320	Macroeconomics	3
Restricted Electives		6
Student must choose 6 credit hours from the course list below:		
ECON 313	Managerial Economics	
ECON 321	Financial Markets & Institutio	
ECON 330	Econometrics	
ECON 350	Economic Development	
ECON 438	Financial Economic Analysis	
ECON 451	International Economics	
Total Credit Hours		**18**

Mathematics and Economics, Minor in Mathematics

Code	Title	Credit Hours
MATH 260	Calculus I	4
MATH 261	Calculus II	4
MATH 360	Calculus III	4
Any two Mathematics courses at the 300 level or above		6
Total Credit Hours		**18**

Department of Applied Engineering Technology

Chairperson: Dr. Peng Cheng
Location: Engineering and Technology Building, Room 201
Contact Information: (804) 524-1210 | pcheng@vsu.edu

Department Overview

The Department of Applied Engineering Technology at Virginia State University offers dynamic and hands-on academic degree programs leading to the **Bachelor of Science in Electrical and Electronics Engineering Technology**, the **Bachelor of Science in Mechanical Engineering Technology**, and the **Bachelor of Science in Information Logistics Technology**. These programs are designed to equip students with the theoretical knowledge and practical skills necessary to excel in a variety of technological and industrial settings. The department also provides opportunities for advanced professional development through a **Graduate Certificate in Project Management**, an **Undergraduate Certificate in Enterprise Systems**, and a **Wireless Technology Certificate**.

Mission Statement

The mission of the Department of Applied Engineering Technology is to graduate lifelong learners through the provision of quality education, research opportunities, and technical skills that prepare them for gainful employment in the private and public sectors of the economy for sustainable growth and development.

Degree Highlight Information

Applied Engineering Technology: A Collaborative Discipline

As Engineers, graduates with an Engineering Technology degree work very closely with other engineering team members: scientists, technicians and artisans. The applied engineers typically organize the manpower, materials and equipment to design, construct, operate, maintain and manage technical engineering projects.

Accreditation Information

Ensuring Program Quality

Electrical and Electronics Engineering Technology (ELET) program is accredited by the Engineering Technology Accreditation Commission of ABET, under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.

Mechanical Engineering Technology (MCET) program is accredited by the Engineering Technology Accreditation Commission of ABET, under the commission's General Criteria and Program Criteria for Mechanical Engineering Technology and Similarly Named Programs.

Information Logistics Technology (INLT) program is accredited by the Applied and Natural Science Accreditation Commission of ABET, under the commission's General Criteria with no applicable program criteria.

Department Goals

Shaping Future Leaders and Innovators

The goals of the Department of Applied Engineering Technology are to prepare graduates:

- Graduates will earn advanced degrees or advanced certificates in engineering, engineering technology, business, or related fields.
- Graduates will advance professionally in leadership both within a chosen technical field and more broadly within the community
- Graduates will contribute as entrepreneurs and innovators by adapting to new technology and career challenges
- Graduates will publish scholarly articles, pursue patents, and be responsive to societal, legal, ethical, and environmental challenges

Program Listings

Bachelor of Science (B.S) in Electrical and Electronics Engineering Technology

The Bachelor of Science in Electrical and Electronics Engineering Technology program provides students with a strong foundation in both the theory and practical application of electrical and electronics systems. Utilizing modern electrical, electronic and microprocessor laboratories, students gain familiarity with a wide range of areas within electrical and electronic systems, including power system, analog and digital integrated circuits, instrumentation, electronic communications and control devices. This hardware-oriented program emphasizes established design methodologies and laboratory techniques. Learning is enhanced through the use of video resources, microprocessor trainers, power training systems, and computers-based tools for problem solving and system design.

> **Course Requirements:** Students must earn a grade of "C" or higher in all major courses and in MATH 150.

Bachelor of Science (B.S.) in Mechanical Engineering Technology

The Bachelor of Science in Mechanical Engineering Technology program centers on the principles of mechanics and thermal processes. Mechanics focuses on the forces acting on machines and the analysis of potential failure modes. Thermodynamics explores the principles of energy conversion as applied to engines, refrigeration, and other thermal systems. The program features significant laboratory experiences, including mechanical measurements, computer-aided drafting, materials testing, and the study of hydraulic and pneumatic systems. Strong emphasis is placed on the integration of computer tools and techniques. Overall, the program provides students with a practical, application-oriented approach to problem-solving in areas such as machine design, production, and manufacturing.

> **Course Requirements:** Students must earn a grade of "C" or higher in all major courses and in MATH 150.

Bachelor of Science (B.S.) in Information Logistics Technology

The Bachelor of Science in Information Logistics Technology program prepares graduates to work collaboratively within engineering and business teams, including scientists, engineers, technicians, skilled workers, marketers, trainers, and managers, across diverse industries and government sectors. Graduates develop the skills to effectively process information and manage logistics functions in areas such as training, production management, quality management, facilities management, industrial sales and marketing, manufacturing management, supply chain management, distribution, and material handling.

The curriculum is designed to cultivate technical and management professionals who are proficient in:

- Applying theories, concepts, and principles from information systems, industrial engineering, and the social and behavioral sciences, with a strong emphasis on communication skills.
- Understanding and applying the principles and concepts of mathematics and science, along with fundamental computer skills.
- Utilizing concepts and developing current skills in a variety of technical and related disciplines, which may include materials and production processes, industrial management and human relations, marketing, communications, electronics, graphics, distribution, and logistics management.
- Completing a focused area of specialization, such as integrated information systems applications, big data processing, computer-aided design, computer-integrated manufacturing, supply chains, or transportation.

Major(s)

- Electrical and (p. 263)Electronics Engineering Technology, (p. 263)Bachelor of Science (B.S.) (p. 263)
- Mechanical Engineering Technology, Bachelor of Science,(B.S.) (p. 264)
- Information Logistics Technology, Bachelor of Science, (B.S.) (p. 265)

Minor(s)

- Information and Logistics Technology Minor (p. 267)

Other

- Lean Six-Sigma Certificate (http://catalog.vsu.edu/undergraduate/college-engineering-technology/department-technology/lean-six-sigma-certificate/)

Electronics Engineering Technology (ELET)

ELET 101. Circuit Analysis I. (3 Credits)
A beginning course in electric circuit analysis with emphasis on direct-current applications. Topics include: SI units and scientific notation, electrical quantities, measuring electrical quantities, power and energy, resistive circuits, methods of analysis, network theorems and capacitance. Prerequisite: ENGT 100 Introduction to Engineering Technology Co-equivalent: ELET 103 Circuit Analysis I Lab.

ELET 102. Circuit Analysis II. (3 Credits)
A beginning course in electric circuit analysis with emphasis on alternating-current applications. Topics include: magnetic circuits, inductors, sinusoidal waveforms, basic elements and phasors, series and parallel ac circuits, series-parallel networks, ac power, resonance, and three-phase systems. Prerequisites: ELET 101 Circuit Analysis I; MATH 150 Precalculus or equivalent Corequisite: ELET 104 Circuit Analysis II Lab.

ELET 103. Circuit Analysis I Lab. (1 Credit)
Laboratory experiments in DC theory with emphasis on breadboarding electric circuits, using meters, and using electronic simulation software to complement ELET 101 Circuit Analysis I. Corequisites: ENGT 100 Introduction to Engineering Technology; Math 150 Precalculus or equivalent; ELET 101 Circuit Analysis I.

ELET 104. Circuit Analysis II Lab. (1 Credit)
Laboratory experiments in AC theory with emphasis on breadboarding electric circuits, using meters and other test equipment to measure and troubleshoot AC circuits and devices. Develops skills in measuring AC circuit parameters. Prerequisites: ELET 101 Circuit Analysis I; MATH 150 Precalculus or equivalent Corequisite: ELET 102 Circuit Analysis II.

ELET 203. Intro to Electronics. (3 Credits)
An introductory course in solid-state electronic devices and their applications. Topics include the following: diodes and their applications, Zener diodes, the junction transistor, CE, CB, and CC configurations of junction transistors, the SCR and other thyristors, and field-effect transistors. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 205 Introduction to Electronics Lab.

ELET 204. Electronic Circuits. (3 Credits)
An introductory course in solid-state electronic circuits and their applications. Topics include the following: amplifier frequency response, power amplifiers, oscillators, differential and operational amplifiers, operational amplifier applications, power supplies, and voltage regulators. Prerequisite: ELET 203 Introduction to Electronics Corequisite: ELET 206 Electronics Circuits Lab.

ELET 205. Introd to Electronics Lab. (1 Credit)
Laboratory experiments with semiconductor junction devices, with emphasis on diodes, bipolar junction transistors and field-effect transistors including DC biasing and stability to complement ELET 203 Introduction to Electronics. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 203 Introduction to Electronics.

ELET 206. Electronics Circuits Lab. (1 Credit)
Laboratory experiments on power amplifiers, operational amplifiers, oscillators, voltage regulators, and other semiconductor devices, and frequency response analysis to complement ELET 204 Electronic Circuits. Prerequisite: ELET 203 Introduction to Electronics Corequisite: ELET 204 Electronic Circuits.

ELET 207. Digital Circuits. (3 Credits)
An introductory course in digital-circuit concepts, applications, and design. Topics include the following: number systems and codes, logic gates, Boolean algebra, Karnaugh mapping, combinational logic design, sequential logic circuits, sequential logic design, and IC logic families. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 209 Digital Circuits Lab.

ELET 208. Microprocessors. (3 Credits)
Introduction to 16-bit microprocessors with emphasis on programming. Topics include the following: data control, memories, data transmission, addressing modes, subroutines, and introduction to hardware. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 211 Microprocessors Lab.

ELET 209. Digital Circuits Lab. (1 Credit)
Laboratory experiments in combinational logic circuits designed to complement ELET 207 Digital Circuits; analyze, measure and troubleshoot logic circuits and devices using general test equipment. Prerequisite: ELET 101 Circuit Analysis I Corequisite: ELET 207 Digital Circuits.

ELET 211. Microprocessors Lab. (1 Credit)
Microprocessor-based laboratory utilizing computer programming language. Emphasis is on writing and running programs on 8086/8088 based microprocessor systems. Laboratory experience includes both software and hardware. This is the laboratory that accompanies ELET 208 Microprocessors. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 208 Microproces.

ELET 304. Advanced Circuit Analysis. (1-4 Credits)
An advanced course in electric circuit analysis. Topics include the following: review of analysis methods for dc and ac networks, waveforms, differential equations, Laplace transforms and applications, and transfer functions. Prerequisites: ELET 102 Electronic Circuits; MATH 260 Calculus I.

ELET 306. Advanced Electronics. (3 Credits)
An advanced course in the design and applications of linear integrated circuit devices. Topics include the following: power supply regulators, op-amp characteristics, single-supply operation, signal generator circuits, and active filters. Prerequisites: ELET 204 Electronic Circuits; MATH 260 Calculus I Corequisite: ELET 307 Advanced Electronics Lab.

ELET 307. Advanced Electronics Lab. (1 Credit)
Hands-on experience with the design and applications of more advanced electronic circuits including linear integrated electronic circuit devices. This laboratory course is designed to complement ELET 306 Advanced Electronics. Prerequisites: ELET 204 Electronic Circuits; MATH 260 Calculus I Corequisite: ELET 306 Advanced Electronics.

ELET 309. Advanced Digital Circuit. (3 Credits)
A design course for digital computer circuits using integrated circuit devices. Topics include the following: shift registers, counters, encoders, multiplexers, arithmetic circuits, D/A and A/D converters, and memory circuits. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 311 Advanced Digital Circuits Lab.

ELET 311. Adv Digital Circuits Lab. (1 Credit)
This laboratory course complements ELET 309 Advanced Digital Circuits. Students design, construct and troubleshoot digital circuits that include shift registers, memory ICs, PLDs, DACs/ADCs.Design and simulation tools are utilized. Prerequisite: ELET 207 Digital Circuits Corequisite: ELET 309 Advanced Digital Circuits.

ELET 399. Special Topics. (3 Credits)
A course which can be designated by the department to cover some aspect of Engineering Technology as needed by a class or group of students in lieu of another technical elective or as independent study to upgrade their skills and knowledge in a particular area. Prerequisite: Permission of the instructor.

ELET 401. Electric Machinery. (3 Credits)
A course in electric machines designed for students majoring in electronics engineering technology. Topics include the following: fundamentals of electromagnetics, dynamo construction, dc generators and motors, ac dynamos, synchronous machines, ideal and practical transformers, polyphase and single-phase induction motors, and other single-phase motors. Prerequisites: ELET 102 Circuit Analysis II; MATH 260 Calculus I; PHYS 106 Introduction to Physics II or equivalent.

ELET 403. Control Systems. (3 Credits)
A course in control theory and applications. Topics include the following: feedback control, servo components, mathematical techniques, transfer functions, block diagrams, analysis of second-order servo systems, stability and frequency response analysis, and compensation. Prerequisites: ELET 304 Advanced Circuit Analysis; MATH 261 Calculus II; PHYS 105 Introduction to Physics I or equivalent.

ELET 406. Communication Systems. (3 Credits)
Introduction to the theory and practice of communication systems. Covers communication system theory, analog and digital communication techniques. Topics include the following: amplitude, phase, analog, pulse and digital modulation, design and analysis of modulation systems. Prerequisites: ELET 208, ELET 306, ELET 309 and PHYS 106 (or equivalent)

ELET 408. Advanced Microprocessors I. (3 Credits)
An advanced course in microprocessors with emphasis on the hardware of a 16-bit processor. Topics include the following: introduction to the 8086/8088 microprocessor, arithmetic and logic instructions, program control instructions, 8086/8088 hardware specifications, memory interfacing, input/output interfacing, and interrupt circuits. Prerequisite: ELET 208 MICROPROCESSORS Corequisite: ELET 411 Advanced Microprocessors I Lab.

ELET 409. Advance Microprocessors II. (3 Credits)
An advanced course in microprocessors with emphasis on the hardware interfacing of the 8086/8088 to compatible chips. Topics include the following: basic I/O interfacing (using the 8255A PPI), interrupts (using the 8259A PIC), direct memory access, the 8089 I/O coprocessor, the 8087 arithmetic coprocessor, and other 8086/8088 family members. Prerequisite: ELET 408 Advanced Microprocessors I Corequisite: ELET 412 Advanced Microprocessors II Lab.

ELET 412. Advan Microprocessors II Lab. (1 Credit)
Project oriented laboratory course in the areas of microprocessor based systems. Prerequisite: ELET 408 Advanced Microprocessors I Corequisite: ELET 409 Advanced Microprocessors II.

ELET 415. Power System Fundamentals. (3 Credits)
This course offers an overview of power system fundamentals with an emphasis on industry-relevant material. Topics include: an introduction to electrical power systems, circuit solving, components of a power system, and power system analysis. Prerequisite (s): ELET 102 Circuit Analysis II or ENGT 290 Introduction to Electricity and Electronics or equivalent.

ELET 499. Special Topics. (3 Credits)
A course which can be designated by the department to cover some aspect of Engineering Technology as needed by a class or group of students in lieu of another technical elective or as independent study to upgrade their skills and knowledge in a particular subject area. Prerequisite: Permission of instructor.

Engineering Technology (ENGT)

ENGT 100. Introduction Engineering Tech. (2 Credits)
Introduction to professional field of engineering technology; professional ethics and responsibilities of technologists; application of hand calculator to engineering problem solving; systems of units and their conversions; engineering problem-solving techniques.

ENGT 105. Engineering Problem Solving. (2 Credits)
Introduction to use of computers for solving engineering problems. Topics include: Computer Systems,Mathematics and Engineering Technology/Engineering Software Packages. Prerequisite: ENGT 100 Introduction to Engineering Technology.

ENGT 261. Fundamentals of ENGR Graphics. (3 Credits)
Introduction to basic 2D technical drawing and 3D modeling, including sketching, lines, points, geometry, orthographic projection, auxiliary views, section views, basic dimensioning, introduction to GD&T, visualization, basic drawing standards, and assembly. Student projects required (sketching, drawing, and CAD software)

ENGT 290. Intro to Elect/Electronics. (3 Credits)
A course in electrical circuits and electrical machines for students NOT majoring in electronics engineering technology. Topics include the following: resistors, dc circuits, magnetism, electromagnetic forces, ac voltage and current, inductance and capacitance, dc generators and motors, ac circuits, single-phase and three-phase circuits, transformers, 3-phase induction motors, synchronous motors and generators, single-phase motors, motor controls, and electrical distribution. Prerequisites: PHYS 106 Introduction to Physics II or equivalent; MATH 150 Precalculus or Equivalent.

ENGT 301. Computer Programming. (3 Credits)
Basic engineering methods of problem solving using C/C++ or other high-level programming 253 languages. Prerequisite: ENGT 105.

ENGT 321. Engineering Economy. (3 Credits)
Analysis of the time value of money as applied to the production environment, Economic analysis of engineering decisions. Determining rates of return on investments. Effects of inflation, depreciation and income taxes. Sensitivity, uncertainty, and risk analysis. Application of basic principles and tool of analysis using case studies. Prerequisite: MATH 260 Calculus I.

ENGT 401. Technical Internship. (3 Credits)
This course requires the student to work in a company for a semester. The internship provides practical experience in a closely supervised environment. A written Report is required at the end of the internship program. Nine contact hours per week. Prerequisite: Junior Standing and Consent of Instructor.

ENGT 420. Senior Project I. (3 Credits)
Student will design a project to illustrate basic knowledge and skills in one phase of his/her major field. Proposal development, library research, project management and computer usage are stressed. Prerequisite: Senior Standing and Consent of Instructor.

ENGT 421. Senior Project II. (2 Credits)
This portion of the project includes complete design specifications, computer analysis and/or simulation, library research, oral and written reports. It may also include construction, trouble-shooting and demonstration of a working prototype. Prerequisite: ENGT 420 Senior Project I.

Mechanical Engineering Technology (MCET)

MCET 102. Machines Laboratory. (1 Credit)
Basic hand tools, shop safety procedures; fundamental machine operations of drilling, sawing, milling, turning; inspection tools, gauges, measuring instruments. Prerequisite: None.

MCET 200. Statics. (3 Credits)
Force systems, resultants, and equilibrium; trusses, method of joints, method of sections; friction; centroids, moments of inertia. Prerequisites: MATH 150 Precalculus or equivalent and ENGT 100 Introduction to Engineering Technology.

MCET 201. Strength Of Materials. (3 Credits)
Stress and deformation; axial, tensile and compressive stresses, torsion; shear and moment in beams; stresses in beams; and design of beams. Prerequisite: MCET 200 Statics.

MCET 202. Strength Of Materials Lab. (1 Credit)
Tensile, compressive, torsional, bending, impact, hardness, and fatigue tests of materials; use of electrical resistance strain gages; statistical evaluation of data. Prerequisites: MCET 200 Statics and MCET 102 Machines Lab. Corequisite:

MCET 301. Intro To Thermodynamics. (3 Credits)
An introduction to fundamentals of thermodynamics; including work and heat; first and second laws; properties of gases, gas mixtures; compression and expansion of gas steam tables are covered. Prerequisites: MATH 260 Calculus I.

MCET 305. Manufac Materials & Processes. (3 Credits)
The study of the physical and mechanical properties of various materials as applied to design, processing, fabrication methods, and advanced manufacturing Methodologies. Prerequisites: MCET 201 Strength of Materials.

MCET 306. Machine Design I. (3 Credits)
The design of basic elements used in machines, including machine columns, welds, rivets, screws, springs, flexible couplings, belt and chain drives. Design for fatigue strength is included. Prerequisites: MCET 201 Strength of Materials, ENGR 200 Engineering Graphics/ENGT 261 Fundamentals of ENGR Graphics and MATH 260 Calculus I.

MCET 307. Kinematics Of Machines. (3 Credits)
The study of techniques for the analysis of displacement, velocity, and acceleration of machine elements; emphasis on graphical kinematics of linkages; introduction to cams. Prerequisites: ENGR 200 Engineering Graphics/ ENGT 261 Fundamentals of ENGR Graphics and MCET 311 Dynamics.

MCET 311. Dynamics. (3 Credits)
The kinematics and kinetics of particles and rigid bodies; rectilinear and curvilinear motion, work, energy, impulse and momentum. Use of computers for problem solving is included. Prerequisites: MCET 200 Statics, MATH 261 Calculus II and PHYS 105 Physics I.

MCET 313. Fluid Mechanics. (3 Credits)
Properties of fluids; fluid statics and dynamics, including momentum, energy, Bernoulli's equation, fluid flow in pipes, fluid machinery, and open channels: study of the siphon, pitot tube, venturi meter, orifices, nozzles, diffusers, weirs, etc. Prerequisites: MCET 200 Statics and MATH 260 Calculus I.

MCET 314. Fluid Mechanics Laboratory. (1 Credit)
Laboratory demonstrations, experiments, and exercises dealing with the verification of fluid equations, and principles and characteristics of fluid machinery. Co-requisite: MCET 313 Fluid Mechanics.

MCET 401. Applied Thermodynamics. (3 Credits)
Study of thermodynamic cycles; includes Carnot, Rankine, Sterling and Application of thermodynamic principles to turbines and compressors. Prerequisites: MCET 301 Introduction to Thermodynamics and MATH 261 Calculus II.

MCET 403. Quality Control. (3 Credits)
A study of the principles and techniques of quality control and its applications to industrial processes. Topics include: An overview of Total Quality Management (TQM), statistics, process control charts, and probability. The relationship between process capability and product specifications is analyzed. Prerequisite: ENGT 105 Engineering Problem Solving.

MCET 404. Energy Laboratory. (1 Credit)
A study of heat transfer equipment; shell and tube heat exchangers, energy conversion from chemical to mechanical energy; calorimeters; internal combustion engines (diesel and Otto cycles). Corequisite: MCET 401 Applied Thermodynamics.

MCET 406. Machine Design II. (3 Credits)
A further development of the principles and techniques of machine element design with particular regard to gears, axles and shafts, bearings, clutches, brakes, gaskets and seals. Design projects are included. Prerequisite: MCET 306 Machine Design I.

MCET 412. Tool Design Laboratory. (1 Credit)

MCET 415. Instrumentation And Control. (3 Credits)
A study of the basic concepts and principles associated with the operation and use of sensors and instruments for the measurement and for the control of various properties (temperature, pressure, liquid level, fluid flow, etc.); accuracy and reliability of instruments and their role in control systems. Prerequisites: ENGT 290 Intro to Elect/Electronics.

MCET 416. Measurements Laboratory. (1 Credit)
Experiments are conducted to reinforce and expand on concepts learned in MCET 415 lecture course; emphasis is on electrical and electronic devices used in mechanical measurements; included as various types of transducers, bridge circuits, and operational amplifiers. Co-requisite: MCET 415 Instrumentation and Controls.

MCET 421. Hydraulics And Pneumatics. (3 Credits)
Fundamentals of hydraulic and pneumatic system design and troubleshooting; topics include circuit diagrams, valves, rotary activators, cylinders, pumps, piping and fitting losses. Prerequisite: MCET 313 Fluid Mechanics.

MCET 422. Hydraulics & Pneumatics Lab. (1 Credit)
Selected design problems and projects dealing with principles and methods discussed in MCET 421. Preparation of circuit diagrams, flow charts, and detailed designs; circuits are set up and analyzed. Corequisite: MCET 421 Hydraulics And Pneumatics.

MCET 441. Heat Transfer. (3 Credits)
A course on the fundamental principles of heat transfer with a broad range of engineering applications. The classic modes of heat transfer, steady state and transient conduction, natural and forced convection, and radiation, will be emphasized. Both numerical and analytical solutions are discussed and illustrated. Application to problems associated with both mechanical and electronic engineering will be demonstrated through problems such as those related to the heating and cooling of buildings and the cooling of electronic equipment. Prerequisite: Math 261 Calculus II and permission of instructor.

MCET 499. Special Topics In Engr Tech. (3 Credits)
A course or independent study covering some topic in Engineering Technology as technical elective. Goal is to enhance student skill and knowledge in relevant topic. Prerequisite: Permission of instructor.

Information and Logistics Technology (INLT)

INLT 141. Introduction to Logistics. (3 Credits)
This course will cover topics related to logistics in a systems approach to managing activities associated with transportation, inventory management and control, forecasting, and integration of logistics with other functional areas, cross functional teams, supplier, distributor, and customer partnerships.

INLT 201. Technology and Society. (3 Credits)
A survey of the technology field as it relates to the academic background and opportunities for industrial technology graduates is covered. Advancing technology and its impact on industry, business, and society is reviewed.

INLT 212. Principles of Technology. (3 Credits)
Provide students with experience in the application of the principles of physics and mathematics as they relate to the modern technological systems, including robotics in a unified systems approach to explore mechanical, electrical, fluid, and thermal systems dealing with force, work, rate, resistance, energy, power, force transformers, momentum, wave, energy converters, transducers, radiation, optical systems, and time constants.

INLT 217. Tech Graphics Communication. (3 Credits)
Introduction to the use of various technical graphics media and methods of presentation of technical information. Topics include; electronic slide shows, graphic file formats, basic editing of graphic data, user interface design, graphic presentation, and interpreting graphic data.

INLT 245. Distribution Systems. (3 Credits)
The course is designed to provide students with an introduction to the methods and strategies used in distributing products and managing the inventory in supply chain. Topics covered include the design of channels and activities performed by node members to facilitate efficient movement of goods. Prerequisite: INLT 141.

INLT 247. Material Hand & Inven Controls. (3 Credits)
The principles of quantitative and operational approaches to the design of handling system including receiving, storage, retrieval, packaging, palletizing, material handling, order picking, shipping, facility sizing and layout. Information systems and operating policies of material handling and warehousing will be covered.

INLT 248. Geog Infor Systs Logistics. (3 Credits)
This course will expose students to the concept of spatial analysis using GIS tools. Topics covered will include GIS needs assessment, mapping of spatial entities, linear referencing, development of a GIS-based transportation routing and decision support system, and applications in asset management and planning Prerequisite: INLT 245.

INLT 249. Material Process & Safety Anal. (3 Credits)
This course provides a strong foundation of knowledge of manufacturing materials, standards and standard organizations; properties and nature of materials, materials testing and applications. Safety engineering and program management of specific construction and industrial hazards and other safety documents dealing with accident investigations. Prerequisite: INLT 212.

INLT 250. Manufact Materials & Processes. (3 Credits)
This course provides a strong foundation of knowledge of industrial materials, ranging from traditional metals, wood, ceramics, and polymers to advanced engineered materials and composites. Standards and standard organizations; properties and nature of materials, materials testing and applications. Prerequisite: INLT 212.

INLT 261. Engineering Graphics II. (3 Credits)
Introduction to 3D modeling including visualization skills, basic parametric modeling, CSG modeling, primitives, Boolean operators, view extraction, file management, assembly, dimensioning, and drawing standards. Student projects required (sketching, CAD software). Prerequisite: I.

INLT 270. Processes Systems & Infor. (3 Credits)
Introduction to processes and information systems from the point of view of creation, monitoring, and adaptation of processes, systems and information with tutorial exercises of an ERP system is covered in this course.

INLT 280. Industrial Ergonomics. (3 Credits)
This course focuses on work design and ergonomics in manufacturing. Specific attention will be on introducing the terminology and the techniques used in work design, and the fundamental concepts embodied in industrial ergonomics. Community based projects may be required. Prerequisite: MATH 122.

INLT 281. Industrial Safety. (3 Credits)
OSHA and its administration. Safety engineering and program management of specific construction and industrial hazards; standards, codes, and other safety documents. Accident investigation and safety analysis. Topics in occupational safety and environmental health are widely covered in the course. Prerequisite: INLT 249.

INLT 290. Introd Database Applications. (3 Credits)
This course introduces the underlying concepts behind data modeling and database systems using relational database management systems (RDBMS), the structured query language (SQL), and web applications (Perl DBI in CGI).

INLT 292. Introduction to ERP. (3 Credits)
ERP approaches to design, plan, and control of logistics management. Core aspects of enterpriser resources planning (ERP) infrastructure and application with extensive hands on practice example s applications will be covered.

INLT 320. Introd ERP & Financial Acct. (3 Credits)
Studies the need for integration and the challenges of managing complex interfaces of functional areas of business with its financial accounting. Activities that lead to integration of information funds and material flows across multiple organizations are discussed. Prerequisite: INLT 292.

INLT 330. Sales and Procurement. (3 Credits)
A realistic perspective on the role of industrial sales and the nature of the sales task in our business. Identification of critical influences on organizational buyer behavior, both internal and external, definition of various types of buying situations, and organizational purchasing processes. Prerequisite: INLT 245.

INLT 335. Lean Process Management. (3 Credits)
A systematic approach to eliminating non-value added activities throughout a production system. Lean principles and techniques will be applied to improve organizations ability to provide added customer value on products. Community based projects may be required. Prerequisite: INLT 212.

INLT 340. Supply Management. (3 Credits)
Student deeply explore the supply function, including organization, procedures, supplier selection, quality, inventory decisions, and price determination. Prerequisite: INLT 141, INLT 245.

INLT 345. Transportation Logistics. (3 Credits)
Introduction to the theory and applications of transportation, logistics, and associated costs is covered. Topics include modes of transportation and their networks; optimization of transportation systems across networks; flow across networks; supply, demand, and forecasting for transportation services; costs and benefits of specific modes and transportation policy analysis. Prerequisite: INLT 141 and INLT 245.

INLT 346. Plan Cont Syst Supp Chain Mgmt. (3 Credits)
Topics such as forecasting, capacity planning, inventory planning, MRP and ERP are discussed to provide students with knowledge of planning and control systems for supply chain management. Prerequisite: INLT 247, INLT 340.

INLT 359. Org'l Mgmt & Supervision. (3 Credits)
The course is a survey of organizational structures, operational, financial, marketing, and accounting management. Emphasis is places on planning, control, personnel, safety, wages, policies, and leadership for an effective industrial management.

INLT 374. Statics & Strength of Material. (3 Credits)
Structural principles and concepts linked to real buildings and components. Elementary statics and strength of materials as they related to the basic principles of mechanics. Gravity and lateral load tracings; determinate structural frame-works. Concept of stress and strain, and material properties; cross-sectional properties; Beam and column analysis and design; steel connections. Use of structural software to generate graphically display outlook. Prerequisite: MATH 212, INLT 372 or permission of instructor.

INLT 383. Quality Management. (3 Credits)
Quality management philosophies of Deming, Juran, and Cosby; total quality management (TQM); quality improvement and problem solving, with practical examples of quality problem tools; sampling techniques. The Taguchi loss function, quality function and policy deployment, materials control and just-in-time; quality audits; ISO 9000 inspection standards; charts for statistical process control and interpretation. Prerequisite: STAT 210.

INLT 385. Cost Estimating. (3 Credits)
Principles and techniques necessary for the economic analysis and cost evaluation of construction and industrial design projects. Interpretation of construction and engineering drawings and specifications; estimating, operations, products, projects, and systems. Estimate assurance and contract considerations. Prerequisite: INLT 249.

INLT 400. Intelligent Transport Systems. (3 Credits)
This course is designed to expose the student to the role of new technology in transportation and logistics particularly in the areas of travel information, traffic and incident management, public transportation, freight transportation, and inventory control. The history of cross-cutting issues in intelligent transportation systems development in the U.S. will be examined. Prerequisite: INLT 345.

INLT 443. Engr & Tech Entrepreneurship. (3 Credits)
This course covers concepts related to entrepreneurship relevant to engineering and technology applications. Major topics include entrepreneurial risk taking, startup strategies, innovative idea evaluation, business plan writing, financing and venture capital, managing growth and introducing and sustaining innovative products and services. Through case studies and guest speakers, the course introduces students to the knowledge and skills needed to recognize and seize technological entrepreneurial opportunities. Prerequisite: Junior or Senior standing.

INLT 444. Enterprise Resource Config. (3 Credits)
Analytical approaches to design, planning, and control of logistics management. Core aspects of enterprise resource planning (ERP) infra-structure and applications in industry. ERP planning strategies and implementation, including domestic and international manufacturing and service operations. Prerequisite: Consent of Instructor.

INLT 445. Procurement Management. (3 Credits)
The role of procurement in business and industry; relationships with other departments, procedures, and basic policies. Planning, organization, budgeting, negotiations, purchasing ethics, procurement control, strategic purchasing management, and impact of research and value analysis. Prerequisite: INLT 345.

INLT 446. Electronics Logistics. (3 Credits)
Reviews several E-Business trends related to logistics management; the impact of E-Business on creating a business plan and discussing E-Business architecture. CRM core competencies, organizational challenges, implementation trends, and planning strategies. Prerequisite: INLT 320.

INLT 447. Supply Chain Management. (3 Credits)
The planning and implementation of supply chain management, reverse logistics, integrated production. Inventory and distribution problems, multi-partner pricing analysis, and supply chain distribution network designs will be covered. Prerequisite: INLT 345.

INLT 448. Global Logistics. (3 Credits)
It covers topics related to global logistics as key component of supply chains that coordinates the movement of raw materials, work-in-process in a global network of shippers, forwarders, third party transportation providers, warehouses, customs agencies, and consignees to coordinate the activities that provide the logistics product. Prerequisite: INLT 345.

INLT 449. Supply Chain Strategy. (3 Credits)
This capstone course provides an opportunity for students to synthesize the knowledge gained in their previous coursework to integrate supply chain management, production, logistics and enterprise solutions to develop supply chain strategies. Prerequisite: INLT 340, INLT 346, INLT 447.

INLT 451. Analysis/Business Intelligence. (3 Credits)
This course is an introduction to business analytics that uses extensive data, statistical and qualitative analysis, exploratory and predictive models, and fact-based management to drive decisions and actions. The development and use of data warehouses and data marts to support business analytics is discussed. The use of key performance indicators, dashboards and scorecards for performance management and opportunity assessment are addressed. Text and web mining are discussed, and the application of selected data mining techniques to business decision making situations is illustrated. Hands-on exercises will be provided for active participation. Prerequisite: INLT 320.

INLT 465. Research and Negotiations. (3 Credits)
Students expand upon knowledge gained in INLT 340 and discuss current philosophy, methods and techniques for conducting strategic and tactical supply chain negotiations. Prerequisite: INLT 340, INLT 447.

INLT 480. Facilities Management. (3 Credits)
Facilities planning strategies, product, process, and schedule design; flow space and activity relationships; design of material handling system. Facilities functions and systems; quantitative facilities planning models, including the use of software applications. Industrial facility management. Prerequisite: ENGR 200 and INLT 245.

INLT 485. Project Management. (3 Credits)
The principles and techniques of managing engineering and construction projects from the conception phase through design and construction, to completion. Working with project teams, early estimates, and design proposals; project budgeting, scheduling, and aggregate planning. Case study approach is emphasized. Prerequisite: INLT 385.

INLT 486. Planning and Scheduling. (3 Credits)
Principles of planning and scheduling in manufacturing and service industries; the conversion of a project plan into an operating time-table. Application areas to cover project, job-shop, workforce, supply chain, and economic lot scheduling. Methodologies to include PERT, WBS, and GANTT chart. Utilization of current and emerging technologies and global dynamics with project management will be emphasized. Prerequisite: INLT 485.

INLT 499. Special Topics. (3 Credits)
A course or independent study covering a topic in Industrial Technology that may be used in lieu of a technical elective. The goal of this course is to enhance students' skills and knowledge in an area relevant to their area of study. Prerequisite: Permission of instructor.

Electrical and Electronics Engineering Technology Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
ENGT 261	Fundamentals of ENGR Graphics	3
ENGT 100	Introduction Engineering Tech	2
ENGL 110	Composition I GE-ENG	3
MCET 102	Machines Laboratory	1
MATH 150	Precalculus GE-MAT	4
GE History Electives (p. 146)		3
	Credit Hours	**16**
2nd Semester		
ELET 101	Circuit Analysis I	3
ELET 103	Circuit Analysis I Lab	1
ENGT 105	Engineering Problem Solving	2
ENGL 111	Composition II GE-ENG	3
GE Wellness/Health Electives (p. 147)		1
STAT 210	Elementary Statistics I GE-MAT	3
PSYC 101	Introduction to Psychology GE-SOC	3
	Credit Hours	**16**
Sophomore Year		
1st Semester		
ELET 203	Introd to Electronics	3
ELET 205	Introd to Electronics Lab	1
ELET 207	Digital Circuits	3
ELET 209	Digital Circuits Lab	1
MATH 260	Calculus I	4
ELET 102	Circuit Analysis II	3
ELET 104	Circuit Analysis II Lab	1
	Credit Hours	**16**
2nd Semester		
ELET 204	Electronic Circuits	3
ELET 206	Electronics Circuits Lab	1
ELET 208	Microprocessors	3
ELET 211	Microprocessors Lab	1
MATH 261	Calculus II	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I LAB	1
	Credit Hours	**16**
Junior Year		
1st Semester		
GE Wellness/Health Electives (p. 147)		1
ELET 306	Advanced Electronics	3
ELET 307	Advanced Electronics Lab	1
ENGT 301	Computer Programming	3
SPEE 214	Introduction To Public Speakin GE-SCI	3
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II LAB	1
	Credit Hours	**15**
2nd Semester		
ELET 309	Advanced Digital Circuit	3
ELET 311	Adv Digital Circuits Lab	1
ELET 304	Advanced Circuit Analysis	3
ENGT 321	Engineering Economy	3
ENGL 342	Technical Communication	3
GE Literature Electives (p. 147)		3
	Credit Hours	**16**
Senior Year		
1st Semester		
ELET 403	Control Systems	3
INLT 292	Introduction to ERP	3
PHIL 275 or PHIL 450	Ethics GE-HUM or Applied Ethics	3
INLT 383	Quality Management	3
ENGT 420	Senior Project I	3
	Credit Hours	**15**
2nd Semester		
ELET 401	Electric Machinery	3
ELET 406	Communication Systems	3
GE Global Studies Electives (p. 146)		3
Restricted Elective Technical Course		3
ENGT 421	Senior Project II	2
	Credit Hours	**14**
	Total Credit Hours	**124**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ELET 101	Circuit Analysis I	3
ELET 102	Circuit Analysis II	3
ELET 103	Circuit Analysis I Lab	1
ELET 104	Circuit Analysis II Lab	1

ELET 203	Intro to Electronics	3
ELET 204	Electronic Circuits	3
ELET 205	Introd to Electronics Lab	1
ELET 206	Electronics Circuits Lab	1
ELET 207	Digital Circuits	3
ELET 208	Microprocessors	3
ELET 209	Digital Circuits Lab	1
ELET 211	Microprocessors Lab	1
ELET 304	Advanced Circuit Analysis	3
ELET 306	Advanced Electronics	3
ELET 307	Advanced Electronics Lab	1
ELET 309	Advanced Digital Circuit	3
ELET 311	Adv Digital Circuits Lab	1
ELET 401	Electric Machinery	3
ELET 403	Control Systems	3
ELET 406	Communication Systems	3
Total Credit Hours		**44**

Code	Title	Credit Hours
ENGT 100	Introduction Engineering Tech	2
ENGT 105	Engineering Problem Solving	2
ENGT 261	Fundamentals of ENGR Graphics	3
MCET 102	Machines Laboratory	1
ENGT 301	Computer Programming	3
ENGT 321	Engineering Economy	3
ENGT 420	Senior Project I	3
ENGT 421	Senior Project II	2
INLT 292	Introduction to ERP	3
INLT 383	Quality Management	3
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I [LAB]	1
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II [LAB]	1
MATH 260	Calculus I	4
MATH 261	Calculus II	4
ENGL 342	Technical Communication	3
Total Credit Hours		**44**

Code	Title	Credit Hours
Restricted Electives [Technical Courses]		3
Total Credit Hours		**3**

Code	Title	Credit Hours
General Education		33
Core Requirements		44
Major/Concentration Requirements		44
Electives		3
Total Credit Hours		**124**

Mechanical Engineering Technology Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
ENGT 100	Introduction Engineering Tech	2
ENGL 110	Composition I	3
MATH 150	Precalculus	4
GE History Electives (p. 146)		3
ENGT 261	Fundamentals of ENGR Graphics	3
MCET 102	Machines Laboratory	1
	Credit Hours	**16**
2nd Semester		
STAT 210	Elementary Statistics I	3
ENGT 105	Engineering Problem Solving	2
ENGL 111	Composition II	3
GE Wellness/Health Electives (p. 147)		1
PSYC 101	Introduction to Psychology	3
GE Global Studies Electives (p. 146)		3
	Credit Hours	**15**
Sophomore Year		
1st Semester		
INLT 292	Introduction to ERP	3
MCET 200	Statics	3
GE Wellness/Health Electives (p. 147)		1
MATH 260	Calculus I	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I [LAB]	1
	Credit Hours	**15**
2nd Semester		
SPEE 214	Introduction To Public Speakin	3
MCET 201	Strength Of Materials	3
MCET 202	Strength Of Materials Lab	1
MATH 261	Calculus II	4
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II [LAB]	1
	Credit Hours	**15**
Junior Year		
1st Semester		
MCET 313 & MCET 314	Fluid Mechanics and Fluid Mechanics Laboratory	4
MCET 311	Dynamics	3
MCET 306	Machine Design I	3
ENGT 290	Intro to Elect/Electronics	3
ENGT 301	Computer Programming	3
	Credit Hours	**16**
2nd Semester		
GE Literature Electives (p. 147)		3
MCET 301	Intro To Thermodynamics	3
MCET 305	Manufac Materials & Processes	3
PHIL 275	Ethics	3
ENGT 321	Engineering Economy	3
	Credit Hours	**15**
Senior Year		
1st Semester		
INLT 485	Project Management	3
MCET 401 & MCET 404	Applied Thermodynamics and Energy Laboratory	4
MCET 441	Heat Transfer	3
ENGL 342	Technical Communication	3

ENGT 420	Senior Project I	3
	Credit Hours	**16**
2nd Semester		
Restricted Elective	Technical Course	3
INLT 383	Quality Management	3
MCET 421 & MCET 422	Hydraulics And Pneumatics and Hydraulics & Pneumatics Lab	4
MCET 415 & MCET 416	Instrumentation And Control and Measurements Laboratory	4
ENGT 421	Senior Project II	2
	Credit Hours	**16**
	Total Credit Hours	**124**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MCET 102	Machines Laboratory	1
MCET 200	Statics	3
MCET 201	Strength Of Materials	3
MCET 202	Strength Of Materials Lab	1
MCET 301	Intro To Thermodynamics	3
MCET 305	Manufac Materials & Processes	3
MCET 306	Machine Design I	3
MCET 311	Dynamics	3
MCET 313	Fluid Mechanics	3
MCET 314	Fluid Mechanics Laboratory	1
MCET 401	Applied Thermodynamics	3
MCET 404	Energy Laboratory	1
MCET 415	Instrumentation And Control	3
MCET 416	Measurements Laboratory	1
MCET 421	Hydraulics And Pneumatics	3
MCET 422	Hydraulics & Pneumatics Lab	1
MCET 441	Heat Transfer	3
Total Credit Hours		**39**

Code	Title	Credit Hours
ENGT 100	Introduction Engineering Tech	2
ENGT 105	Engineering Problem Solving	2
ENGT 261	Fundamentals of ENGR Graphics	3
ENGT 290	Intro to Elect/Electronics	3
ENGT 301	Computer Programming	3
ENGT 321	Engineering Economy	3
ENGT 420	Senior Project I	3
ENGT 421	Senior Project II	2
INLT 292	Introduction to ERP	3
INLT 383	Quality Management	3
INLT 485	Project Management	3
PHYS 105 & 105	Introduction to Physics I and Introduction to Physics I	4
PHYS 106 & 106	Introduction to Physics II and Introduction to Physics II	4
MATH 260	Calculus I	4
MATH 261	Calculus II	4
ENGL 342	Technical Communication	3
Total Credit Hours		**49**

Code	Title	Credit Hours
Restricted Electives	Technical Courses	3
Total Credit Hours		**3**

Code	Title	Credit Hours
General Education		33
Core Requirements		39
Major/Concentration Requirements		49
Electives		3
Total Credit Hours		**124**

Information Logistics Technology Major, Bachelor of Science (B.S)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I GE-ENG	3
MATH 120	College Algebra GE-MAT	3
ENGT 261	Fundamentals of ENGR Graphics	3
INLT 201	Technology and Society	3
ECON 210	Principles Of Microeconomics GE-SOC	3
	Credit Hours	**15**
2nd Semester		
ENGL 111	Composition II GE-ENG	3
MATH 212	Business Calculus GE-MAT	3
HIST 122 or HIST 123	U.S. History to 1865 GE-HIS or U.S. History After 1865	3
INLT 141	Introduction to Logistics	3
INLT 212	Principles of Technology	3
MCET 102	Machines Laboratory	1
	Credit Hours	**16**

Sophomore Year		
1st Semester		
GE Literature Electives (p. 147)		3
INLT 245	Distribution Systems	3
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I	1
INLT 249	Material Process & Safety Anal	3
INLT 290	Introd Database Applications	3
	Credit Hours	**16**
2nd Semester		
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II	1
INLT 292	Introduction to ERP	3
GE Wellness/Health Electives (p. 147)		2
STAT 210	Elementary Statistics I GE-SCI	3
INLT 359	Org'l Mgmt & Supervision	3
	Credit Hours	**15**
Junior Year		
1st Semester		
Restricted Elective Technical Course		3
PHIL 140	Philosophy GE-HUM	3
INLT 281	Industrial Safety	3
INLT 345	Transportation Logistics	3
GE Global Studies Electives (p. 146)		3
	Credit Hours	**15**
2nd Semester		
INLT 451	Analysis/Business Intelligence	3
INLT 385	Cost Estimating	3
INLT 383	Quality Management	3
INLT 320	Introd ERP & Financial Acct	3
Unrestricted Elective		3
	Credit Hours	**15**
Senior Year		
1st Semester		
INLT 480	Facilities Management	3
INLT 445	Procurement Management	3
INLT 447	Supply Chain Management	3
INLT 485	Project Management	3
ENGT 420	Senior Project I	3
	Credit Hours	**15**
2nd Semester		
INLT 444	Enterprise Resource Config	3
INLT 448	Global Logistics	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGT 421	Senior Project II	2
	Credit Hours	**14**
	Total Credit Hours	**121**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
INLT 141	Introduction to Logistics	3
INLT 201	Technology and Society	3
INLT 212	Principles of Technology	3
INLT 245	Distribution Systems	3
INLT 249	Material Process & Safety Anal	3
INLT 290	Introd Database Applications	3
INLT 292	Introduction to ERP	3
INLT 320	Introd ERP & Financial Acct	3
INLT 359	Org'l Mgmt & Supervision	3
INLT 383	Quality Management	3
INLT 385	Cost Estimating	3
INLT 447	Supply Chain Management	3
INLT 480	Facilities Management	3
INLT 485	Project Management	3
ENGT 261	Fundamentals of ENGR Graphics	3
ENGT 420	Senior Project I	3
ENGT 421	Senior Project II	2
Total Credit Hours		**50**

Code	Title	Credit Hours
INLT 281	Industrial Safety	3
INLT 345	Transportation Logistics	3
INLT 444	Enterprise Resource Config	3
INLT 445	Procurement Management	3
INLT 448	Global Logistics	3
INLT 451	Analysis/Business Intelligence	3
MCET 102	Machines Laboratory	1
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I LAB	1
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II LAB	1
Total Credit Hours		**27**

Code	Title	Credit Hours
Unrestricted Electives		9
Restricted Electives STEM Course		3
Total Credit Hours		**12**

Code	Title	Credit Hours
General Education		32
Core Requirements		50
Major/Concentration Requirements		27
Electives		12
Total Credit Hours		**121**

Applied Engineering Technology, Minor in Information and Logistics Technology

Required Courses

Code	Title	Credit Hours
INLT 141	Introduction to Logistics	3
INLT 245	Distribution Systems	3
INLT 292	Introduction to ERP	3
Restricted Electives		9
INLT 320	Introd ERP & Financial Acct	
INLT 345	Transportation Logistics	
INLT 359	Org'l Mgmt & Supervision	
INLT 383	Quality Management	
INLT 385	Cost Estimating	
INLT 444	Enterprise Resource Config	
INLT 445	Procurement Management	
INLT 447	Supply Chain Management	
INLT 448	Global Logistics	
INLT 451	Analysis/Business Intelligence	
INLT 480	Facilities Management	
INLT 485	Project Management	
Total Credit Hours		**18**

College of Humanities and Social Sciences

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Mission Statement

The mission of the College of Humanities and Social Sciences is to develop and continuously enhance a perpetually contemporary global standard of excellence that prepares students to assume productive leadership roles anywhere in the world. To this end, highly effective faculty, staff, and administrators provide leadership for programs that integrate instruction, technology, research, the ethic of service, and professional development programs and activities. In accordance with the long- standing tenets of the liberal arts, the College's philosophy of education is that of liberation of the mind and spirit in facilitation of exploration, discovery, and new ideologies.

Toward fulfillment of this mission, the following are College of Humanities and Social Sciences guiding operational principles:

- ***Accountability*** – The 21st century Institution of Higher Education (IHE) is accountable to a myriad of private, governmental, and professional stakeholder groups whose primary interest is institutional effectiveness in all facets of operation, whether fiscal, curricular, programmatic, administrative, or others. The College is committed to maintain an aggressively nimble operational paradigm focused solely upon student achievement and institutional effectiveness.
- ***Assessment*** – Outcomes-based educational products are arguably the central emphasis of the 21st century academic enterprise. Accordingly the College's model is designed to ensure that program completers fluently represent the knowledge, skills, and dispositions espoused by each of the academic units.
- ***Authentic Engagement*** – The term authentic engagement means one is authentically involved in their curriculum where the assigned task is associated with an outcome that has a clear meaning and value to the student (LeBaron & Santos, 2005; Schlechty, 2002). Authentic engagement stipulates that the learner has intrinsic motivation to work on an assignment. Essentially, the College's embodiment of authentic engagement—in accordance with VSU's core values — invites the student to concomitantly examine content through the eyes of the experts and through their own lives. In this way, the learner becomes acutely aware of how he/she learns and, in turn, is able to get the most out of the curriculum. Authentic engagement, then, requires intense, exacting preparation, knowledge of learning styles, and pedagogical acuity. Authentic engagement encompasses mentoring and retooled iterations of action learning/research.
- ***Lifelong Learning*** – The concept of lifelong learning is the byproduct of the infusion of technology (specifically, the availability of, and accessibility to, information) into teaching, learning, and research, which his substantially and rapidly change methodology, procedure, policy, and/or practice in most disciplines. Thus, the well-prepared professional must be disposed to the ongoing development and currency of his/ her knowledge and skill sets. College of Humanities and Social Sciences is committed to the development of the lifelong

learning dispositions necessary for the professional success of students, faculty, and staff.

- ***Individual and Professional Development*** – The ongoing development of faculty and students is integral to the teaching-learning paradigm. The pervasive use of technology is one driver of rapidly increasing discovery in all disciplines, thus, faculty must be perpetually engaged in scholarly activity in their respective disciplines. Students, then, are the beneficiaries of these activities toward self-actualization as well as pre-professional development.
- ***Research*** – Consistent with the university's goals, the College supports and facilitates a three-tiered structure to perpetuate its research agenda:
  a. discovery or new knowledge that inform the global community and the discipline;
  b. new research/learning opportunities for students; and
  c. School and University niche and global reputation.
- ***Access*** – Historically Black Colleges and Universities (HBCUs) have been bastions of opportunity for those who did not have access to higher education. The College of Humanities and Social Sciences is committed to—through authentic engagement—access and support for those who demonstrate the potential and dispositions conducive to advanced learning.
- ***Collaboration*** – Partnerships across disciplines, with internal and external stakeholders, and the professional realm are essential to the comprehensive educational product offered to students and central to the University's mission to serve the communities to which it is intrinsically bound.

Organization of the College

The College of Humanities and Social Sciences consists of eight undergraduate departments and the ROTC Department. Programs focusing on the humanities and social sciences serve to strengthen critical thinking and analysis, problem-solving capabilities, communication skills and interpretive insights.

Major Programs of Undergraduate Study

Students pursuing undergraduate study may major in the following programs:

Art and Design
Art and Design
Concentrations: Studio Art, Animation, Graphic Design, & Web Design

History and Philosophy
History
History, Secondary Teaching Endorsement

Languages and Literature
English
Concentrations: African-American/Africana Literature, Literatures of the World, Creative Writing, Professional Writing, Linguistics, "7 & 7," and English/Secondary Teaching Endorsement

Mass Communications
Concentrations: Print Media, Radio & Television, & Public Relations, Contemporary Sound Production

Military Science (Minor)
Music
Music
Choral Music Teaching Endorsement (Vocal)
Instrumental Music Teaching Endorsement (Brass, Percussion, String)
Music Performance (Instrument, Keyboard, Vocal) and Sound Recording Technology

Political Science
Political Science
Public Administration (Minor)

Sociology/Criminal Justice
Criminal Justice
Sociology

Social Work
Social Work

Special Facilities and Equipment

WVST, the campus radio station, and the Virginia State Television Network (VSUN), the units under the University Academic Technology Department provide production skill training and teach the use of current technologies. Computer-assisted writing laboratories assist students with special problems.

Organizations and Clubs

There are many groups that students can join to satisfy their intellectual interests or provide opportunities for co-curricular pursuits. There are clubs connected to academic disciplines that provide informal forums to discuss topics of interest in politics, languages, science, history, computers, literature, technology, and business, among others.

Department of Art and Design

Chairperson: Stephanie K. O'Dell Daugherity
Location: Fauntleroy Hall, Room 104
Contact Information: (804) 524-2452 | sodell@vsu.edu

Department Overview

The Art and Design program offers courses leading to a **Bachelor of Fine Arts (B.F.A.) in Visual Arts** degree. All students begin with the CORE program (Communication, Organization, Realization, Expression), covering the first two years, which produces a strong understanding of the design fundamentals and applications of traditional art media. Foundation level courses, including 2D and 3D design, color theory, drawing, and creative technology, are designed to prepare students to begin their advanced concentration coursework in the sophomore year.

Students in the program can decide from three concentrations, aligned with primary creative career paths: Studio Arts, Animation, or Graphic Design. The program also offers minors in Animation, Graphic Design, Photography, and Studio Arts.

Mission Statement

The mission of the Art and Design Department at Virginia State University is to produce the artists of tomorrow, one individual at a time. Our faculty is committed to the artistic development of each student as a unique individual through the process of instruction and mentorship. Our goal is to prepare students for success in whatever professional arena of art they choose by providing a solid base of artistic knowledge and technical

skill, then encouraging creative exploration and stylistic development from this foundation. Through the creative work and service of our students and faculty, we hope to engender a broader appreciation for the arts to enhance the vitality of the university and surrounding community.

Accreditation Information

The Art and Design program is accredited by NASAD, the National Association of Schools of Art and Design. Founded in 1944, the National Association of Schools of Art & Design (NASAD) is an organization of schools, conservatories, colleges, and universities with approximately 328 accredited institutional members. It establishes national standards for undergraduate and graduate degrees and other credentials for art and design and art/design-related disciplines, and provides assistance to institutions and individuals engaged in artistic, scholarly, educational, and other art/design-related endeavors.

Virginia State University is one of few public HBCUs in the nation to offer a Bachelor of Fine Arts (BFA) degree in Visual Arts.

Department Goals

The department goals of the Art and Design program are to ensure that:

- Students will demonstrate an entry-level competence for a professional in their area of specialization, including technical mastery of their media, understanding and use of the concepts of design, and the ability to clearly communicate the intended message.
- Students will demonstrate the ability to develop a cohesive artistic concept (focus) evident throughout a body of work produced in their chosen media.
- Students will be able to research, form and defend value judgments about art and design in both written and oral statements. The student will effectively communicate these ideas at a professional level.
- Students will engage through the arts with their university and local community.

Program Listings

Bachelor of Fine Arts (B.F.A.) in Visual Arts

Studio Arts Concentration - Prepares students for contemporary artistic careers among the disciplines of drawing, painting, printmaking, sculpture, ceramics, mixed media, and new media. As they follow their focus through sequential courses, students can shape their own curricula to span across traditional artistic boundaries and learn a variety of media specially designed to meet their needs and creative desires. This artistic "cross training" permits students to expand their creative horizons using new media tools, techniques, and concepts, and become the artistic leaders of the 21st century.

Animation Concentration - Teaches students the principles and skills of motion and time-based media, using 2D and 3D traditional and digital methods. The curriculum is designed to prepare students to enter graduate programs of study in animation, and/or entry-level apprentice positions within the industry.

Graphic Design Concentration - Students follow a course sequence that builds the knowledge and skills necessary to compete in today's commercial arts marketplace. The program prepares students for careers as commercial artists in areas such as branding, digital illustration, print, and packaging design.

Although a portfolio review is not required for acceptance into the BFA in Visual Arts CORE Program, advancement to the specific concentrations (Studio Art, Animation, Graphic Design) in the second year is dependent on a review of the student's portfolio of artwork, along with the successful completion of all prerequisite courses with a minimum of a 'C' grade.

Minors

- Animation
- Graphic Design
- Photography
- Studio Art

Major(s)

- Visual Arts, Bachelor of Fine Arts with a Concentration in Animation (B.F.A.) (p. 273)
- Visual Arts, Bachelor of Fine Arts with a Concentration in Studio Arts (B.F.A.) (p. 274)
- Visual Arts, Bachelor of Fine Arts with a Concentration in Graphic Design (B.F.A.) (p. 276)

Minor(s)

- Minor in Animation (p. 277)
- Minor in Art History (p. 278)
- Minor in Graphic Design (p. 278)
- Minor in Photography (p. 278)
- Minor Studio Art (p. 278)

ART AND DESIGN

Course Descriptions

FOUNDATION (CORE) COURSES

ARTS 101 DRAWING I – 3 semester hours
Introduction to the fundamentals of drawing expression. Pencil, charcoal, conte, and wash media are explored. Course includes weekly critiques and discussions.

ARTS 102 DRAWING II – 3 semester hours
Continuation of drawing expression. Introduction to linear perspective, foreshortening, and the use of color. Pencil, charcoal, Conte, pastels, Prismacolor, and wash media are explored. Course includes weekly critiques and discussions. **Prerequisites: ARTS 101**

ARTS 103 TWO DIMENSIONAL DESIGN – 3 semester hours
Introduction to the fundamental concepts of two-dimensional design, color theory, form relationships, and their function in various design situations. Contemporary and traditional concepts of design principles and elements are explored. Course includes critiques and discussions. **Art & Design Majors & Minors Only Course**

ARTS 104 TWO DIMENSIONAL DESIGN- COLOR THEORY – 3 semester hours
Examination of the interaction of color through studio experience and the manipulation of color to achieve various effects for problem-solving and individual expression. Course includes critiques and discussions. **Prerequisites: ARTS 101 and 103**

ARTS 108 COMPUTERS FOR ARTISTS – 3 semester hours
An introductory course in the hardware, software, set-up, and use of computers, specifically designed for the needs of artists. Basic hardware and peripherals set-up, use of operating systems, and artist-based programs for both Macintosh and PC systems. **Art & Design Majors Only Course.**

ARTS 202 LIFE DRAWING I – 3 semester hours
Continuation of drawing fundamentals and expression introduced the previous year using the human figure as the means of study. Pencil, charcoal, conte, and wash media are explored. Course includes weekly critiques and discussions. **Prerequisites: ARTS 102 and 103**

ARTS 209 COGNITIVE DEVELOPMENT FOR THE ARTIST - 3 semester hours
Increasing the creativity of artists through the mental processes of perception, memory, judgment, and reasoning. Emphases on different methodologies for creative development of individual and group artwork. **Prerequisites: ARTS 102 and 104**

STUDIO ART COURSES

ARTS 203 PRINTMAKING I – 3 semester hours
Fundamentals of graphic expressions employed in woodcuts, etchings, lithography, and other vehicles for graphic reproductions. Course includes weekly critiques and discussions. **Prerequisites: ARTS 102**

ARTS 204 PRINTMAKING II – 3 semester hours
Continuation of graphic expressions employed in woodcuts, etchings, lithography and other vehicles for graphic reproductions. Course includes weekly critiques and discussions. **Prerequisites: ARTS 203**

ARTS 206 WATERCOLOR – 3 semester hours
Introduction to the fundamentals of transparent and opaque watercolor painting techniques. **Prerequisites: ARTS 102**

ARTS 207 THREE DIMENSIONAL DESIGN – 3 semester hours
Introduction to the functional concepts of three-dimensional design. Form relationships as applied to the elements and principles of design. Course includes critiques and discussions. **Prerequisites: ARTS 102 and 104**

ARTS 208 PERSPECTIVE DRAWING - 3 semester hours
Examination of perspective as a technique of depicting volumes and spatial relationships on a flat surface. Emphasis on the development of comprehension in perspective through drawing exercises and projects. **Prerequisites: ARTS 102 and 103**

ARTS 212 LIFE DRAWING II – 3 semester hours. Advanced development of drawing skills using the human figure as means of expression. Techniques such as gesture, abstraction, composition, and foreshortening are explored using a variety of wet and dry media. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 202**

ARTS 216 2D METHODS AND MATERIALS - 3 semester hours
Overview of the tools, materials, and processes of two-dimensional media. Emphasis on the manipulation and safe handling of materials and tools, their use in artistic expression, and historical development. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 102 and 104**

ARTS 217 3D METHODS AND MATERIALS - 3 semester hours
Overview of the tools, materials, and processes of three-dimensional media. Emphasis on the manipulation and safe handling of materials and tools, their use in artistic expression, and historical development. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 102 and 104**

ARTS 303 SCULPTURE: WOOD – 3 semester hours
Exploration of sculptural fundamentals, emphasizing materials (cardboard and wood) and methods (both additive and subtractive). Course includes weekly critiques and discussions. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 207**

ARTS 304 SCULPTURE: MOLD MAKING – 3 semester hours
In-depth exploration of the three-dimensional concepts, skills, and processes for mold making and plaster casting as generated from clay models. Emphasis is placed on the development of design and construction skills, concept realization, and creative personal invention. Course includes weekly critiques and discussions. **Prerequisite: ARTS 207**

ARTS 305 PAINTING: STILL LIFE – 3 semester hours
Fundamentals of painting in oil and acrylics are introduced through the imagery of the still life. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. **Prerequisites: ARTS 216**

ARTS 306 PAINTING: LANDSCAPE – 3 semester hours
Continuation of painting in oil and acrylics using the imagery of the landscape. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. **Art & Design Majors & Minors Only Course.Prerequisites: ARTS 216**

ARTS 309 CERAMICS: HAND BUILDING – 3 semester hours
Exploration of ceramic design, basic forming, and firing techniques. Focus is on the basic construction techniques (pinch, coil, and slab), and finishing techniques in ceramic media including hand building, fabrication, surface design, glazing, and kiln firing. Course includes weekly critiques and discussions. **Prerequisites: ARTS 207**

ARTS 310 CERAMICS: WHEEL THROWING - 3 semester hours
Development of skills with a focus on wheel throwing. In addition to being introduced to the potter's wheel, students develop their glazing techniques, knowledge of ceramics, and its terminology. Emphasis is placed on the development of design and construction skills with ceramic materials, concept realization, and creative personal invention. Course includes weekly critiques and discussions. **Prerequisites: ARTS 207**

ARTS 312 ADVANCED DRAWING: 3 credit hours. An advanced exploration of the traditional history, methods, and materials of drawing for students who have mastered basic drawing skills and who wish to develop them to enhance visual thinking. Studio approach using live model, via anatomical and perspective approaches to drawing. Emphasis is placed on the technical mastery of drawing techniques and media. **Art & Design Majors & Minors Only Course. Prerequisite: ARTS 212**

ARTS 313 BLACK AND WHITE PHOTOGRAPHY I - 3 semester hours
An introduction to the basics of black and white photography will be covered to include: Basic features and operation of an SLR (manual) camera, black and white film processing, and darkroom procedures. Students will participate with basics of composition, design, lighting, printing, processing, and final print presentation. Students will learn

how to develop film, process prints, and other printing controls such as dodging, burning, and the use of filters. The concentration is placed on photography as a fine art medium. Students should have a 35mm film camera that includes manual controls. **Prerequisites: VCAD 206**

ARTS 314 BLACK AND WHITE PHOTOGRAPHY II - 3 semester hours
A continuation of the exploration of traditional wet process photography, with emphasis on developing film, processing prints, and other printing controls such as dodging, burning, and the use of filters. The concentration is placed on photography as a fine art medium. Students should have a 35mm film camera that includes manual controls. **Prerequisites: ARTS 313**

ARTS 404 ART OF THE MOTION PICTURE: 3 credit hours
Discussion in a seminar setting of the artistic development of the motion picture from its early beginnings to the present, with both technical (editing, production) and aesthetic (cinematography) consideration. Students engage in analysis and discussion after viewing selected films. **Prerequisites: Students must have at least junior status or special permission from the instructor.**

ARTS 409 CERAMICS: MOLD MAKING - 3 semester hours
Examination of ceramic mold making, slip casting, and clay/glaze formulation. Course includes weekly critiques and discussions. **Prerequisites: ARTS 207**

ARTS 410 CERAMICS: MIXED MEDIA - 3 semester hours
Exploration of mixed media formats and techniques to begin the development of a personal style through the creation of a series of related ceramic pieces. **Prerequisites: ARTS 207**

ARTS 412 EXPERIMENTAL DRAWING - 3 credit hours
An exploration of the contemporary conceptual and creative approaches to drawing. Emphasis on the expansion of the definition of drawing through the use of unfamiliar/unexpected materials, methods, and theories for visual thinking. **Art & Design Majors & Minors Only Course. Prerequisite: ARTS 312**

ARTS 413 SCULPTURE: METAL – 3 semester hours
Exploration of three-dimensional concepts, skills, and processes with an emphasis on metal fabrication. Using the machinery of the woodshop, expand technical vocabulary with tools such as MIG welders, oxy-acetylene torches, grinders, and chop saws. Course includes weekly critiques and discussions. **Prerequisites: ARTS 207**

ARTS 414 SCULPTURE: MIXED MEDIA – 3 semester hours
Exploration of conceptual and expressive problems in a variety of sculptural media and various sculptural processes which may include casting, metal fabrication, and/or wood sculpture techniques. Course includes weekly critiques and discussions. **Prerequisites: ARTS 207**

ARTS 415 PAINTING: FIGURE – 3 semester hours
Fundamentals of painting in oil and acrylics introduced through the imagery of the human figure. Traditional and experimental painting processes are explored. Course includes weekly critiques and discussions. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 216**

ARTS 416 PAINTING: MIXED MEDIA – 3 semester hours
Continuing in-depth study of painting formats and techniques integrating various media to begin the development of a personal style through the creation of a series of related paintings. **Art & Design Majors & Minors Only Course. Prerequisites: ARTS 216**

ANIMATION COURSES

ARTS 215 INTRODUCTION TO ANIMATION - 3 semester hours
Introduction to the history and methodology of animation. Regular animation screenings of commercial and experimental works with students responding to the work orally and/or in written form.

ARTS 225 ELECTRONIC ANIMATION - 3 semester hour
Introduction to the various software, hardware, and equipment used in the creation of animation. **Prerequisite: ARTS 215**

ARTS 315 SOUND FOR ANIMATION - 3 semester hours
Examination of the basic theory and methodology of sound design. Project emphasis is on the creation of sound for use in animation. **Prerequisite: ARTS 225**

ARTS 325 ANIMATION BASIC I - 3 semester hours
Examination of the principles that govern animation. Students will explore these principles through various exercises and projects. **Prerequisite: ARTS 225**

ARTS 335 ANIMATION BASIC II - 3 semester hours
Exploration of the principles of special effects animation. Exploration of these principles through various exercises and projects. Sound will also be incorporated into their animation. **Prerequisite: ARTS 325**

ARTS 330 ANIMATION I - 3 semester hours
Examination of animation components for the identification of individual strengths in animation methodology through the completion of animation exercises and projects. **Prerequisite: ARTS 325**

ARTS 425 ANIMATION BASIC III - 3 semester hours
Examination of experimental animation. Exploration of any available methodology/technology for animation exercises and projects. **Prerequisite: ARTS 335**

ARTS 430 ANIMATION II - 3 semester hours
Writing and production of individual animation(s) in preparation for senior studio. **Prerequisite: ARTS 330**

ARTS 435 ANIMATION TEAM - 3 semester hours
Examination of animation production management. Students will take turns in different roles from pre-production to post-production of animation projects. **Prerequisites: ARTS 425 and 430**

ARTS 440 SENIOR ANIMATION STUDIO - 3 semester hours
Preparation for the transition from formal academic study to animation career pursuit. Emphasis on the creation of a demo reel, resumes, and portfolio. **Prerequisites: ARTS 425 and 430**

ART HISTORY COURSES

ARTS 301 WORLD ART SURVEY I – 3 semester hours
Examination of the key stages in the evolution of art and architecture from around the world until approximately 1400 CE. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives.

ARTS 302 WORLD ART SURVEY II – 3 semester hours
Examination of the key stages in the evolution of art and architecture from around the world from approximately 1400 CE to today. Emphasis on understanding the visual language of art as an expression of relationships to the cultural, historical, and philosophical contexts in which the artist lives.

ARTS 307 MODERN ART: 1860 - 1960 – 3 semester hours
Examination of the historical styles and artists of the 'Modern' period from 1860 through 1960, how they compare and relate to previous periods, and how they have been influenced by social and political conditions. **Prerequisites: Students must have junior status or special permission from the instructor.**

ARTS 403 SURVEY OF AFRICAN-AMERICAN ART – 3 semester hours
Examination of art produced by African-Americans in the United States from the Colonial Period to the present. Exploration of the social and political climates influencing the art of African-Americans. **Prerequisites: Students must have junior status or special permission from the instructor.**

ARTS 405 SURVEY OF AFRICAN ART – 3 semester hours
Exploration of the major forms of art and architecture produced by various cultures of Africa. Examination of the art forms and their places within society for pre-historic and ancient civilizations, medieval empires, and the peoples of the Colonial Period in northern, western, central, southern, and east Africa. **Prerequisites: Students must have junior status or special permission from the instructor.**

ARTS 407 HISTORY OF PHOTOGRAPHY – 3 semester hours
A visually oriented history of the development of photography from its earliest manifestations to today and explores photography's applications as a commercial enterprise, a documentary tool, a cultural force and a means of personal expression. Although the emphasis is on photography as a fine art and its relationship to the other arts, topics include documentary photography and photojournalism, fashion and portraiture, and the use of photography in mass media. **Prerequisites: Students must have at least junior status or special permission from the instructor.**

VCAD 200 GRAPHIC DESIGN HISTORY – 3 semester hours
Exploration of the evolution of graphic communications from prehistoric times to the development of modern graphic design. The uses of and styles of graphic design will be covered. **Art & Design Majors Only Course**

GRAPHIC DESIGN COURSES

VCAD 201 TYPOGRAPHY I - 3 semester hours
A study of typography fundamentals. History and development of lettering and type reproduction methods. Exploration of letterform aesthetics and communication value through practical design projects. **For Graphic Design majors only. Prerequisites: ARTS 102 and 108**

VCAD 202 TYPOGRAPHY II - 3 semester hours
An advanced exploration of typography. Functional and expressive type treatments and the effective implementation of type as a visual communication tool. Emphasis is placed on the development of ideas and the ability to communicate them effectively. Introduction to proofreading and editing type. **For Graphic Design majors only. Prerequisite: VCAD 201**

VCAD 203 GRAPHIC DESIGN I – 3 semester hours
An introductory survey to the professional field of graphic design as related to print, multimedia, entertainment, environmental and other areas of visual communications. Emphasis on fundamental principles and skills with a broad approach to the application of techniques and concepts of the field. **For Graphic Design majors. Prerequisites: ARTS 102 and 108**

VCAD 205 GRAPHIC DESIGN II - 3 semester hours
An advanced investigation of the professional field of graphic design as related to print, multimedia, entertainment, environmental and other areas of visual communications. Emphasis on the principles and skills of graphic design with a broad approach to the application of techniques and concepts of the field. **For Graphic Design majors. Prerequisite: VCAD 203**

VCAD 206 BASIC PHOTOGRAPHY - 3 semester hours
An introduction to photography, emphasizing the basic operation of a camera. Students will learn to adjust the settings for exposure, speed, and light conditions. Course includes the regular critiques of student work and discussions of photographic fundamentals. **Prerequisites: ARTS 102 or permission of instructor**

VCAD 207 DIGITAL PHOTOGRAPHY I - 3 semester hours
A digital approach to photography as a communication tool. The course emphasizes the use of the digital camera and photo-correction software and techniques. Course includes the regular critiques of student work and discussions of photographic fundamentals. **Prerequisites: VCAD 206**

VCAD 300 ILLUSTRATION I - 3 semester hours.
Emphasis on the fundamentals of rendering images while exploring various media and techniques. **For Graphic Design majors only. Prerequisites: ARTS 202 and 208**

VCAD 301 SILKSCREEN PROCEDURES – 3 semester hours
Introduction to the various silkscreen procedures employed in advertising art and design. Exploration of hand-cut stencils and photographic processes. **Prerequisites: ARTS 202**

VCAD 302 PRINT I - 3 semester hours
Introduction to the printing process. Examination of commercial printing: the presses, inks, paper, and finishing. The pre-press operations to prepare digital files will be emphasized. **Prerequisites: VCAD 202, 205**

VCAD 307 DIGITAL PHOTOGRAPHY II - 3 semester hours
Students will explore the creative use of digital cameras, and digital printing techniques. Imaging software will be used for editing and printing techniques. Students will learn advanced lighting, cropping, and formatting techniques. Course includes the regular critiques of student work and discussions of photographic fundamentals. **Prerequisites: VCAD 207**

VCAD 310 ILLUSTRATION II - 3 semester hours
Creating illustrations for editorial and business communications using traditional and digital media. **For Graphic Design majors only. Prerequisites: VCAD 300**

VCAD 312 PRINT II - 3 semester hours
Designing print media using experimental formats, as well as special multi-media materials and techniques. **For Graphic Design majors/minors only. Prerequisites: VCAD 302**

VCAD 315 PUBLICATION DESIGN - 3 semester hours
Analysis of professional design studio problems and processes related to publication design. Integrating cohesive design solutions, strategies, grid structures, layouts and compositions throughout multi-page formats. **For Art & Design majors only. Prerequisites: VCAD 202 and 205**

VCAD 400 EDITORIAL ILLUSTRATION - 3 credit hours
Course devoted to generating commercial illustrations based on printed and digital publications with an understanding of the history of editorial illustration and its role in commercial art today. Contracts and forms, time management, client relationships and current trends are explored. **Prerequisite: VCAD 310**

VCAD 410 VISUAL NARRATIVE - 3 credit hours

Illustration-heavy course devoted to exploring the art of visual storytelling and character development. Proficiency in digital and traditional illustration required. **Prerequisite: VCAD 400**

VCAD 415 PACKAGE DESIGN - 3 semester hours
Professional design studio processes and procedures related to packaging design. Developing brand identity and focusing on product positioning, while designing the three-dimensional structure. **For Art & Design majors only. Prerequisites: VCAD 202 and 205**

VCAD 416 ADVERTISING DESIGN - 3 semester hours
An introduction to advertising fundamentals. Development and implementation of strategic design concepts across multi-vehicle marketing materials. **For Art & Design majors only. Prerequisites: VCAD 202 and 205**

VCAD 430 PORTFOLIO - 3 semester hours
Exploring the various methodologies for creating a professional portfolio and resume. **For Art & Design majors only. Prerequisites: Senior status**

VCAD 489 STRATEGIC DESIGN - 3 credit hours.
Students will be selected to work with area nonprofit clients to create and produce a wide variety of fully designed advertising and promotional materials. Students will work in teams to develop brand, marketing, and design strategies, write creative briefs, recruit teams to work with them during CreateAthononCampus (a 24 hour creative event held during Spring Break), present works to clients, and follow any deliverables through to production. Strong emphasis on leadership, teamwork, and a commitment to working with nonprofits. **Prerequisite: Permission by Instructor**.

VCAD 499 —SPECIAL TOPICS IN GRAPHIC DESIGN: 3 credit hours.
An investigation of special/current topics in graphic design of a particular interest to advanced students. Content varies with each semester. May be repeated for credit. **Prerequisites: VCAD 202, 205**

VCAD 450 INTERNSHIP - 3 semester hours
Pragmatic work experience under the supervision of qualified professional practitioners. **For Art & Design majors only. Prerequisites: VCAD 202 and VCAD 205**

VCAD 451 SENIOR THESIS PROJECT – 3 semester hours
Examination of the business aspects of the commercial art world. Culminates in a formal presentation of a cohesive body of work before a departmental committee. **Prerequisites: Senior status**

VCAD 304 HTML – 3 semester hours
Exploration of the language and structure of HTML documents, markup techniques, and validation. Topics include text formatting, lists, tables, META tags, and CSS. **Prerequisites: VCAD 202 and 205**

VCAD 305 WEB DESIGN I – 3 semester hours
Introduction to the planning and development of useful, aesthetically appealing websites through the effective use of navigation techniques with the creative use of graphics, sound, and typography. **Prerequisite: VCAD 304**

VCAD 314 WEB ANIMATION – 3 semester hours
Exploration of the effective use of animations in website design and the graphics software used to make them. **Prerequisite: VCAD 304**

VCAD 401 WEB DESIGN II – 3 semester hours
Advanced work in the planning and development of useful, aesthetically appealing websites. Students will learn the effects of browser choices and computing platforms on their design choices and should gain a critical eye for evaluating website designs. **Prerequisite: VCAD 305**

VCAD 411 WEB DESIGN III – 3 semester hours
Continuing in-depth study of web design formats and techniques to begin the development of a personal style through the creation of a series of extended websites utilizing a variety of graphics. **Prerequisite: VCAD 401**

GENERAL EDUCATION COURSES (NON-MAJORS)

ARTS 199 ART APPRECIATION – 3 semester hours

An introduction to the study and understanding of the visual arts. The various methods through which humans are able to access, interpret, and interact with art will be discussed. Topics include various cultural definitions of art and its use, the elements of design, the characteristics of art media, and the interpretation of content. Emphasis is placed on the areas of painting, sculpture, and architecture, but other areas (drawing, graphics, crafts, etc.) are discussed.

ARTS 200 ART CRAFTS – 3 semester hours
Introduction to the functional and decorative handicrafts through a variety of media.

Visual Arts, Bachelor of Fine Arts with a Concentration in Animation (B.F.A.)

Freshman Year		Credit Hours
ARTS 101	Drawing I	3
ARTS 103	Two Dimensional Design	3
ARTS 199	Art Appreciation	3
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
ARTS 102	Drawing II	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
HPER 170	Health And Wellness	2
	Credit Hours	**32**
Sophomore Year		
ARTS 202	Life Drawing I	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
ARTS 215	Introduction to Animation	3
GE Science Electives (p. 147)		4
ARTS 212	Life Drawing II	3
ARTS 207	Three Dimensional Design	3
ARTS 225	Electronic Animation	3
GE Literature Electives (p. 147)		3
Unrestricted Elective		3
	Credit Hours	**31**
Junior Year		
ARTS 131	World Art Survey I	3
ARTS 325	Animation Basic I	3
ARTS 315	Sound for Animation	3
HIST 114	World History to 1500	3
Unrestricted Elective		3
ARTS 132	World Art Survey II	3

ARTS 335	Animation Basic II	3
ARTS 330	Animation I	3
HIST 115	World History Since 1500	3
Unrestricted Elective	ARTS Course	3
	Credit Hours	**30**
Senior Year		
Restricted Elective	Art History Course	3
Restricted Elective	Art History Course	3
ARTS 425	Animation Basic III	3
ARTS 430	Animation II	3
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
ARTS 435	Animation Team	3
ARTS 440	Senior Animation Studio	3
	Credit Hours	**30**
	Total Credit Hours	**123**

All classes within the major (ARTS/VCAD) must be completed with a grade of 'C' or better.

***Major Requirements**
***NASAD accreditation requires a minimum of 72 credit hours in Art & Design courses for a BFA degree.**
Animation: 78 credit hours*

Electives (free):

Animation: 18 credit hours

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ARTS 101	Drawing I	3
ARTS 102	Drawing II	3
ARTS 103	Two Dimensional Design	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ARTS 131	World Art Survey I	3
ARTS 132	World Art Survey II	3
ARTS 202	Life Drawing I	3
ARTS 212	Life Drawing II	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
Total Credit Hours		**33**

Code	Title	Credit Hours
ARTS 215	Introduction to Animation	3
ARTS 225	Electronic Animation	3
ARTS 315	Sound for Animation	3
ARTS 330	Animation I	3
ARTS 430	Animation II	3
ARTS 325	Animation Basic I	3
ARTS 335	Animation Basic II	3
ARTS 425	Animation Basic III	3
ARTS 207	Three Dimensional Design	3
ARTS 435	Animation Team	3
ARTS 440	Senior Animation Studio	3
Total Credit Hours		**33**

Code	Title	Credit Hours
Restricted Electives	Arts History Courses	6
Unrestricted Electives		18
Total Credit Hours		**24**

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		33
Electives		24
Total Credit Hours		**123**

Visual Arts, Bachelor of Fine Arts with a Concentration in Studio Arts (B.F.A.)

Freshman Year		
1st Semester		**Credit Hours**
ARTS 101	Drawing I	3
ARTS 103	Two Dimensional Design	3
ARTS 199	Art Appreciation	3
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
	Credit Hours	**15**
2nd Semester		
ARTS 102	Drawing II	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ENGL 111	Composition II	3

MATH 113	Basic Mathematics II	3
HPER 170	Health And Wellness	2
	Credit Hours	**17**
Sophomore Year		
1st Semester		
ARTS 202	Life Drawing I	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
ARTS 217	3D Methods & Materials	3
GE Science Electives (p. 147)		4
	Credit Hours	**16**
2nd Semester		
ARTS 212	Life Drawing II	3
ARTS 207	Three Dimensional Design	3
ARTS 216	2D Methods & Materials	3
GE Literature Electives (p. 147)		3
Unrestricted Elective		3
	Credit Hours	**15**
Junior Year		
1st Semester		
ARTS 301	World Art Survey I	3
Restricted Elective	ARTS Paint/Sculpture/Ceramics Course	3
Restricted Elective	1 ARTS Course	3
HIST 114 or HIST 122	World History to 1500 or U.S. History to 1865	3
Unrestricted Elective		3
	Credit Hours	**15**
2nd Semester		
HIST 115 or HIST 123	World History Since 1500 or U.S. History After 1865	3
ARTS 302	World Art Survey II	3
Unrestricted Elective	ARTS Paint/Sculpture/Ceramics Course	3
Restricted Elective	1 ARTS Course	3
Unrestricted Elective		3
	Credit Hours	**15**
Senior Year		
1st Semester		
Restricted Elective	ARTS Paint/Sculpture/Ceramics Course	3
Restricted Elective	Art History Elective	3
Restricted Elective	1 ARTS Course	3
VCAD 430	Portfolio (SP)	3
Unrestricted Elective		3
	Credit Hours	**15**
2nd Semester		
Restricted Elective	ARTS Paint/Sculpture/Ceramics Course	3
Restricted Elective	Art History Course	3
VCAD 451	Senior Thesis Project	3
GE Social Science Electives (p. 147)	SOCI 101/PSYC 101	3
Unrestricted Elective		3
	Credit Hours	**15**
	Total Credit Hours	**123**

All classes within the major (ARTS/VCAD) must be completed with a grade of 'C' or better.

*Major Requirements
*NASAD accreditation requires a minimum of 72 credit hours in Art & Design courses for a BFA degree.

Studio: 78 credit hours*

Electives (free):

Studio: 12 credit hours

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ARTS 101	Drawing I	3
ARTS 102	Drawing II	3
ARTS 103	Two Dimensional Design	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ARTS 131	World Art Survey I	3
ARTS 132	World Art Survey II	3
ARTS 202	Life Drawing I	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
ARTS 212	Life Drawing II	3
Total Credit Hours		**33**

Code	Title	Credit Hours
ARTS 217	3D Methods & Materials	3
ARTS 207	Three Dimensional Design	3
ARTS 216	2D Methods & Materials	3
VCAD 430	Portfolio (SP)	3
VCAD 450	Internship	3-6
VCAD 451	Senior Thesis Project	3-6
ARTS History Course		3
ARTS History Course		3
Students are required to take 12 credits from paint, sculpture or ceramics as restricted electives. (See Electives tab)		
Total Credit Hours		**24-30**

Electives
Studio Arts Concentration

Code	Title	Credit Hours
Unrestricted Electives		**12**
Restricted Electives	**Choose 3 courses from the following list.**	**21**
ARTS 203	Printmaking I	
ARTS 204	Printmaking II	
ARTS 303	Sculpture - Wood	
ARTS 304	Sculpture - Mold MakingI	
ARTS 305	Painting - Still Life	
ARTS 306	Painting - Landscape	
ARTS 309	Ceramics - Hand Building	
ARTS 310	Ceramics - Wheel Throwing	
ARTS 312	Advanced Drawing	
ARTS 313	Black & White Photography I	
ARTS 314	Black & White Photography II	
ARTS 409	Ceramics - Mold Making	
ARTS 410	Ceramics - Mixed Media	
ARTS 412	Experimental Drawing	
ARTS 413	Sculpture - Metal	
ARTS 414	Sculpture - Mixed Media	
ARTS 415	Painting - Figure	
ARTS 416	Painting - Mixed Media	
Students are required to take 12 credits from paint, sculpture or ceramics from the following list:		
ARTS 303	Sculpture - Wood	
ARTS 304	Sculpture - Mold MakingI	
ARTS 305	Painting - Still Life	
ARTS 306	Painting - Landscape	
ARTS 309	Ceramics - Hand Building	
ARTS 310	Ceramics - Wheel Throwing	
ARTS 409	Ceramics - Mold Making	
ARTS 410	Ceramics - Mixed Media	
ARTS 413	Sculpture - Metal	
ARTS 414	Sculpture - Mixed Media	
ARTS 415	Painting - Figure	
ARTS 416	Painting - Mixed Media	
Total Credit Hours		**33**

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		24
Electives		33
Total Credit Hours		**123**

Visual Arts, Bachelor of Fine Arts with a Concentration in Graphic Design (B.F.A.)

BFA IN VISUAL ARTS
Graphic Design Concentration

Freshman Year		
1st Semester		**Credit Hours**
ARTS 101	Drawing I	3
ARTS 103	Two Dimensional Design	3
ARTS 199	Art Appreciation	3
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
	Credit Hours	**15**
2nd Semester		
ARTS 102	Drawing II	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
HPER 170	Health And Wellness	2
	Credit Hours	**17**
Sophomore Year		
1st Semester		
ARTS 202	Life Drawing I	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
VCAD 201	Typography I	3
VCAD 203	Graphic Design I	3
	Credit Hours	**15**
2nd Semester		
ARTS 212	Life Drawing II	3
VCAD 200	Graphic Design History	3
VCAD 202	Typography II	3
VCAD 205	Graphic Design II	3
GE Literature Electives (p. 147)		3
	Credit Hours	**15**
Junior Year		
1st Semester		
ARTS 301	World Art Survey I	3
VCAD 206	Basic Photography (Restricted Elective)	3
Restricted Elective	VCAD Course	3
HIST 114	World History to 1500	3
GE Science Electives (p. 147)		4
	Credit Hours	**16**
2nd Semester		
ARTS 302	World Art Survey II	3
Restricted Elective	VCAD Course	3
HIST 115	World History Since 1500	3
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
	Credit Hours	**15**
Senior Year		
1st Semester		
Restricted Elective	VCAD Course 1	3
VCAD 430	Portfolio (SP)	3
VCAD 450	Internship	3
Unrestricted Elective		3

Unrestricted Elective		3
	Credit Hours	**15**
2nd Semester		
Restricted Elective	Art History Course	3
Restricted Elective	1 VCAD Course	3
VCAD 451	Senior Thesis Project	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**15**
	Total Credit Hours	**123**

***Major Requirements**
***NASAD accreditation requires a minimum of 72 credit hours in Art & Design courses for a BFA degree.**
Graphic Design: 78 credit hours*

Electives (free):

Graphic Design: 15 credit hours

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ARTS 101	Drawing I	3
ARTS 102	Drawing II	3
ARTS 103	Two Dimensional Design	3
ARTS 104	2 Dimenl Design;Color Theor	3
ARTS 108	Computers for Artists	3
ARTS 131	World Art Survey I	3
ARTS 132	World Art Survey II	3
ARTS 202	Life Drawing I	3
ARTS 212	Life Drawing II	3
ARTS 208	Perspective Drawing	3
ARTS 209	Cognitive Develop for Artist	3
Total Credit Hours		**33**

Code	Title	Credit Hours
VCAD 201	Typography I	3
VCAD 202	Typography II	3
VCAD 203	Graphic Design I	3
VCAD 205	Graphic Design II	3
VCAD 206	Basic Photography	3
VCAD 200	Graphic Design History	3
VCAD 430	Portfolio (SP)	3
VCAD 450	Internship	3-6
VCAD 451	Senior Thesis Project	3-6
Total Credit Hours		**27-33**

Electives
Graphic Design Concentration

Code	Title	Credit Hours
Unrestricted Electives		**18**
Restricted Electives	**Choose 4 from the following courses:**	**12**
VCAD 207	Digital Photography I	
VCAD 300	Traditional Illustration	
VCAD 301	Silkscreen Procedures	
VCAD 302	Print Design	
VCAD 304	HTML	
VCAD 305	UX/UI Design	
VCAD 307	Digital Photography II	
VCAD 310	Digital Illustration	
VCAD 315	Publication Design	
VCAD 400	Editorial Illustration	
VCAD 410	Visual Narrative	
VCAD 415	Package Design	
VCAD 416	Advertising Design	
VCAD 489	Strategic Design	
VCAD 499	Special Topics Graphic Design	
Total Credit Hours		**30**

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		27
Electives		30
Total Credit Hours		**123**

Art and Design, Minor in Animation

To be eligible, a student must complete:

Code	Title	Credit Hours
ARTS 215	Introduction to Animation	3
ARTS 225	Electronic Animation	3
ARTS 315	Sound for Animation	3

ARTS 325	Animation Basic I	3
ARTS 330	Animation I	3
ARTS 335	Animation Basic II	3
Total Credit Hours		**18**

Art and Design, Minor in Art History

To be eligible, a student must first complete ARTS 301 and ARTS 302 with a grade of 'C' or higher. After successful completion of these two courses, the student must complete an additional 4 courses (12 hours) of Art History at the 300 and 400 levels and/or VCAD 200- Graphic Design History, for a total of 18 credit hours.

Art and Design, Minor in Graphic Design

To be eligible, a student must complete:

Code	Title	Credit Hours
VCAD 200	Graphic Design History	3
VCAD 201	Typography I	3
VCAD 202	Typography II	3
VCAD 203	Graphic Design I	3
VCAD 205	Graphic Design II	3
VCAD	Restricted Elective	3
Total Credit Hours		**18**

Art and Design, Minor in Photography

To be eligible, a student must complete:

Code	Title	Credit Hours
ARTS 103	Two Dimensional Design	3
VCAD 206	Basic Photography	3
VCAD/ARTS	3 Photography courses	9
ARTS 407	History of Photography	3
Total Credit Hours		**18**

Art and Design, Minor in Studio Art

To be eligible, a student must first complete, in sequential order the courses below, with a grade of 'C' or higher, for a total of 12 credit hours. After successful completion of these core requirements, the student must complete an additional 2 courses (6 hours) of Art Studio at the 300 and 400 levels in the same media concentration, for a total of 18 credit hours.

Code	Title	Credit Hours
ARTS 101	Drawing I	3
ARTS 102	Drawing II	3
or ARTS 202	Life Drawing I	
ARTS 103	Two Dimensional Design	3
ARTS 104	2 Dimenl Design;Color Theor	3
or ARTS 207	Three Dimensional Design	
Art Studio courses at 300 and 400 levels.		6
Total Credit Hours		**18**

Department of History and Philosophy

Chairperson: Dr. Richard Chew
Location: Alfred W. Harris Academic Commons Building, Room 3213
Contact Information: (804) 524-6871 | rchew@vsu.edu

Department Overview

The Department of History and Philosophy teaches courses in history, philosophy, and geography, and offers the **Bachelor of Arts (B.A.) in History**, a **Minor in History**, and a **Minor in Philosophy**. For the bachelor's degree in History, majors may elect to have a concentration, and the department currently offers four concentrations: **Public History**, **HBCU Studies**, **African/African-American/African Diasporic/Black Studies**, and **Social Sciences Secondary Education Grades 6-12**. Many of the department's history, philosophy, and geography courses contribute significantly to the university's requirements in the General Education program, and many of the department's courses are listed as requirements in other programs and majors at the university.

Mission Statement

The mission of the department is to engender a knowledge of the struggles and achievements of previous generations, foster an appreciation of global interdependence and cultural diversity, and develop discerning and literate graduates who possess the research, analytical, problem-solving, and communication skills valuable in various post-graduate and professional fields. Majors from the department are prepared for graduate and professional programs, and possess an essential foundation for a variety of careers in the public service sector, museum and library work, private industry, and education, especially when it comes to teaching history at the secondary level. The History program aims to actively engage students in the history of local, regional, and international communities through activities within and outside of the classroom. The Philosophy minor has the goal of developing analytical thinking, moral reasoning, and an awareness of social justice.

Degree Highlight Information

Ensuring Program Quality

The History program undergoes a rigorous Program Review every five years that includes an examination of how the program compares to peer and aspirant institutions. The review helps ensure that the program maintains a competitive edge in the field, and includes a Program Quality Enhancement Plan (PQEP) with specific, targeted, measured goals to achieve program improvement year-over-year and over the long-run.

Department Goals

The goals of the Department of History and Philosophy are to prepare graduates to:

- Possess the essential foundation needed for a variety of careers in the business, corporate, and commercial for-profit sector, the public sector, and the non-profit sector, as well as careers in education, teaching, and academia,
- Excel in graduate and professional programs, including M.A. programs, Ph.D. programs, business school, and law school,
- Actively engage as informed scholars in local, regional, and international communities.

Program Listings

Bachelor of Arts (B.A.) in History

History is often misunderstood as the study of the past, but this definition is far too broad and does not entail the methodological approach or philosophy embraced by the discipline and the department: history is the study of how causes and effects in any endeavor lead to change over time. This philosophy, which centers on evidentiary analysis and critical thinking, is applicable across a broad range of academic, business, government, and professional vocations. The approach is introduced in survey courses, reinforced in upper-level subject-based classes, and culminates with the senior seminar paper. To realize this philosophy, history majors are immersed throughout their courses in the study of narratives, texts, visual imagery, artefacts, data sets, and other evidence so that they may build interpretations and then communicate their findings effectively, succinctly, and persuasively through both written and oral communication.

The B.A. requires a total of 45 credits, including 24 credits in the common core courses (HIST 114, 115, 122, 123, 499, PHIL 140, 180, and GEOG 210), 18 credits in required HIST courses, and 3 credits in a restricted elective (please see the curriculum sheet that follows the course descriptions for details.) Students must earn a grade of "C" or higher in the common core courses and required HIST courses for the degree.

Additional Requirements for the Concentration in Public History:
Students must earn a grade of "C" or higher in HIST 392: Public History, and two electives from the department's approved list of courses in public history (please see department Chair for the approved list).

Additional Requirements for the Concentration in HBCU Studies:
Students must earn a grade of "C" or higher in HIST 245, HIST 246, and an elective from the department's list of approved courses in HBCU Studies (please see department Chair for the approved list).

Additional Requirements for the Concentration in African/African-American/African Diasporic/Black Studies:
Students must take a two-course sequence in either HIST 240 and HIST 241 (African American History to/from 1865) or HIST 274 and HIST 275 (African History to/from 1800). The chosen sequence may be taken out of order. Students must also take two electives from the department's list of approved courses in African/African-American/African Diasporic/Black Studies (please see department Chair for the approved list). Students must earn a "C" or higher in all classes for the concentration in African/African-American/African Diasporic/Black Studies.

Additional Requirements for the Concentration in Social Sciences Secondary Education Grades 6-12:
Students must earn a grade of "C" or higher in all courses in the approved curriculum for secondary education certification—please see the curriculum sheet for details. The curriculum sheets follow the course listings below.

Minor in History

The History minor requires six courses, including HIST 122 or 123, HIST 114 or 115, and four upper-level HIST courses. At least one upper-level HIST course must be at the 200-level or higher, and at least one upper-level HIST course must be at the 300-level or higher. Students must earn a grade of "C" in all courses for the minor.

Minor in Philosophy

The Philosophy minor requires six courses, including PHIL 140, PHIL 220, one course from the department's approved list of ethics courses (please see department Chair for the approved list), and three additional PHIL courses that are not on the department's approved list of ethics courses. Students must earn a grade of "C" in all courses for the minor.

Major(s)

- History, Bachelor of Arts (B.A.) (p. 285)
- History, Bachelor of Arts with a Concentration in Secondary Education 6-12 (B.A. (p. 286))
- History, Bachelor of Arts with a Concentration in HBCU Studies (B.A.) (p. 287)
- History, Bachelor of Arts with a Concentration in Public History (B.A.) (p. 288)
- History, Bachelor of Arts with a Concentration in African, African-American, African Diasporic and Black Studies (B.A.) (p. 289)

Minor

- Minor in History (p. 290)
- Minor in Philosophy (p. 290)

GEOG (p.), HIST (p. 280), PHIL (p. 284)

Geography (GEOG)

GEOG 210. World Geography. (3 Credits)
An introduction to the geographic principles underlying different types of climate and their influence on society in various physical and political regions.

GEOG 313. Virginia Geography. (3 Credits)
A survey of the geographic regions of Virginia, and the influence of geographic factors on social and economic problems in Virginia, past and present.

GEOG 314. Geography Of North America. (3 Credits)
A study of the physical and cultural environments of North America with emphasis on regional economic activities.

GEOG 316. Human Geography. (3 Credits)
A survey of the content of human geography. Topics include population, migration, urban geography, the distribution of agriculture and industry, and human environmental impact.

GEOG 410. Geography Of Developing Natio. (3 Credits)
A study of the relationships between population and economic development in developing countries, and of possible responses to current problems and their consequences.

GEOG 411. Urban Geography. (3 Credits)
An examination of the economic basis, regional spacing and internal social and economic organization of cities.

GEOG 412. Seminar Land Use & Development. (3 Credits)
Interpretation of the landscape features of the United States with an emphasis on the historical and present patterns of social and economic activities.

GEOG 413. Economic Geography. (3 Credits)
A study of the relation between natural resources and the development and interdependence of national industrial and trade centers.

History (HIST)

HIST 114. World History to 1500. (3 Credits)
A topical introduction to the development of civilization up to the eve of the Modern Period, covering the growth of independent cultural traditions and diffusion of ideas, institutions and people.

HIST 115. World History Since 1500. (3 Credits)
A Topical introduction to the evolution of civilizations through the scientific, industrial, political and economic revolutions of the Modern Period down to the present. Emphasis will be placed on the evolution of global interdependence through the interaction of western and non-western cultures.

HIST 122. U.S. History to 1865. (3 Credits)
Introduces students to the social, political and economic history of the United States from Pre-Columbian America to the end of the Civil War.

HIST 123. U.S. History After 1865. (3 Credits)
Introduces students to the social, political and economic history of the United States from Reconstruction to Contemporary America.

HIST 222. U S Hist Early Beginning To 18. (3 Credits)
This reading and writing intensive survey course provides students with an in-depth analysis of key historical issues of American history from the first habitation to the end of the Civil War.

HIST 223. U S History 1865 To Present. (3 Credits)
This reading and writing intensive survey course students with an in-depth analysis of key historical issues of American history from 1865 to today.

HIST 231. History of Virginia. (3 Credits)
A general course on the development of Virginia and its role in the history of the nation.

HIST 240. African American Hist. to 1865. (3 Credits)
HIST 240 African American History to 1865- 3 Semester hours A reading and writing intensive course which provides students with an analysis of important issues in African American origins to 1865.

HIST 241. Afric. Am. Hist. Fr 1865 to Pr. (3 Credits)
HIST 241 African American History From 1865 to Present- 3 Semester hours A reading and writing intensive course which provides students with an analysis of important issues in African American history from 1865 to the present.

HIST 243. Hip Hop History. (3 Credits)
Hip Hop" is a term that describes a range of artistic, intellectual, cultural, and political themes and practices closely associated with late 20th and early 21st century urban American and African American culture. The course will survey the origins and development of hip hop culture, explore both the aesthetics and aspirations of the movement, and consider major topics of concern to the culture, including identify, oppression, entrepreneurship, social justice, and political power.

HIST 244. Readings in History. (3 Credits)
The course introduces students to the discipline of history and allows flexibility to both student and professor to explore a historical topic or theme in depth, different from a survey format. Mainly intended for history or related majors, the course will emphasize a critical thinking approach to analysis of historical events, thus preparing students for higher courses in historical methodology and the history senior seminar. This course must be successfully completed before enrolling in HIST 344.

HIST 245. HBCU History. (3 Credits)
HIST 245 HBCU History - 3 semester hours Historically Black Colleges and Universities have been a vital instrument in the struggle for liberty, equality, and opportunity for the African American community. This course traces the history of these institutions from their emergence in the nineteenth century, through the challenges they faced during the twentieth century, and their evolving role within African American life and American society generally in the twenty-first century United States.

HIST 246. History of Virginia State Univ. (3 Credits)
This course traces the history of Virginia State University from its founding through the contemporary period. Topics will include how the institution has overcome challenges, both internally and externally, the history of academic, social, and intellectual life on campus, VSU's outreach as a land grant college, and how VSU graduates have helped change the world.

HIST 250. American Sports History. (3 Credits)
A social history of America, using sports and leisure as indicators of how these activities reflect American attitudes from the colonial period to the present day.

HIST 257. History of American Holiday. (3 Credits)
A study of how different American holidays emerged, changed over time, and, in many cases, have disappeared from American life and culture, from colonial times to the present. The course reflects on how holidays can be sources of myth, identity, community, memory, and social protest under the general theme "you are what you celebrate.

HIST 258. Consumption & Clutter in Amer. (3 Credits)
This course examines the place, uses, and understanding of consumer goods and material objects in American llife and culture. Topics include the evolution of American consumerism, the idea of "conspicuous consumption," how individuals assert identity throughj material items, the connections between gender and consumer culture, the dichotomy of abundance and scarcity during industrialization and globalization, and the environmental consequences of consumerism.

HIST 260. U.S. Women's History to 1865. (3 Credits)
This course is a general survey of the history of women in the United States from the pre-colonial era to the mid-nineteenth century. The course will take a mainly narrative approach, but will also introduce students to important concepts, such as the intersection of race, class, and gender in women's lives and its impact on the evolution of sex and gender norms. Major topics may include the importance of women's work and community networks, the gendered underpinnings of American slavery and racist ideologies, changing ideas about women and citizenship, the transformative impacts of colonization, industrialization, and westward expansion.

HIST 261. U.S. Women's History Sin 1865. (3 Credits)
This course is a general survey of the history of women in the United States from the mid-nineteenth century to the present. The course will take a mainly narrative approach, but will also introduce students to important concepts, such as the intersection of race, class, and gender in women's lives and its impact on the evolution of sex and gender norms. Major topics may include women and industrialization, the rise of Jim Crow through women's eyes, the complicated and troubled nature of the women's suffrage movement, evolving understandings of women's sexuality, the politics of reproduction, and women's experiences of and contributions to social justice movements.

HIST 274. History of Africa to 1800. (3 Credits)
A survey of the history of Africa from the earliest times to the end of the 18th century. The course will explore the old myths of Africa as a 'dark continent' and emphasize the internal dynamics of the development of indigenous cultures and civilizations. Africa's contribution to world history, and the significance of external forces as they impacted Africa, especially the slave trade, will be underscored.

HIST 275. History of Africa Since 1800. (3 Credits)
A survey of the history of Africa since the late 18th century as a background for understanding today's events. The course will examine socio-economic and political developments inside Africa, relations with outside forces, and the increasing European interest in Africa, which paved way for the imposition of European colonialism. The colonial impact and African reactions, decolonization, the post-colonial period and the current problems and prospects of Africa will be studied.

HIST 277. History of England. (3 Credits)
HIST 227 History of England - 3 semester hours A survey of the social, economic, and political development of England from 1485 to the Twentieth Century.

HIST 299. Special Topics In History. (3 Credits)
A temporary and/or topic specific course with content appropriate for a sophomore level audience.

HIST 301. Colonial American to 1763. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 304. American Military History. (3 Credits)
A study of American Military History, and the origin and the growth of the United States Army and its accomplishments in war and peace from 1775 to the present.

HIST 305. Amer. Rev. & Early U.S. Republ. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 307. Black Freedom in an Age of Evo. (3 Credits)
This course focuses on how people of African ancestry in the Americas fought for political freedom, social equality, and economic opportunity in the era of the American, French, and Haitian Revolutions. Topics will include the experiences of African Americans in American Revolution, the efforts of the first civil rights leaders in the United States, the movement to end slavery and the slave trade in the early U.S., the Haitian Revolution and its impact on the early U.S., and the emergent discussion of pan-African and African-American identity in the early 19th century.

HIST 309. Antebellum America. (3 Credits)
An overview of the United States from 1815 to the outbreak of the Civil War, with an emphasis on major political, economic and social trends.

HIST 312. History Of Russia & Soviet Uni. (3 Credits)
A historical overview of the development of the Russian state, with emphasis on the time period of Communist control under the Soviet Union and the re-emergence of non-communist Russia.

HIST 313. Civil War and Reconstruction. (3 Credits)
A study of the Civil War and its causes as well as the economic, political, and social changes in the South during Reconstruction.

HIST 315. The New South. (3 Credits)
A study of the effects of the Civil War and Emancipation on southern reconstruction, industrialization, and agriculture.

HIST 317. Progress to Depress 1900-1933. (3 Credits)
An intensive study of the United States in the first three decades of the twentieth century, including a consideration of Progressive Reform, World War I, the Twenties, the Crash, and the Depression.

HIST 321. New Deal to Now, 1933 to Pres.. (3 Credits)
A concentrated study of the recent history of the United States, including a consideration of the Depression and the New Deal, the Second World War, the Cold War, Civil Rights struggle, and other domestic developments.

HIST 325. Contemporary American History. (3 Credits)
An intensive study of contemporary topics and analysis of their background and impact.

HIST 327. History Of The Carribbean. (3 Credits)
A history of the political, economic, and social characteristics of the Caribbean region.

HIST 328. America in Two World Wars. (3 Credits)
A study of America's participation in World War I and World War II, the conflicts that marked American's transition to a global superpower.

HIST 333. Reel History. (3 Credits)
This course will focus on how the past is portrayed in visual media, and is thus a class in public history, or how the past is presented in non-academic settings. Subjects will be drawn from multiple nations and cultures and the course will explore presentations of the past from societies across the planet from antiquity to the contemporary period.

HIST 340. African American History To 18. (3 Credits)
This reading and writing intensive course will provide students with an analysis of important issues in African American origins to 1865.

HIST 341. African Amer Hist Fr 1865 To P. (3 Credits)
This reading and writing intensive course will provide students with an analysis of important issues in African American history from 1865 to the present.

HIST 344. Historical Methods. (3 Credits)
This course introduces students to the methods involved in historical analysis, research and writing. Emphasis will be placed on approaches to the study of history, modes of historical writing, interpretation and argument, data collection, analysis and documentation, and style and writing conventions. Students successfully completing this course will be able to write effectively, reason logically, and argue convincingly. This course must be successfully completed before enrolling in HIST 444: Senior Seminar.

HIST 347. Black Voices in American Hist. (3 Credits)
A reading and discussion intensive course that explores the ways in which African Americans have experienced and responded to life in the social, political, and economic spheres of American society.

HIST 348. Islam in African Amer Experien. (3 Credits)
The course explores the origins and connections between Islam and African American culture from colonial times to the present.

HIST 349. HBCU History. (3 Credits)
HIST 349 HBCU History - 3 semester hours Historically Black Colleges and Universities have been a vital instrument in the struggle for liberty, equality, and opportunity for the African American community. This course traces the history of these institutions from their emergence in the nineteenth century, through the challenges they faced during the twentieth century, and their evolving role within African American life and American society generally in the twenty-first century United States.

HIST 350. Native Americans in Early Amer. (3 Credits)
A study of Native Americans in North American from the earliest settlements on the continent until the early nineteenth century.

HIST 352. Black Voices In American Histo. (3 Credits)
A reading and discussion intensive course that explores the ways in which African Americans have experienced and responded to life in the social, political, and economic spheres of American society.

HIST 353. Amer Constitutional History. (3 Credits)
A historical study of the creation of the U.S. constitution, its impact upon American development and society, and the evolution of the document through contemporary history.

HIST 360. Race, Sex and Gen in Amer. HIS. (3 Credits)
This course examines aspects of American history and culture through the intersecting lenses of race, sex, and gender. Topics include the evolution of sex and gender norms, the gendered roots of white supremacism, colonization, and westward expansion, multiple definitions of race in American culture, and changing understandings of sex and sexuality from the colonial era to the present.

HIST 362. WMN, Politics & Amer. Pub Life. (3 Credits)
Women actively contributed to American public life well before winning the vote. Along with the abolitionist, suffrage, civil rights, and other social justice movements, this course examines the ways women have exercised public influence in everyday life. Other topics may include boycotts, public protests, strikes, voluntary associations, and grass-roots organizing. Close attention will be paid to the varied ways race, class, legal status, and gender identity have interacted with women's experiences of public life.

HIST 372. Women's Voices in Wrld History. (3 Credits)
This course takes a topical approach to world history by examining selected eras and events through the lens of women's writings and acts of cultural remembrance. Specifics of place and time period will vary by semester. Topics will also vary by semester but may include war, migration, colonialism, education, social unrest, and political activism.

HIST 380. African Disaporic History. (3 Credits)
An examination of the African diaspora, from its origins in the slave trade to the present day. Topics may include the emergence of diasporic identities, the endurance of African cultural practices and traditions, and the interaction between diasporic people and Africa.

HIST 381. Black Women's History in Ameri. (3 Credits)
A study of black women in both North America and Latin America focusing on comparative historical themes and the changing historical roles of black women in the various parts of the Americas.

HIST 392. Public History. (3 Credits)
This course combines theory and experience to introduce students to the academic and practical aspects of public history. The focus will vary by semester and areas of interest may include museum exhibitions, efforts at historical commemoration, the use of history within various media, and the process of historic site excavation, interpretation, and preservation.

HIST 399. Special Topics In History. (3 Credits)
A temporary and/or topic-specific course with content appropriate for an upperclassman audience.

HIST 401. Colonial America To 1763. (3 Credits)
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.

HIST 402. Student Teaching For History. (3 Credits)
This course is designed to provide supervision in the content area for pre-service secondary history candidates.

HIST 405. Revolutionary Early Nat'L Peri. (3 Credits)
An examination of the founding of the United States from the Revolution through the War of 1812.

HIST 406. Native Americans In Early Amer. (3 Credits)
An examination of the founding of the United States from the Revolution through the War of 1812.

HIST 409. Antebellum America. (3 Credits)
An overview of the United States from 1815 to the outbreak of the Civil War, with an emphasis on major political, economic and social trends.

HIST 413. Civil War And Reconstruction. (3 Credits)
A study of the Civil War and its causes as well as the economic, political, and social changes in the South during Reconstruction.

HIST 415. The New South. (3 Credits)
A study of the effects of the Civil War and Emancipation on southern reconstruction, industrialization, and agriculture.

HIST 417. Progressivism Depression 1900. (3 Credits)
An intensive study of the United States in the first three decades of the twentieth century, including a consideration of Progressive Reform, World War I, the Twenties, the Crash, and the Depression.

HIST 421. New Deal To Now 1933 To Presen. (3 Credits)
A concentrated study of the recent history of the United States, including a consideration of the Depression and the New Deal, the Second World War, the Cold War, Civil Rights struggle, and other domestic developments.

HIST 425. Contemporary American History. (3 Credits)
An intensive study of contemporary topics and analysis of their background and impact.

HIST 426. Methods Materials Teach Soc St. (3 Credits)
Implications of contemporary teaching strategies, educational materials, and instructional designs for cross-disciplinary instruction in history and social studies.

HIST 428. America In Two World Wars. (3 Credits)
A study of America's participation in World War I and World War II, the conflicts that marked American's transition to a global superpower.

HIST 431. History Of Virginia. (3 Credits)
A general course on the development of Virginia and its role in the history of the nation.

HIST 435. American Diplomatic History. (3 Credits)
A comprehensive study of American foreign relations from the colonial era to the present day.

HIST 437. Econ & Bus His Us:Growth Capit. (3 Credits)
A study of the ideas, forces, and people behind the emergence of a capitalist economy in the United States, from the Revolution to the present.

HIST 439. American Constitutional Histor. (3 Credits)
A historical study of the creation of the U.S. constitution, its impact upon American development and society, and the evolution of the document through contemporary history.

HIST 441. Ameri Intellectual Cultural Hi. (3 Credits)
An overview of the major social trends of the various peoples of America, including intellectual, religious, cultural and literary movements.

HIST 443. History Internship. (3 Credits)
Provides students with the opportunity to experience the practice of history through placement in internships with public or private agencies.

HIST 444. Senior Seminar. (3 Credits)
Designed as a capstone course for History majors, the Senior Seminar requires students to demonstrate their historical knowledge and skills through the research, writing, presentation and defense of a seminar paper on a topic approved by the seminar director. Prerequisite/Co-requisite: HIST 344.

HIST 445. Women'S History. (3 Credits)
A study of the significance of women in American history, focusing on the changing historical roles of women in society and the emergence of the women's movement.

HIST 449. History Of The American Wet. (3 Credits)
An examination of the primary events, social movements and historical impact of American migration into the West from the nineteenth century to the present day.

HIST 450. Reel History. (3 Credits)
This course will focus on how the past is portrayed in visual media, and is thus a class in public history, or how the past is presented in non-academic settings. Subjects will be drawn from multiple nations and cultures and the course will explore presentations of the past from societies across the planet from antiquity to the contemporary period.

HIST 451. Black History. (3 Credits)
A study tracing the career of Afro-Americans throughout American history from the African background to present times.

HIST 453. History Of Black Ed In The Us. (3 Credits)
An investigation into the ideologies, methods, and struggles involved in the education of blacks in the United States across time and regions.

HIST 455. Black Protet Twentieth Century. (3 Credits)
An extensive examination of the efforts of Afro-Americans to secure freedom and dignity in twentieth- century America with emphasis on the philosophies and leaders of the major protest organizations.

HIST 459. History Black Religion Exp Ame. (3 Credits)
This course examines the origins and contributions of the black sectarian and established religious experiences in America from the Colonial period to the present.

HIST 461. History Of Africa To 1800. (3 Credits)
Survey of the history of Africa from the earliest times to the end of the 18th century. The course will explode the old myths of Africa as a 'dark continent', and emphasize the internal dynamics of the development of indigenous cultures and civilizations. Africa's contribution to world history, and the significance of external forces as they impacted Africa, especially the slave trade, will be underscored.

HIST 462. History Of Africa Since 1800. (3 Credits)
Survey of the history of Africa since the late 18th century as a background for understanding today's events. The course will examine socio-economic and political developments inside Africa, relations with outside forces, and the increasing European interest in Africa, which paved way for the imposition of European colonialism. The colonial impact and African reactions, decolonization, the post-colonial period and the current problems and prospects of Africa will be studied.

HIST 463. The Rise Of The Atlantic World. (3 Credits)
A study of the how European exploration and trade brought together Europe, Africa and the new World in a commercial relationship culminating in the Atlantic slave trade; the coping mechanisms and the role of Africans in the emergence of new communities around this Atlantic world.

HIST 465. W. Africa Era Of Atlantic Sla. (3 Credits)
A study of the social, political and economic developments inside West Africa in the era of the greatest forced migration in human history. Attention will be paid to the ways in which the slave trade influenced internal developments and impacted societies in West Africa.

HIST 481. Europe 1814-1914. (3 Credits)
An examination of the rise of nationalism and industrialism in Europe during the nineteenth century and the causes of World War I.

HIST 482. Methods/Materials Teach HIST. (3 Credits)
Implications of contemporary teaching strategies, educational materials, and instructional designs for cross-disciplinary instruction in history and social studies.

HIST 483. Europe Since 1914. (3 Credits)
An examination of conditions in Europe since 1914: the rise of dictatorship; the coming of World War II; the defeat of the Axis; the end of European imperialism; and post-war European organization and problems.

HIST 484. Senior Sem inTeaching History. (3 Credits)
A course designed to provide supervision in the content area for pre-service secondary history candidates.

HIST 487. British Empire/Commonwealth. (3 Credits)
A survey of the development of the British Empire from the American Revolution to the Commonwealth of Nations and its place in the Age of Anti-Colonialism.

HIST 489. American Legal History. (3 Credits)
A history of the American legal system from the colonial era to the present, emphasizing the changing nature of the law to reflect American society.

HIST 490. History Internship. (3 Credits)
An opportunity to experience the practice of history through placement in internships with public or private agencies.

HIST 491. The French Revolution. (3 Credits)
An analytical examination of the people and processes of the French Revolutionary period. A special focus of this course will be the study of revolutionary theories developed by social scientists during the last several decades.

HIST 492. American Immigration History. (3 Credits)
A history of immigration to the Western Hemisphere, including a discussion of where the immigrants came , why they came, and how they influenced America after their arrival.

HIST 493. Historical Pathways & Careers. (3 Credits)
HIST 493 Historical Pathways and Careers - 3 semester hours The course introduces students to trending theoretical and practical resources for securing rewarding careers in history. It is designed for history majors and others interested in history careers to align their strengths, talents, scholarly interest, and transferable skills for post-graduation professional school and other career options.

HIST 495. Independent Study In History. (3 Credits)
An open format history course featuring directed supervision of the student in their chosen topic by a designated faculty member.

HIST 497. Historiographical Methods. (3 Credits)
Designed as an elective lead-in course to the capstone course for History majors, Historiographical Methods requires students to complete a major historiographical essay on a topic approved by the professor of record. Prerequisite(s): Student must complete one "basic core" course in history (any course numbered HIST 240-289) and one "advanced core" course in history (any course numbered HIST 340-389) to enroll in HIST 497.

HIST 499. Senior Sem Historical Methods. (3 Credits)
Designed as a capstone course for History majors. Students will work closely with the seminar director on how to apply historical methods to their own primary research. To complete the course, students must successfully write, present, and defend a seminar paper based on original research on a topic approved by the seminar director.

Philosophy (PHIL)

PHIL 140. Philosophy. (3 Credits)
An introduction to methods of critical thinking, and to the major problem areas of philosophy such as epistemology, metaphysics and ethics.

PHIL 180. Critical Thinking. (3 Credits)
An introductory course exploring the nature and structure of arguments and enhancing reasoning abilities. Students will learn to develop and analyze arguments, identify informal fallacies, differentiate among assumptions, opinions, and facts, and hone critical reading and writing skills.

PHIL 213. History Of Philosophy. (3 Credits)
A survey of the history of Western philosophy from the Renaissance through the nineteenth century, including Hobbes, Descartes, Leibnitz, Spinoza, Locke, Berkeley, Hume, Kant, and Hegel.

PHIL 214. Non-Western Philosophies. (3 Credits)
A survey of non-western philosophies. Topics will vary by semester but may include epistemology, ethics, and metaphysics as they are approached throughout Asia and Africa.

PHIL 216. Philosophy of Religion. (3 Credits)
PHIL 216 Philosophy of Religion - 3 semester hours A survey of Eastern and Western religious thought, including the idea of God, knowledge of God, the problem of evil, immortality, and reincarnation.

PHIL 218. African American Philosphy. (3 Credits)
A survey of African American philosophical thought. The course will explore both the distinctive tradition of African American philosophy as well as the unique contributions made by African Americans to different branches of philosophy.

PHIL 220. Introduction To Logic. (3 Credits)
An introduction to the methods of elementary formal logic, including traditional syllogistic, Venn diagrams, sentential logic, truth tables, methods of deduction, and inductive reasoning.

PHIL 275. Ethics. (3 Credits)
An introductory study of the nature, analysis, and justification of moral judgments.

PHIL 280. Medical Ethics. (3 Credits)
A course designed to introduce students to ethical theories and moral reasoning that they will then apply to case studies concerning health care and medicine and their intersections with biotechnology. Students will consider contemporary moral dilemmas that confront health care professionals and scientists, as well as individuals who need to make medical decisions that deal with challenging ethical questions.

PHIL 290. Business Ethics. (3 Credits)
A course designed to introduce students to ethical theories and moral reasoning which they will then apply to business case studies. Students will consider contemporary moral dilemmas confronting businesses and corporations. They will develop the critical skills needed to analyze complex moral situations and formulate, weigh, discuss and defend appropriate moral solutions.

PHIL 314. Philosophy Of Religion. (3 Credits)
A survey of Eastern and Western religious thought, including the idea of God, knowledge of God, the problem of evil, immortality, and reincarnation.

PHIL 315. African Philosophy. (3 Credits)
An exploration of metaphysical, epistemological and ethical theories arising from peoples of the African continent. Students will analyze, discuss and compare the differing principles and world views of the diverse African societies.

PHIL 323. Special Topics In Philosophy. (3 Credits)
A close reading of original philosophical works on an in-depth treatment of a philosophical problem, such as readings in the philosophy of law, Black philosophy, existentialism, the philosophy of language, and symbolic logic.

PHIL 326. Mythology. (3 Credits)
An introductory survey of the traditional mythological narratives of ancient civilizations, considering the origins of myths, their nature, and their functions in shaping and expressing a culture's understanding of the divine, the natural world, human nature, and the institutions of human community.

PHIL 327. Philosophy In Literature. (3 Credits)
Study of basic philosophical problems in major works of literature. Prerequisite: GEPI 140 or other philosophy course, or permission of instructor(s).

PHIL 340. Philosophy Of Mind. (3 Credits)
The question 'what is it to have a mind?' forms the focus of the course, and the objective is to arrive at an answer by examining the multifarious manifestations of mind. The course is organized around an interdisciplinary approach by incorporating theories from psychology, artificial intelligence and cognitive science.

PHIL 350. Philosophy Of Law. (3 Credits)
An examination of the sources, content and extent of political and moral rights and obligations. Other concepts explored will be autonomy, privacy, freedom of religion, equal opportunity, paternalism, and how these concepts impact issues such as conscientious objection, flag burning, pornography, affirmative action, abortion, and euthanasia.

PHIL 400. Contemporary Philosophy. (3 Credits)
A study of twentieth century Western philosophy, including the work of such contemporary philosophers as Russell, Wittgenstein, Pierce, James, Dewey, Heidegger, and Sartre.

PHIL 422. Philosophy Of Science. (3 Credits)
An examination of the fundamental conceptual basis of the sciences; consideration given to scientific methods of certification, theory construction and explanation, the metaphysical assumptions and implications of scientific theories, and the relations between the scientific and non-scientific views of the world.

PHIL 424. Seminar In Philosophy. (3 Credits)
An opportunity for students to pursue original research in an area of the instructor's special interest and study.

PHIL 450. Applied Ethics. (3 Credits)
An in-depth exploration of moral theory and discussion of its application to broad areas such as business, the environment, or bio-medical issues.

PHIL 460. Epistemology. (3 Credits)
This is a senior-level class on epistemology, a field of philosophical inquiry that addresses the study of the nature of knowledge. The course will cover a number of issues in epistemology, such as: the analysis of knowledge; skepticism; the structure of justification; relevance of gender and race to understanding and the ethics of belief; contextualism; epistemological methodology.

PHIL 470. Metaphysics. (3 Credits)
This is a senior-level class on metaphysics, a field of philosophical inquiry that addresses questions about the fundamental nature of reality. Topics covered in this course include, for example: personal identity; the mind-body problem; causation and laws; space and time; modality; mereology; the nature of freedom.

History Major, Bachelor of Arts (B.A.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
	Credit Hours	**30**
Sophomore Year		
GE Humanities Electives (p. 146)	May not be HIST 122, HIST 123, PHIL 140 or PHIL 180	3
GE Global Studies Electives (p. 146)	May not be HIST 114, HIST 115 or GEOG 210	3
GE History Electives (p. 146)	Must choose from the following:	3
HIST 240	African American Hist. to 1865	
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	
HIST 245	HBCU History	
HIST 274	History of Africa to 1800	
HIST 275	History of Africa Since 1800	
GE Literature Electives (p. 147)		3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
Restricted Elective	Any ENGL 300+ Level Course	3
GEOG 210	World Geography	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200+ Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
Unrestricted Elective		3
HIST Required Course	Any HIST 300-399 Course	3
HIST Required Course	Any HIST 300-399 Course	3
HIST Required Course	Any HIST 300-399 Course	3
HIST 499	Senior Sem Historical Methods	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

Note: Courses with HIST, ENGL, and PHIL prefixes require a pass of C or better.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
HIST 499	Senior Sem Historical Methods	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3

GEOG 210	World Geography	3
Total Credit Hours		**24**

Code	Title	Credit Hours
HIST 200-299		6
HIST 200 or higher		3
HIST 300 or higher		9
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives		**3**
ENGL 300 or higher		
Unrestricted Electives		**42**
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		18
Electives		45
Total Credit Hours		**120**

History, Bachelor of Arts with a Concentration in Secondary Education 6-12 (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
AGRI 100	General Earth Science GE-SCI Course	4
HPER 170	Health And Wellness GE-WEL Course	2
ECON 100	Basic Economics GE-SOC Course	3
EDUC 200	Technology in the Classroom	3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
	Credit Hours	**30**
Sophomore Year		
GE Humanities Electives (p. 146) May not be HIST 122, HIST 123, PHIL 140, or PHIL 180		3
GE Global Studies Electives (p. 146) May not be HIST 114, HIST 115, or GEOG 210		3
GE History Electives (p. 146) Must choose from the following:		3
HIST 240	African American Hist. to 1865	
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	
HIST 245	HBCU History	
HIST 274	History of Africa to 1800	
HIST 275	History of Africa Since 1800	
GE Literature Electives (p. 147)		3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
	Credit Hours	**30**
Junior Year		
Restricted Elective Any ENGL 300+ Course		3
GEOG 210	World Geography	3
HIST 231	History of Virginia	3
HIST Required Course Any HIST 200-299 Course		3
EDUC 427	Reading In The Subject Area	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
SPED 403	Classroom Mgmt Ed Setting (FE)	3
AGRI 280	Prin Geographic Info Systems	3
POLI 150	United States Government	3
PSYC 212	Human Growth & Development	3
	Credit Hours	**32**
Senior Year		
HIST 482	Methods/Materials Teach HIST	3
HIST 484	Senior Sem inTeaching History	3
HIST Required Course Any HIST 300+ Course		3
Unrestricted Elective		3
Unrestricted Elective		3
HIST 499	Senior Sem Historical Methods	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**30**
	Total Credit Hours	**122**

Note: Courses with HIST, ENGL, and PHIL prefixes require a pass of C or better.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3

HIST 499	Senior Sem Historical Methods	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
GEOG 210	World Geography	3
Total Credit Hours		**24**

Code	Title	Credit Hours
HIST 231	History of Virginia	3
HIST Required Course	Any HIST 200-299 Course	3
EDUC 427	Reading In The Subject Area	3
HIST 482	Methods/Materials Teach HIST	3
HIST 484	Senior Sem inTeaching History	3
HIST Required Course	Any HIST 300+ Course	3
EDUC 200	Technology in the Classroom	3
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
EDUC 315	Data Driven Instructional Desi	3
EDUC 424	Culturally Responsive Pedagogy	2
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
POLI 150	United States Government	3
PSYC 212	Human Growth & Development	3
AGRI 280	Prin Geographic Info Systems	3
Total Credit Hours		**56**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		6
Total Credit Hours		**9**

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		56
Electives		9
Total Credit Hours		**122**

History, Bachelor of Arts with a Concentration in HBCU Studies (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
	Credit Hours	**30**
Sophomore Year		
GE Humanities Electives (p. 146)	May not be HIST 122, HIST 123, PHIL 140, or PHIL 180	3
GE Wellness/Health Electives (p. 147)		2
GE Global Studies Electives (p. 146)	May not be HIST 114, HIST 115, or GEOG 210	3
GE History Electives (p. 146)	Must choose from the following:	3
HIST 240	African American Hist. to 1865	
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	
HIST 245	HBCU History	
HIST 274	History of Africa to 1800	
HIST 275	History of Africa Since 1800	
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**29**
Junior Year		
Restricted Elective	Any ENGL 300+ Course	3
GEOG 210	World Geography	3
HIST 245	HBCU History	3
HIST 246	History of Virginia State Univ	3
HIST Required Course	HIST Required Course: Choose from list of courses provided by the department.	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200-299 Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
HIST Required Course	Any HIST 200+ Course	3
HIST Required Course	Any HIST 300+ Course	3
HIST Required Course	Any HIST 300+ Course	3
HIST Required Course	Any HIST 300+ Course	3
HIST 499	Senior Sem Historical Methods	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**33**
	Total Credit Hours	**122**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		

GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
HIST 499	Senior Sem Historical Methods	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
GEOG 210	World Geography	3
Total Credit Hours		**24**

Code	Title	Credit Hours
HIST Required Courses		18
HIST 245	HBCU History	3
HIST 246	History of Virginia State Univ	3
Required Courses		3
Total Credit Hours		**27**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		33
Total Credit Hours		**36**

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		27
Electives		36
Total Credit Hours		**120**

History, Bachelor of Arts with a Concentration in Public History (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
	Credit Hours	**30**
Sophomore Year		
GE Humanities Electives (p. 146)	May not be HIST 122, HIST 123, PHIL 140, or PHIL 180	3
GE Global Studies Electives (p. 146)	May not be HIST 114, HIST 115, or GEOG 210	3
GE History Electives (p. 146)	Must choose from the following:	3
HIST 240	African American Hist. to 1865	
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	
HIST 245	HBCU History	
HIST 274	History of Africa to 1800	
HIST 275	History of Africa Since 1800	
GE Literature Electives (p. 147)		3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
Unrestricted Elective		3
Unrestricted Elective		
GEOG 210	World Geography	3
	Credit Hours	**30**
Junior Year		
Restricted Elective	Any ENGL 300-399 Course	3
HIST 392	Public History	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 300-399 Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
HIST 499	Senior Sem Historical Methods	3
HIST Required Course	Any HIST 300-399 Course	3
HIST Required Course	Any HIST 300-399 Course	3
HIST Required Course	Choose from HIST 333, HIST 490, HIST 493, or HIST 495	3
HIST Required Course	Choose from HIST 333, HIST 490, HIST 493, or HIST 495	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		

GE Social Science Electives (p. 147)	
GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
HIST 499	Senior Sem Historical Methods	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
GEOG 210	World Geography	3
Total Credit Hours		**24**

Code	Title	Credit Hours
HIST Required Courses		24
HIST 392	Public History	3
Total Credit Hours		**27**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		33
Total Credit Hours		**36**

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		27
Electives		36
Total Credit Hours		**120**

History, Bachelor of Arts with a Concentration in African, African-American, African Diasporic and Black Studies (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
Unrestricted Elective		3
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
	Credit Hours	**30**
Sophomore Year		
GE Humanities Electives (p. 146)	May not be HIST 122, HIST 123, PHIL 140, or PHIL 180	3
GE Global Studies Electives (p. 146)	May not be HIST 114, HIST 115, or GEOG 210	3
GE History Electives (p. 146)	Must choose from the following:	3
HIST 240	African American Hist. to 1865	
HIST 241	Afric. Am. Hist. Fr 1865 to Pr	
HIST 245	HBCU History	
HIST 274	History of Africa to 1800	
HIST 275	History of Africa Since 1800	
GE Literature Electives (p. 147)		3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
Restricted Elective	Any ENGL 300+ Course	3
GEOG 210	World Geography	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200-299 Course	3
HIST Required Course	Any HIST 200+ Course	3
HIST Required Course	Any HIST 300+ Course	3
HIST Required Course	Any HIST 300+ Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
HIST Required Course	Any HIST 300+ Course	3
HIST 240 & HIST 241	African American Hist. to 1865 and Afric. Am. Hist. Fr 1865 to Pr OR HIST 274/HIST 275 Sequence	6
HIST 499	Senior Sem Historical Methods	3
HIST Required Course	Choose from list of courses provided by the department	3
HIST Required Course	Choose from list of courses provided by the department	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		

GE Science Electives (p. 147)	
GE Social Science Electives (p. 147)	
GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
HIST 499	Senior Sem Historical Methods	3
PHIL 140	Philosophy	3
PHIL 180	Critical Thinking	3
GEOG 210	World Geography	3
Total Credit Hours		**24**

Code	Title	Credit Hours
HIST Required Courses		18
HIST 240 & HIST 241	African American Hist. to 1865 and Afric. Am. Hist. Fr 1865 to Pr Or HIST 274/HIST 275 Sequence	6
HIST Required Courses for AAAAB Majors See Electives tab		3
HIST Required Courses for AAAAB Majors See Electives tab		3
Total Credit Hours		**30**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		30
Total Credit Hours		**33**

Concentration Electives List

Code	Title	Credit Hours
HIST 243	Hip Hop History	3
HIST 245	HBCU History	3
HIST 246	History of Virginia State Univ	3
HIST 307	Black Freedom in an Age of Evo	3
HIST 348	Islam in African Amer Experien	3
HIST 380	African Disaporic History	3
HIST 381	Black Women's History in Ameri	3

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		30
Electives		33
Total Credit Hours		**120**

History, Minor in History

Code	Title	Credit Hours
HIST 114	World History to 1500	3
or HIST 115	World History Since 1500	
HIST 122	U.S. History to 1865	3
or HIST 123	U.S. History After 1865	
HIST 200-299 Course		3
Restricted Electives Any two HIST courses not already taken to fulfill the minor		6
HIST 300-399 Course		3
Total Credit Hours		**18**

History and Philosophy, Minor in Philosophy

Code	Title	Credit Hours
Required Courses		
PHIL 140	Philosophy	3
PHIL 220	Introduction To Logic	3
Restricted Electives		
Ethics Elective Any PHIL course on Ethics from the following:		3
PHIL 275	Ethics	
PHIL 280	Medical Ethics	
PHIL 290	Business Ethics	
PHIL 450	Applied Ethics	
Philosophy Electives Any three non-Ethics PHIL courses (may be at the 100, 200, 300, or 400 levels)		9
Total Credit Hours		**18**

Department of Languages and Literature

Chairperson: Dr. Latorial Faison
Location: Colson Hall, Room 300T
Contact Information: (804) 524-5159 | lfaison@vsu.edu

Department Overview

The Department of Languages and Literature at Virginia State University is committed to academic excellence and cultural enrichment through the study of language, literature, and writing. The department offers diverse courses and programs in English, World Languages, Drama, Speech, and Interdisciplinary Humanities to prepare students for professions in media, education, law, public service, and other fields. Students can pursue a **Bachelor of Arts (B.A.) in English** with concentrations in **African American Literature/Africana Studies**, **Literatures of the World**, **Creative Writing**, **Linguistics**, **Film Studies**, **Professional Writing**, and **Secondary Education**,

which may lead to a teaching endorsement. Additionally, the Department offers **Minors in Africana Studies**, **Drama**, **English**, **Film Studies**, **Spanish**, **Hip-Hop Studies**, and **Creative Writing**.

Students engage with a broad spectrum of literary texts, rhetorical strategies, and linguistic traditions while cultivating strong analytical, creative, and communication skills. The department's curriculum emphasizes the transformative power of language to shape human experience, promote social justice, and reflect diverse perspectives across time and cultures. Through innovative coursework, research opportunities, and community engagement, the department nurtures intellectual curiosity, global competence, and a lifelong appreciation for the written and spoken word.

Mission Statement

The mission of the Department of Languages and Literature at Virginia State University is to empower students with the linguistic, literary, and critical tools necessary for thoughtful inquiry, effective communication, advanced scholarship, and engaged citizenship in a global society. Anchored in the liberal arts tradition and the university's commitment to academic excellence and cultural diversity, the department promotes the study of English, World Languages, and Interdisciplinary Humanities as pathways to intellectual growth, ethical reasoning, and social responsibility. Guided by principles of inclusivity, scholarly rigor, and creative expression, the department fosters a learning environment where students explore the richness of language and literature across historical, cultural, and national boundaries.

Degree Highlight Information

Pursuing a degree in the Department of Languages and Literature at Virginia State University offers students a transformative academic experience rooted in critical inquiry, cultural exploration, and real-world application. Our programs equip students with essential 21st-century skills that are in high demand across a wide range of professional fields.

A. Career Pathways

Graduates from our department are prepared to excel in diverse careers, including:

- Education and Teaching (K–12 and Higher Education)
- Journalism, Publishing, and Editing
- Law and Legal Studies
- Human Services
- Public Relations and Communications
- Government and Public Policy
- International Relations and Diplomacy
- Content Creation and Media Production
- Graduate and Professional Studies

B. Unique Learning Experiences

- **Small Class Sizes & Mentorship**: Languages & Literatures majors and minors benefit from individualized attention and close mentoring by faculty committed to student success.
- **Interdisciplinary Approach**: Courses integrate literature, writing, linguistics, culture, digital media, and cross-curricular options promoting a broad and adaptable skill set.
- **Study Abroad & Language Immersion**: Opportunities to study world languages and cultures firsthand through travel and exchange programs.
- **Internships & Community Engagement**: Hands-on experience with local schools, publications, businesses, corporations, nonprofits, and cultural institutions.
- **Student Organizations, Publications & Literary Events**: Opportunities to join departmental organizations and clubs, publish creative work, and participate in campus-wide literary publications, readings, conferences, and events.

C. Technical & Transferable Skills Acquired

- Advanced Writing and Research Proficiency
- Critical and Creative Thinking
- Verbal and Written Communication
- Cultural Literacy and Global Awareness
- Analytical Reasoning and Argumentation
- Language Proficiency and Translation
- Media and Digital Literacy

A degree from the Department of Languages and Literature empowers students not only with academic knowledge but also with the adaptability, insight, and communication skills needed to thrive in today's evolving professional landscape. Our graduates leave prepared to lead, teach, advocate, and innovate across communities and industries.

Accreditation Information

The Department of Languages and Literature at Virginia State University operates under the university's institutional accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). This accreditation authorizes Virginia State University to award baccalaureate, master's, and doctorate degrees, ensuring that all academic programs, including those within the Department of Languages and Literature, meet rigorous standards of academic quality and institutional effectiveness. While the Department of Languages and Literature does not have separate program-specific accreditation, its programs are encompassed within the university's comprehensive accreditation by SACSCOC. This accreditation affirms that the department's curricula, faculty qualifications, and student support services align with the high standards set by the accrediting body.

Department Goals

The Department of Languages and Literature at Virginia State University is committed to achieving the following academic, professional, and community-centered goals:

1. **Promote Academic Excellence**
   Deliver high-quality instruction in English, World Languages, and interdisciplinary studies that fosters critical thinking, intellectual curiosity, and lifelong learning.

2. **Enhance Communication Skills**
   Equip students with advanced written, oral, and digital communication skills applicable to academic, professional, and civic settings.
3. **Foster Cultural and Global Awareness**
   Develop students' understanding of diverse cultures, literatures, and languages to prepare them for responsible global citizenship and intercultural engagement.
4. **Support Professional and Career Development**
   Provide students with experiential and service-learning opportunities such as internships, writing workshops, and research projects that prepare them for careers in education, media, public service, law, and more.
5. **Encourage Research and Creative Expression**
   Promote faculty and student scholarship, literary analysis, and creative writing through mentorship, publications, conferences, and symposia.
6. **Advance Language Proficiency**
   Enhance students' fluency and cultural competence in world languages through immersive learning, study abroad opportunities, and community engagement.
7. **Strengthen Community and Civic Engagement**
   Build partnerships with local schools, organizations, and cultural institutions to promote literacy, language learning, and the humanities beyond the campus.
8. **Support Diversity, Equity, and Inclusion**
   Ensure a learning environment that values diverse voices, challenges bias, and cultivates empathy through the study of literature and language.
9. **Integrate Technology and Innovation**
   Incorporate digital tools and emerging technologies into teaching and scholarship to enhance learning and expand access to the humanities.
10. **Cultivate a Supportive Academic Environment**
    Foster a department culture that supports student success, faculty development, interdisciplinary collaboration, and a commitment to the liberal arts tradition.

These goals reflect the department's mission to inspire, educate, and empower students while contributing meaningfully to the intellectual and cultural life of Virginia State University and the broader community.

Program Listings

Bachelor of Arts (B.A) in English

The Bachelor of Arts in English at Virginia State University offers a flexible curriculum that allows students to tailor their academic experience. With 42 hours of unrestricted electives, students can easily pursue concentrations in African American/African Literature, Literatures of the World, Creative Writing, Linguistics, Professional Writing, and Secondary Education.

Multiple minors in **Africana Studies**, **Creative Writing**, **Drama**, **Spanish**, **English**, **Writing, Film Studies in Literature,** and **Hip Hop Studies**, preparing them for diverse careers in education, writing, law, public service, and more.

Minors

With additional coursework and study of at least 18 hours of unrestricted electives, students can easily pursue multiple minors in the Department of Languages and Literature preparing them for diverse careers in education, writing, law, public service, and more. The following minors are available to students:

- **Africana Studies**
- **Drama**
- **Spanish**
- **English**
- **Creative Writing**
- **Digital Humanities**
- **Film Studies in Literature**
- **Hip Hop Studies**

Major(s)

- English, Bachelor of Arts (B.A.)
- English, Bachelor of Arts with a Concentration in Secondary Education (B.S. (p. 302))
- English, Bachelor of Arts with a Concentration in African-American/ Africana Literature (B.A.)
- English, Bachelor of Arts with a Concentration in Creative Writing (B.A.)
- English, Bachelor of Arts with a Concentration in Literature of the World (B.A.)
- English, Bachelor of Arts with a Concentration in Linguistics (B.A.) (p. 306)
- English, Bachelor of Arts with a Concentration in Professional Writing (B.A.) (p. 307)

Minor(s)

- Minor in Africana Studies (p. 308)
- Minor in Digital Humanities (p. 308)
- Minor in Drama (p. 309)
- Minor in English (p. 309)
- Minor in Film Studies (p. 309)
- Minor in French (p. 309)
- Minor in Hip-Hop Studies (p. 309)
- Minor in Spanish (p. 309)
- Minor in Writing (p. 309)

IDUP (p. 292), DRAM (p. 293), ENED (p. 293), ENGL (p. 293), ARAB (p. 298), FREN (p. 298), GERM (p. 299), RUSS (p. 299), SPAN (p. 300), SPEE (p. 300)

Interdisciplinary University P (IDUP)

IDUP 270. Introduction To Africana Stud. (3 Credits)
This course examines the various disciplinary and theoretical approaches to Africana Studies and its development as a field of scholarly inquiry. Through fiction and nonfiction, students will explore topics that will include Africa and its place in the world community, the Atlantic slave trade, nationalism, Pan- Africanism, Afro centricity, and the roles of race, gender, and class in shaping the experiences of people of African descent in African and the Diaspora. Prerequisites: ENGL 110 Composition I, ENGL 111 Composition II.

IDUP 371. Study Abroad In Africa. (3-6 Credits)
An individually designed and planned learning experience at an African university.

IDUP 470. Special Topics Africana Studie. (3 Credits)
In-depth study of a selected topic in the literatures and/or languages of Africa and/or the African Diaspora. Topics will vary from semester to semester. Prerequisites: ENGL110 Composition I, ENGL 111 Composition II.

Drama (DRAM)

DRAM 113. Acting. (3 Credits)
Basic instruction in the fundamentals of acting, emphasizing vocal and body techniques employed in creating and presenting characterizations. Includes studies of historical and modern acting styles, techniques, theories, and dramatic relationships. Laboratory experience.

DRAM 199. Drama Appreciation. (3 Credits)
An introduction to the study and understanding of the dramatic arts. The various methods through which humans are able to access, interpret, and interact with drama will be discussed. Topics include an overview of historical development of drama and theatre and a general survey of the roles of the collaborative artists responsible for a theatre production. Emphasis is placed on the areas of textual analysis and history of dramatic performances, but other areas (design, acting, directing, playwriting, dramaturgy) are discussed. Some evaluation of outside performances is required and involvement in one of the college theatre productions may also be required.

DRAM 215. Stagecraft I. (3 Credits)
Lecture-laboratory approach to the study of elementary principles and problems regarding crews, scripts, and stage design concepts, design procedures, construction, and color and paint.

DRAM 217. Activities In Drama. (3 Credits)
Practice in optional phases of presenting dramatic productions.

DRAM 301. Drama Production. (1 Credit)
Students work on the creation, technical production, and management of performances given by the Little Theatre and the VSU Performers.

DRAM 313. Acting II. (3 Credits)
Advanced study of acting fundamentals, emphasizing the tools of voice and body awareness for creating and presenting characterizations. Includes study of techniques for textual analysis and character development. Course includes rehearsal and performance of both monologues and partnered scenes.

DRAM 316. Stagecraft II. (3 Credits)
Lecture-laboratory approach to the study of elementary principles and problems regarding properties, lighting, special sound and visual effects, make-up, and costumes.

DRAM 414. Directing And Producing. (3 Credits)
Lecture-laboratory approach to the principles and techniques of directing and producing.

English Education (ENED)

ENED 371. Teaching Engl Secondary School. (3 Credits)
Examination of traditional and current theories and practices in the teaching of English, with opportunities supervised lab and first-hand experiences in practice teaching.

ENED 372. Engl Lang Arts Professional. (3 Credits)

ENED 402. Student Teaching In English. (3 Credits)
This course is designed to provide supervision on the content area for pre-service secondary English candidates. Prerequisite: Department approval Co-requisites: EDUC 401 Student Teaching Seminar, EDUC 402 Student Teaching.

ENED 431. Teaching Composition. (3 Credits)
A course dealing with developing a philosophy of composition, emphasizing particularly the relationship between the process of composing and the process of exploring a subject. Also presents ways of organizing and conducting the composition class as well as techniques of evaluation.

ENED 432. Reading & Literature. (3 Credits)
A course based on the premise that one is likely to read well by reading often in a favorable, positive atmosphere. Emphasis on environments teachers create and materials and procedures they use which can lead to students developing the desire to read and the habit of reading extensively. Practicum in planning lessons in literature for students with various abilities and interests, with emphasis on adolescent literature.

English (ENGL)

ENGL 110. Composition I. (3 Credits)
Introduces students to critical thinking and the fundamentals of academic writing. Frequent and intensive writing in varied expository modes, with emphasis on analysis and discussion of the composing process.

ENGL 111. Composition II. (3 Credits)
Continues to develop students' critical thinking skills, documentation expertise, and academic writing proficiency. Greater focus on persuasive writing and the research process. Close examination and discussion of a range of texts about the human experience leading to frequent and intensive writing. Prerequisite: ENGL 110.

ENGL 112. Honors Composition I. (3 Credits)
Honors Composition I introduces students with substantila background and ability to work at an enhanced level to critical thinking, academics writing, discussion, independent research and study, a treatment of subject matter in both depth and breadth, and some creative writing. Opportunities to write in various expository modes with emphasis on reading, analyzing, and discussing nonfiction and short fiction pieces, collaborative activities, presentation skills, and research strategies. Prerequisite: Enrollment is limited to students who are in the University Honors program. Additional enrollment can result from limited recommendations from English faculty, if approved by Languages and Literature department chairman, and if space is available.

ENGL 113. Honors Composition II. (3 Credits)
Honors Composition II offers students who are working at an accelerated level, enhanced opportunities to continue reading and writing, analyzing, and evaluating short fiction and nonfiction sources to develop further their critical thinking, academic writing, field research techniques, presentation skills; practice creative writing and occasional independent study. Prerequisites: ENGL 112 Enrollment is limited to students who are in the University Honors program. Additional enrollment can result from limited recommendations from English faculty, if approved by Languages and Literature departmemt chairman, and if space is available.

ENGL 114. Intro to Digital Humanities. (3 Credits)
Introduces theories and concepts in digital technologies and applications in literary studies from remediating classic literary texts online, generating born digital texts, analyzing texts computationally digitally, to creating digital literary projects. This course addresses the emergence of digital technologies and their cultural influences in relation to literary study.

ENGL 200. Research Writing. (3 Credits)
Develops and enhances students' research skills and approaches to conducting research and composing documented essays. The course includes library and original student research, literature reviews, in-text citations, citation styles, and notation conventions. Prerequisites (s): ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113.

ENGL 201. Introduction To Literature. (3 Credits)
A course in reading, thinking critically about, and discussing literature from a variety of genres and cultures, through the study of significant texts and authors. Writing intensive. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition II.

ENGL 202. Intro African American Lit. (3 Credits)
A course in reading, thinking critically about, and discussing literature from a variety of genres, through the of significant texts by African American authors. Writing intensive. Prerequisites: ENGL 110 and ENGL 111.

ENGL 203. Introd Literary Analysis/Crit. (3 Credits)

ENGL 204. Digital Humanities & Lit Studi. (3 Credits)
Explores literary creation, publication, and analysis through digital technologies and applications. The course focuses specifically on literary study through and in relation to the digital humanities such as by analyzing digital literary projects and approaches. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 114.

ENGL 210. English Literature I. (3 Credits)
Study of English literature and its background from Anglo-Saxon times through the age of Samuel Johnson.

ENGL 211. English Literature II. (3 Credits)
Study of English literature and its background from the Romantic age to the twentieth century.

ENGL 212. American Literature I. (3 Credits)
Survey of various topics, literary form, and writer representative of achievements and trends from Colonial times to the Civil War.

ENGL 213. American Literature Ii. (3 Credits)
Survey of various types of creative works and critical opinions, designed to show the variety and strengths of literary achievement from the Civil War to the present.

ENGL 214. World Literature I. (3 Credits)
Survey in English of world literature from the Ancient World through the Renaissance, with attention to main ideas and genres.

ENGL 215. World Literature II. (3 Credits)
Survey in English of world literature from the seventeenth century to the present, with attention to main ideas and genres.

ENGL 217. Digital Literature. (3 Credits)
Introduces students to born-digital, or electronic, literature. The course offers a survey in electronic literature from its beginnings in the 1980s to the present and covers various genres especially those specific to electronic literature such as first- and second-generation hypertext fiction, interactive fiction and drama, locative narratives, generative text, and flash and cyber poems. Prerequisites: ENGL 110/112, ENGL 111/113, and for English majors, ENGL 203.

ENGL 240. Introduction Creative Writing. (3 Credits)
A workshop course for sudents who have completed ENGL 110 and ENGL 111. Focuses on writing both short fiction and poetry. No previous experence with creative writing is required.

ENGL 260. Introd to Film Studies. (3 Credits)
An introduction to film studies as an important aspect of literary discourse. Students will explore film history, language, and structure, while using a variety of critical analysis strategies to analyze films. A series of selected screenings throughout the course will help students to identify and examine connections between popular culture, language and literature studies, and film. Prerequisites: ENGL 110 Composition I and ENGL 111 Composition II.

ENGL 270. The Soles of Blk Folk:Sneak Cl. (3 Credits)
From the nineteenth century to present, the contemporary athletic shoe has experienced a major evolution. What began as necessity matriculated to style, and then morphed into unique multicultural identities. The course addresses hip hop culture, societal ills, life, and identity within the sneaker subculture, and explores the overall impact and phenomenon of sneakers on a global level via the culture's literature. Prerequisite(s): ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113.

ENGL 301. English Literature Middle Ages. (3 Credits)
Study of the chief works of medieval English literature from Beowulf to the fifteenth century against a background of prevailing social, political, and religious ideas.

ENGL 302. Engl Literature Of Renaissance. (3 Credits)
Study of the principal writers of the Renaissance and the Interregnum, from Skelton to Milton. Prevailing social, political, and religious thought of the Renaissance and early seventeenth century as background.

ENGL 303. Engl Lit Retoration & 18th Cen. (3 Credits)
Study of the principle writers of the Restoration and eighteenth century. Prevailing social, cultural, and political thoughts of the Restoration /18th century as background.

ENGL 304. Engl Literature Of 19th Centur. (3 Credits)
Study of the principal poets and prose writers of the Romantic movement and the Victorian period. Prevailing social, cultural, and political thought of the late 18th century and 19th century as background.

ENGL 306. Engl Literature Of 20th Centur. (3 Credits)
Study of the principal writers of literary and critical movements in the 20th century. Prevailing social, cultural, and political thought of the 20th and early 21st century as background.

ENGL 307. Ameri Literature Before 1800. (3 Credits)
Study of the major issues, movements, forms, and/or themes in American literature and culture before 1800. Topics may include narratives of exploration and encounter, Puritan and/or Enlightenment writings, captivity and slave narratives, post-colonial approaches to colonial rhetoric and poetry, and/or in-depth studies of selected writers.

ENGL 308. American Literature 19th Centu. (3 Credits)
Study of the major issues, movements, forms and/or themes in 19th century American literature and culture. Topics may include the American Renaissance, literature and abolition, African American novels and poetry, romance and romanticism, the rise of the short story, realism, naturalism, the frontier, representations of region, American capitalism, and/or in-depth studies of selected writers.

ENGL 309. American Literature 20th Centu. (3 Credits)
Study of the major issues, movements, forms, and/or themes in 20th century American literature and culture. Topics may include Modernism, Post-Modernism, the Harlem Renaissance, Depression-era literature, consumer society, the Beats, Civil Rights literature of American imperialism, and/or in-depth studies of selected writers.

ENGL 310. Advanced Communications Skills. (3 Credits)
Study and practice of advanced communication skills through print and nonprint media through listening and reading (receptive language skills) as lifelong skills in both informal and academic writing and speaking (expressive language skills). Prerequisite: C grade or better in ENGL 110 and ENGL 111 or ENGL112 and ENGL 113.

ENGL 311. African-American Literature. (3 Credits)
Survey of the African American literary tradition from its earliest expressions to the present. Topics may include African American folklore, slave narratives, essays, poetry, drama, fiction, non-fiction, criticism, and the shaping of a Black aesthetic.

ENGL 312. African-American Non-Fiction. (3 Credits)
ENGL 312 - African American Nonfiction - 3 semester hours This course examines non-fiction prose by key African American writers and the influences and legacies of these texts on the African American literary tradition. Prose genres will include, but not be limited to, the essay, autobiography, memoir, slave narratives, travel writing, and related subgenres of non-friction prose. Attention will be given to rhetorical and aesthetic achievements as well as elements of style, form, and critical significance. Prerequisite(s): ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 313. Classics Of Western Literature. (3 Credits)
Study of Greek and Latin literature in translation, with consideration of major classical works and their influence on English and American literature. Will include works by such writers as Homer, Aeschylus, Sophocles, Euripides, Plato, Aristotle, Virgil, Horace, Catullus, Juvenal, and Ovid.

ENGL 314. Readings Multi-Culture Literat. (3 Credits)
Variable content. Study of selected works from the literature of Native American, Jewish, Asian, Chicano/Latino, or other traditions. May be repeated once for credit with different topic, with consent of department.

ENGL 315. African Literature. (3 Credits)
Study of the literature(s) of Africa from pre-colonial to contemporary times. Includes investigation of the relationship between oral and written forms, and how "Orature" has influenced and continues to influences written African literature. Will include representative works from such writers as Achebe, Soyinka, WaThiongo, Head, Emecheta, Ba, Osundare, U'Tamsi, and Aidoo.

ENGL 316. Black British Literature. (3 Credits)
Studies the literature of the African diaspora in England, Britain, and the British colonies and the African diasporic presence in British literature. The course may focus on a specific time, genre, region, or provide a survey of Black British literature.

ENGL 317. Black Virginia Writers. (3 Credits)
ENGL 317 Black Virginia Writers - 3 semester hours Study of Black Virginian's writings from 1805 to 1955 with literary genres as the focus of textual, regional, and cultural analyses. Readings include slave narratives, letters, poetry, essays, and novel excerpts. State laws, local newspaper reports, videos, and cartoons will augment literary discussions. Prerequisite(s): ENGL 110-112, ENGL 111-113. English majors ENGL 203.

ENGL 320. Harlem Renaissance. (3 Credits)
Study of the flourishing of the literary, visual, and performing arts by African Americans during the period known as the Harlem Renaissance (1920-1940). Emphasis includes the articulation of black aesthetics and the impact on artistic productivity.

ENGL 321. Readings in Multi-Cultural Lit. (3 Credits)
ENGL 321 Readings in Multi-Cultural Literature - 3 semester hours Variable content. Study of selected works from the literature of Native American, Jewish, Asian, Chicano/Latino, or other traditions. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL 110, ENGL 111, and for English majors, ENGL 203.

ENGL 322. Post-Colonial Literature. (3 Credits)
Survey of the development of literatures in English in former European colonies. Topics include the spread of European literary forms in Asia, Africa, the Caribbean, and the far new world (Australia and New Zealand) and the ways writers from colonies integrate influences from their cultures and influences from European literary traditions in their work.

ENGL 323. Classics of Western Literature. (3 Credits)
ENGL 323 Classics of Western Literature - 3 semester hours Study of Greek and Latin literature in translation, with consideration of major classical works and their influence on British and American literature. Will include works by such writers as Homer, Aeschylus, Sophocles, Euripides, Plato, Aristotle, Virgil, Horace, Catullus, Juvenal, and Ovid. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 324. Anglo-Irish Literature. (3 Credits)
Study of Irish literature in translation from medieval sagas and myths to the Irish Literary Revival (1880- 1940). Special emphasis on Yeats, Synge, Lady Gregory, Joyce, and the Abbey dramatists.

ENGL 325. Bible As Literature. (3 Credits)
Study of selections from the Old and New Testaments as literary texts. May include consideration of the of Biblical texts on other literary works and traditions.

ENGL 326. Mythology. (3 Credits)
An introductory survey of the traditional mythological narratives of ancient civilizations, considering the origins of myths, their nature, and their functions in shaping and expressing a culture's understanding of the divine, the natural world, human nature, and the institutions of human community.

ENGL 327. Philosophy In Literature. (3 Credits)
Study of basic philosophical problems in major works of literature. Prerequisite: GEPI 140 or other philosophy course, or permission of instructor(s).

ENGL 331. History Of Drama. (3 Credits)
Study of major developments of drama up to the 20th century. Close reading and discussion of representative from major playwrights and literary periods in terms of their historical and social contexts.

ENGL 332. Modern Drama. (3 Credits)
Critical study of the development of modern drama from the late 19th century to the present. Close reading and discussion of representative plays from major playwrights and literary movements in terms of their historical and social contexts.

ENGL 333. Readings In Popular Culture. (3 Credits)
Variable content. Study of selected popular culture texts. May include genres such as mysteries, science fiction, romances, frontier literature, etc., as well as media such as television, advertising, and film. May be repeated once for credit with different topic, with consent of department.

ENGL 336. Environmental Literature. (3 Credits)
ENGL 336 Environmental Literature - 3 semester hours Study of the relationship between literature and environmental values, and how literary interpretations of the land reflect and influence attitudes toward nonhuman nature and our orientations to our environment. Issues may include the environment as a hostile wilderness, divine nature, the frontier, as well as contemporary nature writers' concern with imperiled ecosystems. Some consideration of Ecocriticism. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 203.

ENGL 337. Indigenous American Literature. (3 Credits)
Studies the literature of the Indigenous peoples in the Americas, including their diaspora in addition to the American Indigenous presence. The course may focus on a specific group, time, genre, region, or provide a survey of Indigenous American literature.

ENGL 341. Expository Writing. (3 Credits)
Focuses on oral and written discourse which is used to describe, explain, inform, and persuade. Emphasizes showing rather than telling to communicate to an audience or reader in clear and objective language. Required readings serve as prompts for the study of rhetorical patterns, style and organization. Involves research and appropriate technology. Prerequisite: "C" or better in ENGL 110 and in ENGL 111.

ENGL 342. Technical Communication. (3 Credits)
Emphasizes clear, effective communication skills essential to technical and professional writing for students from a variety of majors. Builds on a writing process, basic rhetorical principles, audience awareness, and the writer's role in legal, ethical, and electronic communications. Emphasizes reports, memos, résumés, problem-solving, research, and proposals. Prerequisites: "C" or better in ENGL 110 and in ENGL 111.

ENGL 343. Writing Poetry. (3 Credits)
Development of skills in writing and evaluating poetry, with emphasis on traditional forms and patterns as well as contemporary trends; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 344. Writing Short Fiction. (3 Credits)
Development of skills in writing and evaluating short fiction, with emphasis on traditional uses of plot, characterization, etc.as well as contemporary trends; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 345. Writing Creative Non-Fiction. (3 Credits)
Development of skills in writing and evaluating creative non-fiction prose, with emphasis on forms such as memoir, autobiography, nature and science writing, history, and interviewing writing; critical analysis of student works in a workshop setting. Prerequisite: ENGL 110 Composition I and ENGL 111 Composition.

ENGL 346. Practicum In Writing. (3 Credits)
Allows students the opportunity to do hands-on work in the field of professional writing through internships or work opportunities both on-campus and within the community. The number of credit hours earned will be determined by the instructor and based on the number of hours worked. Approval by the department required.

ENGL 347. Theory/Prac Professional Editi. (3 Credits)
ENGL 347 - Theory and Practice of Professional Editing - 3 semester hours Instruction in editing technical and professional documents; emphasizes methods of achieving clarity, accuracy, consistency, and completeness in written documents; practice in editing documents for grammar, syntax, organization, professional style, audience awareness, content accuracy; review of grammar, punctuation, and usage. Prerequisite(s): ENGL 110/112 and ENGL 111/113.

ENGL 348. Special Topics Creative Writin. (3 Credits)
ENGL 348 - Special Topics in Creative Writing - 3 semester hours Variable content. Development of skills in writing and evaluating creative works of a certain style, genre, or form; critical analysis of student works in a workshop setting. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 240. Corequisite(s):

ENGL 349. Literary Editing and Publishin. (3 Credits)
Study of current practices and trends of literary publishing, including literary journals, magazines, small presses, and commercial publishers. Students will complete hands-on editorial work in literary publishing by participating in the production of VSU's literary journal(s). Prerequisite (s): ENGL 110/112 and ENGL 111/113.

ENGL 351. Introduction To Language Study. (3 Credits)
Study of the fundamental characteristics of language and its functions; an overview of phonology, morphology, syntax, and semantics; an introduction to language change and varieties; and an examination of language acquisition and language processing.

ENGL 352. English Structure. (3 Credits)
Systematic analysis of language, overview of traditional and modern grammarians' conceptions of English structure, and study of English from the perspectives of structural and generative grammars.

ENGL 353. Forensic Linguistics. (3 Credits)
An exploration of the interface of Language and the law. Aims at using the scientific analysis of language to advance the cause of justice in the application of the law. Exposes students to the process of applying linguistic theory to the analysis of language data in legal settings. Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II, or their equivalents.

ENGL 361. Film Genres. (3 Credits)
The study of a variety of film styles/genres such as westerns, musicals, melodramas, action, mystery, comedy, and horror. Focuses on themes, conventions, and narrative trends associated with particular genres, placing a strong emphasis on analyzing their influence on other film genres and on other forms of creative expression. Since the specific genres to be explored will vary, the course may be repeated for up to six credit hours as allowed by the department. Prerequisite: ENGL 260.

ENGL 362. Literature and Film. (3 Credits)
The study of film adaptations of significant literary works. Students will read selected literary works and analyze the social, historical, and cultural implications of both the literary works and their film interpretations. A series of screenings throughout the course will help students to evaluated, analyzed, and appreciate pieces of literature and their related film adaptations as independent yet equally important creative texts. Prerequisite: ENGL 260.

ENGL 363. Identity in Film. (3 Credits)
The study of identity, race, gender, differences, and representation in film. This course focuses on how people of a variety of races, cultures, genders, and ethnicities are represented in Hollywood films and selected other types of films, with a focus on exploring and analyzing the sociopolitical and cultural factors that influence audiences, directors, and narrative trends. Prerequisite: ENGL 260.

ENGL 364. Blacks and Film. (3 Credits)
The study of blacks in film from the silent era to the present. Weekly screenings of selected films, with a focus on examining and critically analyzing specific characterizations and narrative functions that have been associated with blacks throughout film history, as well as the impact of black film genres, performers, directors, and producers on the American film industry. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 260.

ENGL 365. Special Topics in Film. (3 Credits)
The study of special topics in film. Topics will vary, but may include an intensive study of the films of a specific director, a specific movement or trend in film, film as history, gender in film, alternative film forms such as documentaries, independent and foreign films, film and society, politics in film, or other pertinent film topics as established by the instructor. As the topics change, the course may be repeated for up to six credit hours as approved by the department. Prerequisite: ENGL 260.

ENGL 370. Theories & Appl Digi Humanitie. (3 Credits)
Studies theoretical approaches and technical applications in computing and digital technologies in the humanities as related to literary study. This course may offer practical experience with these approaches and applications to literary study. Pre-requisites: ENGL 110/112, ENGL 111/113, ENGL 114, and for English majors ENGL 204.

ENGL 371. History of Digital Humanities. (3 Credits)
Surveys origins and developments in digital technologies and applications in literary studies. While a survey, this course may focus more specifically on aspects of digital technologies and applications in literary studies, including more recent developments such as generative artificial intelligence, and their histories. ENGL 110/112, ENGL 111/113, ENGL 114, and for English majors ENGL 204.

ENGL 380. Writing ID and Social Issues. (3 Credits)
Variable content. Develops skills in writing and analyzing representative literary works from the perspective of contemporary societal issues (including hip hop culture) and identities. Includes various literary genres, as well as pop culture: social media, television, advertising, and film. May be repeated once for credit with different topic, with department approval. Prerequisites: ENGL 110 and ENGL 111 or ENGL 112 and ENGL 113, and for English majors, ENGL 203.

ENGL 401. Chaucer. (3 Credits)
Study of the Canterbury Tales, Troilus and Criseyde, and/or selected minor poems.

ENGL 402. Milton. (3 Credits)
Study of the chief poems and prose works of Milton. Some emphasis on Milton's religious and political ideas.

ENGL 403. Shakespeare. (3 Credits)
Survey of Shakespeare's range of work including his early and later work in relation to Elizabethan and Jacobean social, critical, and theatrical ideas but may address other contexts. Readings may include comedies, histories, tragedies, romances, and sonnets. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 404. Shakespeare II. (3 Credits)
Survey of Shakespeare's later work, with reading of selected plays and their study against the background of Jacobean social, critical, and theatrical ideas. Emphasis on tragedies and romances.

ENGL 405. The English Novel. (3 Credits)
Study of the English novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists.

ENGL 406. The American Novel. (3 Credits)
Study of the American novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists.

ENGL 407. Literary Movements. (3 Credits)
Study of the ideas, literary methods, and influence of writers who furthered the development of the dominant mode of modern fiction.

ENGL 408. Place & Space in Literature. (3 Credits)
Survey of main trends from Colonial times to the present, treated under such topics as patrician tradition, the Civil War, folklore, regionalism, the New South.

ENGL 409. Special Topics in Literature. (3 Credits)
Variable content. Intensive study in an aspect of literature that may engage various authors, genres, traditions, time periods, and other relevant literary topics. The course may address specific issues in or related to literature and literary study as well as literary theory and its applications. May be repeated once for credit with different topic, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 410. Readings In African American L. (3 Credits)
Variable content. Intensive study of a major issue, movement, from, theme, or writer in African American literature and culture. May be repeated once for credit with different topic, with consent of department.

ENGL 411. Readings African Lit & Culture. (3 Credits)
Variable content. Intensive study of a major issue, movement, form, theme, or writer in African literatures and cultures. May be repeated once for credit with different topic, with consent of department.

ENGL 412. Caribbean Literature. (3 Credits)
Survey of Caribbean literature, which explores fictional and non-fictional prose, poetry, and drama in order to gain an appreciation of the literature and the cultures from which it springs.

ENGL 413. Special Topics in Africana Lit. (3 Credits)
ENGL 413 - Special Topics in Africana Literature - 3 semester hours Examines issues critical to the African Diaspora and requires quality written research via the investigation of Africana literature, history, philosophy, and culture. Prerequisite(s): ENGL 110/112, ENGL 111/113, ENGL 203 and for non English majors, consent of the department.

ENGL 414. Major Authors Af Am African Li. (3 Credits)
ENGL 414 - Major authors in African-American/Africana Literature - 3 semester hours Variable content. Intensive study of the fiction, non-fiction, and/or poetry of one or more authors from various ethnic groups and cultural backgrounds within the African Diaspora. Emphasis on the author's critical reception as a major writer, the relevant historical, social, and political context in which the author writes, and the influences on and the development and criticism of the author's works. May be repeated once for credit with different topics, with consent of department. Prerequisite(s): ENGL 110/112, ENGL 111/113, ENGL 201/202/203/, and for non-English majors, consent of department.

ENGL 420. Survey Literary Theory/Critici. (3 Credits)
Examination of representative writings in literary criticism from ancient times to the present. Emphasis upon the effective application of critical principles to the analysis and evaluation of various literary forms.

ENGL 421. Rhetorical Traditions. (3 Credits)
Introduces major traditions of rhetorical inquiry, with a particular emphasis on their relevance to composition studies. Study of the works of various rhetoricians from the Classical period to Modern times. Prerequisites: "C" or better in ENGL 110 and ENGL 111, or permission of the instructor.

ENGL 422. History Of The English Languag. (3 Credits)
Survey of the historical development of modern English from its earliest Indo-European origins; a study of the sound, vocabulary, word-formation, and sentence structure of Old English, Middle English, and Modern English—including a brief discussion of American dialects.

ENGL 441. Special Topic: Profess Writing. (3 Credits)
Variable content. Study of selected topics in professional writing such as writing for social media, rhetorical theory, writing for social change, or writing in a specific discipline. May be repeated once for credit with different topic, with consent of department. Prerequisites: A grade of C or better in ENGL 110/112 and in ENGL 111/113.

ENGL 442. Special Topics in Creative Wrt. (3 Credits)
Variable content. Development of skills of writing and evaluating creative works of a certain style, genre, or form; critical analysis of student works in a workshop setting. May be repeated once for course credit with different topic, with consent of the department. Prerequisites: ENGL 110/112 and ENGL 111/113, and for English majors, ENGL 240.

ENGL 447. Advanced Creative Writing. (3 Credits)
A creative writing workshop in which students will complete an ambitious project: a group of short stories or poems, a play, or a novella. Editing, revising and critiquing with attention to the problems of longer literary forms. Prerequisite: ENGL 343, 344, or 345 or permission of the instructor.

ENGL 450. Special Topics in Film. (3 Credits)
Variable content. Intensive study of the films of a specific director; a specific movement or trend in film; film as history; gender in film; alternative film forms such as documentaries, independent and foreign films; film and society; politics in film; or other pertinent film topics as established by the instructor. May be repeated once for credit with different topic, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 260.

ENGL 451. Special Topics in Linquistics. (3 Credits)
ENGL 451 Special Topics in Linguistics - 3 semester hours
Variable content. Study of special topics (such as sociolinguistics, psycholinguistics, language acquisition) or specialized issues (theoretical or practical) in linguistics. May be repeated once for credit with different topic, with consent of department. Prerequisite(s): ENGL110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 461. Digital Humanities Project. (3 Credits)
Guides students through individual and collaborative research projects in digital technologies in the humanities with emphasis on literary studies. Pre-requisites: ENGL 110/112, ENGL 111/113, ENGL 114, ENGL 370, and for English majors ENGL 204.

ENGL 471. Studies in Poetry. (3 Credits)
Variable content. An examination of poetry as a genre. May be repeated once for credit with different structures, readings, dictations and oral practice. Prerequisite: ARAB 110 or its equivalent.

ENGL 476. Instensive Study of an Author. (3 Credits)
Variable content. An intensive and extensive study of a writer. Consideration of style, dominant ideas, influence, development, and criticism of the writer. May be repeated once for credit with different writer, with consent of department. Prerequisites: ENGL 110/112, ENGL 111/113, and ENGL 201/202/203 or consent of the department.

ENGL 495. Senior Seminar in English. (3 Credits)
A capstone experience for the English major with two components: Intensive study of a selected topic, theme, or author; career preparation. Focus of intensive study with vary according to instructor. Reading and writing intensive study. Prerequisite: Senior standing.

Arabic (ARAB)

ARAB 110. Elementary Arabic I. (3 Credits)
Pronunciation, explanations, and drill in basic structures, easy readings, dictations and daily oral practice; open to those students presenting no admission credit in Arabic. .

ARAB 111. Elementary Arabic II. (3 Credits)
Supplementary course to Arabic 110; continued pronunciation, explanations, and drill in basic structures, dictations and oral practice. Prerequisite: ARAB 110 or its equivalent.

ARAB 212. Intermediate Arabic I. (3 Credits)
Review of grammar, reading of moderately difficult prose, practice in oral Arabic, and work in written composition. Prerequisite: ARAB 111 or its equivalent.

ARAB 213. Intermediate Arabic II. (3 Credits)
Review of grammar, continued practiced in pronunciation and conversation, and reading of moderately difficult prose. Prerequisite: ARAB 212 or its equivalent.

French (FREN)

FREN 110. Elementary French I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in French: Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students receiving no admission credit in French.

FREN 111. Elementary French II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in French: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisites: FREN 110 Elementary French I or its equivalent.

FREN 212. Intermediate French I. (3 Credits)
Inductive review of grammar, reading of moderately difficult prose, and extensive oral drill in basic structures. Prerequisite: FREN 111 Elementary French II or its equivalent.

FREN 213. Intermediate French II. (3 Credits)
Careful study and reading of representative modern prose with continued practice in pronunciation and conversation and some extensive reading. Prerequisite: FREN 212 Intermediate French I or its equivalent.

FREN 214. Scientific French. (3 Credits)
Intensive reading designed to develop an adequate vocabulary in the basic sciences and mathematics. Prerequisite: FREN 212 Intermediate French I or its equivalent.

FREN 300. Survey Of French Literature I. (3 Credits)
General survey of French literature from the beginning to 1715, with illustrative readings and reports. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 301. Survey Of French Literature II. (3 Credits)
Survey of French literature from 1715 to 1900, with illustrative readings and reports. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 310. French Composition. (3 Credits)
A course including a careful review and application of principles of grammar and considerable practice in writing French; special stress on the acquisition of a stock of idiomatic expressions. Conducted in French as far as possible. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 311. Advanced Compositon. (3 Credits)
Continued practice in writing French with some attention to elements of style, topics for composition work assigned from day to day, and translation into French or English prose. Conducted in French.

FREN 312. Practice Of French Phonetics. (3 Credits)

FREN 313. French Conversation. (3 Credits)
Systematic study of modern spoken French aimed at the acquisition of a vocabulary based on material dealing with everyday life; the stress group, intonation and daily exercises in simple conversation. Prerequisite: FREN 213 Intermediate French II or departmental permission.

FREN 314. Advanced Conversation. (3 Credits)
Continued practice in spoken French and daily drill in formal and informal speech. Prerequisite: FREN 313 French Conversation or departmental permission.

FREN 410. French Literature 17th Century. (3 Credits)
Study of French classicism as reflected in Malherbe, Corneille, Racine, La Rocheffoucauld, Moliere, La Fontaine, La Bruyere, Mme de Sevigne, and others. Prerequisite: FREN 310 French Composition.

FREN 411. French Literature 18th Century. (3 Credits)
Emphasis on nonfictional literature of the period. Prerequisite: FREN 301 Survey of French Literature.

FREN 412. French Literature 19th Century. (3 Credits)
Romanticism as reflected in Chateaubriand, Mme de Stael, Lamartine, Hugo, Vigny, Musset, Gautier, pere, G. Sand and others. Prerequisite: FREN 301 Survey of French Literature.

FREN 416. French Civilization. (3 Credits)
Study and discussion of significant aspects of the social, political, and cultural life of France. Prerequisite: FREN 213 Intermediate French II or its equivalent.

FREN 418. Senior Seminar In French. (4 Credits)
Independent readings in French planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographical material. Prerequisite: Eighteen semester hours of French.

German (GERM)

GERM 110. Elementary German I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in German: Pronunciation, understanding of grammatical construction, basic reading, dictations, and daily oral practice; open to students receiving no admission credit in German.

GERM 111. Elementary German II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in German: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisite: GERM 110 Elementary German I or its equivalent.

GERM 212. Intermediate German I. (3 Credits)
Review of grammar; reading of moderately difficult prose and poetry with provision for ample practice in oral and written composition.. Prerequisite: GERM 111 Elementary German II or its equivalent.

GERM 213. Intermediate German Ii. (3 Credits)
Study of selected readings of more difficult nature from standard modern authors. Prerequisite: GERM 212 Intermediate German I or its equivalent.

GERM 214. Scientific German. (3 Credits)
A course designed primarily for science majors and those students preparing to enter medical school. Prerequisite: GERM 212 Intermediate German I or its equivalent.

GERM 300. Survey Of German Literature I. (3 Credits)
Historical study of German literature from the beginning through Goethe. Prerequisite: GERM 213 Intermediate German II.

GERM 301. Survey Of German Literature II. (3 Credits)
Historical study of German literature from Goethe to the present. Prerequisite: GERM 213 Intermediate German II.

GERM 310. German Composition. (3 Credits)
Careful review and study of the fundamentals of grammar, including practice in written composition. Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase; exercises in dictation and memorization. Prerequisite: GERM 213 Intermediate German II.

GERM 312. Practice German Phonetics. (3 Credits)
Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase; exercises in dictation and memorization. Prerequisite: GERM 213 Intermediate German II.

GERM 313. German Conversation. (3 Credits)
Systematic drill in speaking modern German; acquisition of vocabulary based on material dealing with everyday life; daily exercises in simple conversation. Prerequisite: GERM 213 Intermediate German II or permission of the instructor.

GERM 415. German Civilization. (3 Credits)
Comprehensive and systematic study of the life of the German people from early middle ages to modern times and their cultural role in the development of world civilization Conducted in German. Prerequisite: GERM 310 German Composition or GERM 313 German Conversation.

GERM 417. Grammar & Composition Tchrs Ge. (3 Credits)
Review of grammar and composition designed for prospective teachers and in-service teachers of German; emphasis on the more involved phases of syntax. Prerequisite: GERM 310 German Composition or permission of instructor.

GERM 418. Senior Seminar In German. (4 Credits)
Independent readings in German planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographical material.

Russian (RUSS)

RUSS 110. Elementary Russian I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing Russian. Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students presenting no admission credit in Russian.

RUSS 111. Elementary Russian II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing Russian. Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice. Prerequisite: RUSS 110 Elementary Russian I or its equivalent.

RUSS 212. Intermediate Russian I. (3 Credits)
Review of grammar, reading of moderately difficult prose, practice in oral Russian, and extensive work in written composition. Prerequisite: RUSS 111 Elementary Russian II or its equivalent.

RUSS 213. Intermediate Russian II. (3 Credits)
Careful study and reading of representative modern prose with continued practice in pronunciation, conversation and composition. Prerequisite: RUSS 212 Intermediate Russian I or its equivalent.

Spanish (SPAN)

SPAN 110. Elementary Spanish I. (3 Credits)
Emphasis on the four skills of listening, speaking, reading, and writing in Spanish: Pronunciation, understanding of grammatical construction, basic readings, dictations, and daily oral practice; open to students receiving no admission credit in Spanish.

SPAN 111. Elementary Spanish II. (3 Credits)
Continued emphasis on the four skills of listening, speaking, reading, and writing in Spanish: Pronunciation, understanding of grammatical construction, readings, dictations, and daily oral practice. Prerequisite: SPAN 110 Elementary Spanish I or its equivalent.

SPAN 212. Intermediate Spanish. (3 Credits)
Review of grammar, reading of moderately difficult prose, practice in oral Spanish, and extensive work in written composition. Prerequisite: SPAN 111 Elementary Spanish I or its equivalent.

SPAN 213. Intermediate Spanish II. (3 Credits)
Careful study of representative modern prose; continued practice in pronunciation and conversation. Prerequisite: SPAN 212 Intermediate Spanish or its equivalent.

SPAN 214. Professional Spanish. (3 Credits)
Designed for students wanting to further their knowledge of Spanish in the context of various professions, including, for example: medicine, dentistry, law, human resources, information technology and social services. Prerequisite: SPAN 212 Intermediate Spanish I and SPAN 213 Intermediate Spanish II.

SPAN 300. Survey Of Spanish Literature I. (3 Credits)
Survey of Spanish literature from the beginning to the Siglo de Oro. Prerequisite: SPAN 213 Intermediate Spanish II.

SPAN 301. Survey Of Spanish Literature I. (3 Credits)
Survey of Spanish literature from about 1700 to the present. Prerequisite: SPAN 213 Intermediate Spanish II or its equivalent.

SPAN 310. Spanish Composition. (3 Credits)
Careful review and application of the principles of grammar and considerable practice in writing Spanish with special stress on the acquisition of a stock of idiomatic expressions. Prerequisite: SPAN 213.

SPAN 312. Practical Spanish Phonetics. (3 Credits)
Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase with exercises in dictation and memorization. Prerequisite: SPAN 213.

SPAN 313. Spanish Conversation. (3 Credits)
Daily practice and drill in oral Spanish based principally on topics of current interest. Prerequisite: SPAN 213.

SPAN 314. Advanced Spanish Converation. (3 Credits)
Continued practice in spoken Spanish through class discussion and oral presentation of topics of current interest; designed for Spanish minors and others admitted by departmental permission. Prerequisite: SPAN 313 Spanish Conversation.

SPAN 315. Survey Latin Amer Literature I. (3 Credits)
General survey of the literature of Latin American beginning with the letters of Cortez and continuing to Ricardo Palma of Peru with emphasis on historical and social background; conducted in Spanish. Prerequisite: SPAN 313.

SPAN 316. Survey Latin Amer Literature 2. (3 Credits)
Continuation of SPAN 315 extending from Ricardo Palma to the present; conducted in Spanish. Prerequisite: SPAN 213.

SPAN 410. Drama Of The Golden Age. (3 Credits)
Review of the rise of the drama of Spain, and critical study of representative works of Lope de Vega, Calderon, Tirso de Molina, Alarcon, Moreto, and others. Prerequisite: SPAN 213.

SPAN 412. The Novel In Spanish Literatur. (3 Credits)
Examination and analysis of major Spanish novels with emphasis on the works of Cervantes, the picaresque novel, and the regional novel in Spain. Prerequisite: SPAN 213.

SPAN 413. The Generation Of 1898. (3 Credits)
A study of the works of Valle-Inclan, Azorin, Unamuno, Maextu, and others. Prerequisite: SPAN 213.

SPAN 414. Spanish Civilization. (3 Credits)
Comprehensive and systematic study of Spain and its role in world history from its origins as a nation to the transition to democracy and beyond; conducted in Spanish. Prerequisite: SPAN 310 or SPAN 313.

SPAN 415. Hispanic American Civilization. (3 Credits)
Comprehensive and systematic study of the origin and development of the Spanish Americas and their role in world history from pre-Columbian civilizations to the present; conducted in Spanish. Prerequisite: SPAN 310 or SPAN 313.

SPAN 416. Special Topics In Spanish. (3 Credits)
This course is designed to permit an in-depth study in an area of language and/or literature not available in current course offerings. Course may be repeated once upon change of topic. Prerequisite: SPAN 213 Intermediate Spanish II.

SPAN 418. Senior Seminar In Spanish. (4 Credits)
Independent readings and studies in Spanish planned in consultation with and pursued under the direction of the instructor; acquaints the student with methods of research and literary criticism and introduces bibliographic al material. Prerequisite: Eighteen semester hours of Spanish.

Speech (SPEE)

SPEE 214. Introduction To Public Speakin. (3 Credits)
Compositional and delivery techniques for speaking before various kinds of audiences; instruction and participation in argumentation, debate, discussions, and parliamentary procedure. Emphasis upon participation. Prerequisites: ENGL 110 Composition I.

SPEE 215. Voice And Diction. (3 Credits)
An analysis of speech patterns and organs responsible for the production of voice and speech, with special emphasis on the study and practice of the techniques of good articulation. Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II.

SPEE 313. Oral Interpretation. (3 Credits)
Experience in reading and in oral presentations to develop greater appreciation for literature and also skills in conveying meanings and moods. Individual opportunities for literary comparisons, analyses, and recordings.

English Major, Bachelor of Arts (B.A.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE History Electives (p. 146)		3
GE Social Science Electives (p. 147)		3
Language Required Course SPAN 213		3
Restricted Elective HIST or PHIL		3
Restricted Elective Speech, Drama, Music, or Art Course		3
Restricted Elective Speech, Drama, Music, or Art Course		3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210 or ENGL 211	English Literature I or English Literature II	3
GE Science Electives (p. 147)		4
ENGL 212 or ENGL 213	American Literature I or American Literature Ii	3
GE Wellness/Health Electives (p. 147)		2
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
African American Literature Course ENGL 311 or ENGL 317 or ENGL 320		3
Restricted Elective English, Literature, or Related Course		3
Restricted Elective English, Literature, or Related Course		3
Restricted Elective English, Literature, or Related Course		3
Restricted Elective English, Literature, or Related Course		3
Restricted Elective English, Literature, or Related Course		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403	Shakespeare I	3
ENGL 495	Senior Seminar in English	3
Restricted Elective English, Literature, or Related Course		3
Restricted Elective English, Literature, or Related Course		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210 or ENGL 211	English Literature I English Literature II	3
ENGL 212 or ENGL 213	American Literature I American Literature Ii	3
ENGL 214 or ENGL 215	World Literature I World Literature II	3
ENGL 311 or ENGL 317	African-American Literature Black Virginia Writers	3
ENGL 320	Harlem Renaissance	3
ENGL 403	Shakespeare	3
ENGL 495 or ENGL 447	Senior Seminar in English Advanced Creative Writing	3
Total Credit Hours		**24**

Code	Title	Credit Hours
ENGL 2xx-, 3xx-, or 4xx-Level Courses		9
ENGL 3xx- or 4xx-Level Courses		12
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		33
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21

Major/Concentration Requirements	21
Electives	45
Total Credit Hours	**120**

English, Bachelor of Arts with a Concentration in Secondary Education (B.A.)

Course	Title	Credit Hours
Freshman Year		
1st Semester		
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I (or GE Menu)	3
Restricted Elective	Music, Art, or Drama Course	3
GE Science Electives (p. 147)		3
GE Wellness/Health Electives (p. 147)		2
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II (GE menu)	3
GE History Electives (p. 146)		3
Restricted Elective	Speech Course	3
Language Required Course	SPAN 213	3
	Credit Hours	**15**
Sophomore Year		
1st Semester		
ENGL 203	Introd Literary Analysis/Crit	3
EDUC 201	Seminar in Education	3
IDST 200	Digital Media Teacher Educatio	3
PSYC 212	Human Growth & Development	3
Restricted Elective	or Foreign Language as needed	3
Restricted Elective	Philosophy Course (PHIL 180 recommended)	3
	Credit Hours	**18**
2nd Semester		
ENGL 341	Expository Writing	3
EDUC 202	Foundations of Education	3
Literature Survey		3
Literature Survey		3
Restricted Elective	ENGL Course or Related Subject	3
	Credit Hours	**15**
Junior Year		
1st Semester		
African American Literature Course	ENGL 311, 317, or 320	3
GE Social Science Electives (p. 147)		3
Linguistics Course	ENGL 351, 352, or 422	3
Literature Survey		
ENED 371	Teaching Engl Secondary School	3
EDUC 315	Data Driven Instructional Desi	3
	Credit Hours	**15**
2nd Semester		
Restricted Elective	ENGL 3xx or 4xx Course	3
ENGL 403	Shakespeare	3
ENED 431	Teaching Composition	3
ENED 432	Reading & Literature	3
ENED 372	Engl Lang Arts Professional	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
	Credit Hours	**18**
Senior Year		
1st Semester		
ENGL 495	Senior Seminar in English	3
Linguistics Course	ENGL 351, 352, or 422	3
Restricted Elective	ENGL 3xx or 4xx Course	3
Restricted Elective	ENGL Course	3
EDUC 424	Culturally Responsive Pedagogy	2
	Credit Hours	**14**
2nd Semester		
EDUC 401	Student Teaching Seminar	3
ENED 402	Student Teaching In English	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**15**
	Total Credit Hours	**124**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210	English Literature I	3
or ENGL 211	English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 311	African-American Literature or ENGL 317 or ENGL 320	3
ENGL 403	Shakespeare	3
or ENGL 404	Shakespeare II	
ENGL 495	Senior Seminar in English	3
or ENGL 447	Advanced Creative Writing	
Additional Humanities Requirements	Language, Speech, Music/Art/Drama, and Philosophy Courses	12
Total Credit Hours		**33**

Code	Title	Credit Hours
Secondary Education Courses		18
Field Experience		15
ENED and Associated Requirements		9
Total Credit Hours		**42**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		3
Total Credit Hours		**15**

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		42
Electives		15
Total Credit Hours		**123**

English, Bachelor of Arts with a Concentration in African-American/ Africana Literature (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
MATH 112	Basic Mathematics I	3
GE Social Science Electives (p. 147)		3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
ENGL 111	Composition II	3
Restricted Elective	HIST or PHIL Course	3
MATH 113	Basic Mathematics II	3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
Language Required Course	SPAN 213	3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 210 or ENGL 211	English Literature I or English Literature II	3
ENGL 212 or ENGL 213	American Literature I or American Literature Ii	3
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
African American Literature Required Course	ENGL 311 or ENGL 317	3
ENGL 312	African-American Non-Fiction	3
ENGL 320	Harlem Renaissance	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 522	History Of The English Languag	3
ENGL 412	Caribbean Literature	3
ENGL 413	Special Topics in Africana Lit	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403	Shakespeare	3
African American Literature Required Course	Choose from ENGL 311, 315, 364, 410, or 414 (Must not duplicate course taken in Core Requirements)	3
African American Literature Required Course	Choose from ENGL 311, 315, 364, 410, or 414 (Must not duplicate course taken in Core Requirements)	3
ENGL 411	Readings African Lit & Culture	3
ENGL 495	Senior Seminar in English	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210 or ENGL 211	English Literature I English Literature II	3
ENGL 212 or ENGL 213	American Literature I American Literature Ii	3
ENGL 214 or ENGL 215	World Literature I World Literature II	3
ENGL 311	African-American Literature or ENGL 317 or ENGL 320	3
ENGL 403 or ENGL 404	Shakespeare Shakespeare II	3
ENGL 495	Senior Seminar in English	3

or ENGL 447	Advanced Creative Writing	
Total Credit Hours		**21**

Code	Title	Credit Hours
ENGL 312	African-American Non-Fiction	3
ENGL 320	Harlem Renaissance	3
ENGL 411	Readings African Lit & Culture	3
ENGL 412	Caribbean Literature	3
ENGL 413	Special Topics in Africana Lit	3
ENGL 2xx-, 3xx-, or 4xx-Level Courses		3
ENGL 3xx- or 4xx-Level Courses		3
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		9
Unrestricted Electives		36
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21
Major/Concentration Requirements		21
Electives		45
Total Credit Hours		**120**

English, Bachelor of Arts with a Concentration in Creative Writing (B.A.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
MATH 112	Basic Mathematics I	3
GE Social Science Electives (p. 147)		3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
ENGL 111	Composition II	3
Restricted Elective	History or Philosophy Course	3
MATH 113	Basic Mathematics II	3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
Language Required Course	SPAN 213	3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 210 or ENGL 211	English Literature I or English Literature II	3
ENGL 212 or ENGL 213	American Literature I or American Literature Ii	3
ENGL 240	Introduction Creative Writing	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
African American Literature Course	ENGL 311, ENGL 317, or ENGL 320	3
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
Restricted Elective (Creative Writing)	ENGL 300 Level Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Restricted Elective (Creative Writing)	ENGL 300 Level Course	3
Restricted Elective (Creative Writing)	ENGL 300 Level Course	3
Restricted Elective (ENGL Course)	Any 200-, 300-, or 400-Level Course	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403	Shakespeare	3
Restricted Elective (ENGL Course)	Any 200-, 300-, or 400-Level Course	3
Restricted Elective (ENGL Course)	Any 200-, 300-, or 400-Level Course	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 447	Advanced Creative Writing	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210 or ENGL 211	English Literature I English Literature II	3
ENGL 212 or ENGL 213	American Literature I American Literature Ii	3

ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 311	African-American Literature	3
or ENGL 317	Black Virginia Writers	
ENGL 403	Shakespeare	3
or ENGL 404	Shakespeare II	
ENGL 447	Advanced Creative Writing	3
Total Credit Hours		**21**

Code	Title	Credit Hours
ENGL 2xx-, 3xx-, or 4xx-Level Courses		3
ENGL 3xx- or 4xx-Level Courses		6
ENGL 240	Introduction Creative Writing	3
Choose 3 of the following:		9
ENGL 343	Writing Poetry	
ENGL 344	Writing Short Fiction	
ENGL 345	Writing Creative Non-Fiction	
ENGL 348	Special Topics Creative Writin	
ENGL 349	Literary Editing and Publishin	
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		21
Unrestricted Electives		24
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21
Major/Concentration Requirements		21
Electives		45
Total Credit Hours		**120**

English, Bachelor of Arts with a Concentration in Literature of the World

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
MATH 112	Basic Mathematics I	3
GE Social Science Electives (p. 147)		3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
ENGL 111	Composition II	3
Restricted Elective	History or Philosophy Course	3
MATH 113	Basic Mathematics II	3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
Language Required Course	SPAN 213	3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 210	English Literature I	3
or ENGL 211	or English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	or American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	or World Literature II	
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
Restricted Elective (British or American Literature)	One class from ENGL 210, ENGL 211, ENGL 301, ENGL 302, ENGL 303, ENGL 304, ENGL 306, ENGL 324, ENGL 401, ENGL 402, ENGL 403, ENGL 404, ENGL 405, ENGL 212, ENGL 213, ENGL 307, ENGL 308, ENGL 309, ENGL 406, ENGL 407, or ENGL 408.	3
Restricted Elective (African American Literature)	One class from ENGL 311, ENGL 317, or ENGL 320.	3
Restricted Elective (Ancestral Lit & its Successors)	One class from ENGL 321, ENGL 322, ENGL 323, ENGL 325, or ENGL 326	3
Unrestricted Elective		3
Unrestricted Elective		3
Restricted Elective (Lit & Culture, Gender, or the Environment)	One class from SPAN 300, SPAN 301, SPAN 315, SPAN 316, SPAN 410, SPAN 412, SPAN 413, FREN 300, FREN 301, FREN 410, FREN 411, FREN 412, ENGL 214, ENGL 215, ENGL 312, ENGL 327, ENGL 331, ENGL 332, ENGL 333, ENGL 334, ENGL 335, ENGL 336, ENGL 411, ENGL 412, ENGL 413, or ENGL 414	3
Major Required Course	300/400 level	3
Major Required Course	300/400 level	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403	Shakespeare	3
Restricted Elective (ENGL Course)	Any two classes with an ENGL prefix	3
Restricted Elective (ENGL Course)	Any two classes with an ENGL prefix	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 495	Senior Seminar in English	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		

GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210	English Literature I	3
or ENGL 211	English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 311	African-American Literature or ENGL 317 or ENGL 320	3
ENGL 403	Shakespeare	3
or ENGL 404	Shakespeare II	
ENGL 495	Senior Seminar in English	3
or ENGL 447	Advanced Creative Writing	
Total Credit Hours		**21**

Code	Title	Credit Hours
ENGL 2xx-, 3xx-, or 4xx-Level Courses		3
Required Courses (Advisor Approval)		9
ENGL 3xx- or 4xx-Level Courses		9
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		33
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21
Major/Concentration Requirements		21
Electives		45
Total Credit Hours		**120**

English, Bachelor of Arts with a Concentration in Linguistics

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
MATH 112	Basic Mathematics I	3
GE Social Science Electives (p. 147)		3
Restricted Elective Speech, Drama, Music, or Art		3
ENGL 111	Composition II	3
Restricted Elective History or Philosophy		3
MATH 113	Basic Mathematics II	3
Restricted Elective Speech, Drama, Music, or Art		3
Language Required Course SPAN 213		3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 210	English Literature I	3
or ENGL 211	or English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	or American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	or World Literature II	
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
Restricted Elective (African American Literature) One class from ENGL 311, ENGL 317, or ENGL 320		3
ENGL Linguistics Course ENGL 351, ENGL 352, ENGL 353, ENGL 422 or ENGL 451		3
ENGL Linguistics Course ENGL 351, ENGL 352, ENGL 353, ENGL 422 or ENGL 451		3
ENGL Linguistics Course ENGL 351, ENGL 352, ENGL 353, ENGL 422 or ENGL 451		3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL Linguistics Course ENGL 351, ENGL 352, ENGL 353, ENGL 422 or ENGL 451		3
ENGL Linguistics Course ENGL 351, ENGL 352, ENGL 353, ENGL 422 or ENGL 451		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403	Shakespeare	3
Restricted Elective (Interdisciplinary Linguistics) PHIL 220, SPAN 312, or PSYC 421.		3
Restricted Elective (ENGL Course) Any 200-, 300-, or 400-Level Course		3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 495	Senior Seminar in English	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		

GE Social Science Electives (p. 147)

GE Wellness/Health Electives (p. 147)

GE Mathematics Electives (p. 147)

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210	English Literature I	3
or ENGL 211	English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 311	African-American Literature or ENGL 317 or ENGL 320	3
ENGL 403	Shakespeare	3
or ENGL 404	Shakespeare II	
ENGL 495	Senior Seminar in English	3
or ENGL 447	Advanced Creative Writing	
Total Credit Hours		**21**

Code	Title	Credit Hours
ENGL 351	Introduction To Language Study	3
ENGL 352	English Structure	3
ENGL 353	Forensic Linguistics	3
ENGL 422	History Of The English Languag	3
ENGL 451	Special Topics in Linquistics	3
ENGL 2xx-, 3xx-, or 4xx-Level Courses		3
Choose one of the following:		3
PHIL 220	Introduction To Logic	
SPAN 312	Practical Spanish Phonetics	
PSYC 421	Language & Cognitive Developme	
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		33
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21
Major/Concentration Requirements		21
Electives		45
Total Credit Hours		**120**

English, Bachelor of Arts with a Concentration in Professional Writing

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
GE History Electives (p. 146)		3
MATH 112	Basic Mathematics I	3
GE Social Science Electives (p. 147)		3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
ENGL 111	Composition II	3
Restricted Elective	History or Philosophy Course	3
MATH 113	Basic Mathematics II	3
Restricted Elective	Speech, Drama, Music, or Art Elective	3
Language Required Course	SPAN 213	3
	Credit Hours	**30**
Sophomore Year		
ENGL 203	Introd Literary Analysis/Crit	3
GE Science Electives (p. 147)		4
GE Wellness/Health Electives (p. 147)		2
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 210 or ENGL 211	English Literature I or English Literature II	3
ENGL 212 or ENGL 213	American Literature I or American Literature Ii	3
ENGL 214 or ENGL 215	World Literature I or World Literature II	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Junior Year		
Restricted Elective (African American Literature)	One class from ENGL 311, ENGL 317, or ENGL 320.	3
ENGL Writing or Linguistics Course	ENGL 341, ENGL 342, ENGL 352, ENGL 347, or ENGL 441.	3
ENGL Writing or Linguistics Course	ENGL 341, ENGL 342, ENGL 352, ENGL 347, or ENGL 441.	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL Writing or Linguistics Course	ENGL 341, ENGL 342, ENGL 352, ENGL 347, or ENGL 441.	3
ENGL Writing or Linguistics Course	ENGL 341, ENGL 342, ENGL 352, ENGL 347, or ENGL 441.	3
ENGL Writing or Linguistics Course	ENGL 341, ENGL 342, ENGL 352, ENGL 347, or ENGL 441.	3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
ENGL 403 or ENGL 404	Shakespeare or Shakespeare II	3
Professional Writing Course	One class from ENGL 310, ENGL 346, ENGL 351, ENGL 421, or ENED 431	3
Restricted Elective (ENGL Course)	Any 200-, 300-, or 400-Level Course	3
Unrestricted Elective		3
Unrestricted Elective		3
ENGL 495	Senior Seminar in English	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3

Unrestricted Elective	3
Credit Hours	**30**
Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
ENGL 203	Introd Literary Analysis/Crit	3
ENGL 210	English Literature I	3
or ENGL 211	English Literature II	
ENGL 212	American Literature I	3
or ENGL 213	American Literature Ii	
ENGL 214	World Literature I	3
or ENGL 215	World Literature II	
ENGL 311	African-American Literature or ENGL 317 or ENGL 320	3
ENGL 403	Shakespeare	3
or ENGL 404	Shakespeare II	
ENGL 495	Senior Seminar in English	3
or ENGL 447	Advanced Creative Writing	
Total Credit Hours		**21**

Code	Title	Credit Hours
ENGL 341	Expository Writing	3
ENGL 342	Technical Communication	3
ENGL 347	Theory/Prac Professional Editi	3
ENGL 352	English Structure	3
ENGL 441	Special Topic: Profess Writing	3
ENGL 2xx-, 3xx-, or 4xx-Level Courses		3
Choose one of the following:		3
ENGL 310	Advanced Communications Skills	
ENGL 346	Practicum In Writing	
ENGL 351	Introduction To Language Study	
ENGL 421	Rhetorical Traditions	
ENED 431	Teaching Composition	
Total Credit Hours		**21**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		33
Total Credit Hours		**45**

Code	Title	Credit Hours
General Education		33
Core Requirements		21
Major/Concentration Requirements		21
Electives		45
Total Credit Hours		**120**

English, Minor in Africana Studies

Code	Title	Credit Hours
IDUP 270	Introduction To Africana Stud	3
IDUP 371	Study Abroad In Africa	3-6
or IDUP 470	Special Topics Africana Studie	
Choose one of the following:		**3**
ENGL 311	African-American Literature	
ENGL 317	Black Virginia Writers	
ENGL 320	Harlem Renaissance	
ENGL 410	Readings In African American L	
Choose one of the following:		**3**
ENGL 315	African Literature	
ENGL 411	Readings African Lit & Culture	
ENGL 412	Caribbean Literature	
Student must choose 3 credit hours in a Humanities course in Blacks in Africa or African Diaspora		**3**
Student must choose 3 credit hours in a Social Science course in Blacks in Africa or African Diaspora		**3**
Total Credit Hours		**18-21**

English, Minor in Digital Humanities

Code	Title	Credit Hours
ENGL 114	Intro to Digital Humanities	3
ENGL 204	Digital Humanities & Lit Studi	3
ENGL 217	Digital Literature	3
ENGL 370	Theories & Appl Digi Humanitie	3
ENGL 371	History of Digital Humanities	3
ENGL 461	Digital Humanities Project	3
Total Credit Hours		**18**

English, Minor in Drama

Code	Title	Credit Hours
DRAM 113	Acting	3
DRAM 199	Drama Appreciation	3
DRAM 215	Stagecraft I	3
DRAM 301	Drama Production	1
SPEE 215	Voice And Diction	3
Choose two of the following:		6
DRAM 217	Activities In Drama	
DRAM 313	Acting II	
DRAM 414	Directing And Producing	
SPEE 313	Oral Interpretation	
ENGL 331	History Of Drama	
ENGL 332	Modern Drama	
ENGL 403	Shakespeare	
ENGL 404	Shakespeare II	
Total Credit Hours		**19**

English, Minor in English

English Minor

Students in any school at Virginia State University may declare the Minor in English. The English Minor requires 18 semester hours.

Code	Title	Credit Hours
One (1) course chosen from the following:		
ENGL 311	African-American Literature	3
or ENGL 315	African Literature	
Five (5) additional ENGL courses in any field offered by the department, with these provisions: • No more than two (2) ENGL courses at the 200 level will count toward the English minor (i.e., at least three (3) must be 300/400 level courses) • Neither ENGL 201 nor ENGL 202 can be counted toward the English minor		15
Total Credit Hours		**18**

English, Minor in Film Studies in Literature

Code	Title	Credit Hours
ENGL 260	Introd to Film Studies	3
ENGL 361	Film Genres	3
or COMM 361	Film Genres	
ENGL 362	Literature and Film	3
ENGL 363	Identity in Film	3
ENGL 364	Blacks and Film	3
ENGL 365	Special Topics in Film	3
Total Credit Hours		**18**

English, Minor in French

Code	Title	Credit Hours
FREN 212	Intermediate French I	3
FREN 213	Intermediate French II	3
Choose one of the following:		**3**
FREN 310	French Composition	
FREN 313	French Conversation	
FREN 314	Advanced Conversation	
Choose two of the following:		**6**
FREN 410	French Literature 17th Century	
FREN 411	French Literature 18th Century	
FREN 412	French Literature 19th Century	
FREN 416	French Civilization	
FREN 2xx, 3xx, or 4xx Course	Any FREN 200, 300, or 400 Level Course	3
Total Credit Hours		**18**

English, Minor in Hip Hop Studies

Code	Title	Credit Hours
Required Courses		
ENGL 270	The Soles of Blk Folk:Sneak Cl	3
SOCI 333	SOCI Hip Hop & the Media	3
Choose 4 of the following:		12
ENGL 348	Special Topics Creative Writin	
ENGL 365	Special Topics in Film	
ENGL 471	Studies in Poetry	
ENGL 476	Instensive Study of an Author	
HIST 243	Hip Hop History	
ENGL 380	Writing ID and Social Issues	

English, Minor in Spanish

Code	Title	Credit Hours
SPAN 212	Intermediate Spanish	3
SPAN 213	Intermediate Spanish II	3
SPAN 310	Spanish Composition	3
SPAN 313	Spanish Conversation	3
SPAN 2xx, 3xx, or 4xx Course	Any SPAN 200, 300, or 400 level Course	3
SPAN 3xx or 4xx Course	Any SPAN 300 or 400 level Course	3
Total Credit Hours		**18**

English, Minor in Writing

Code	Title	Credit Hours
Choose six courses from the following:		**18**
ENGL 240	Introduction Creative Writing	
ENGL 310	Advanced Communications Skills	
ENGL 341	Expository Writing	
ENGL 342	Technical Communication	

ENGL 343	Writing Poetry	
ENGL 344	Writing Short Fiction	
ENGL 345	Writing Creative Non-Fiction	
ENGL 346	Practicum In Writing	
ENGL 421	Rhetorical Traditions	
ENGL 447	Advanced Creative Writing	
Total Credit Hours		**18**

Students also may elect any one course that is a practical writing course (i.e., a course which focuses primarily on discipline-specific writing, and which includes explicit writing instruction*) from another department. Students should get pre-approval from their advisor for specific courses.

*A course with the "writing intensive" label may not qualify if it simply includes several writing assignments.

Department of Mass Communications

Chairperson: Dr. Jerry Crawford
Location: Hunter-McDaniel Building, Room 40Nd
Contact Information: (804) 524-5369 | jcrawford@vsu.edu

Department Overview

The Department of Mass Communications at Virginia State University program is one of the most sought-after majors at the University. We offer the **Bachelor of Arts (B.A.) in Mass Communications** degree with four concentrations: **Radio/Television, Public Relations, Journalism, Print Media**. Mass Communications has become one of the fastest growing departments at VSU, offering unique skillsets and opportunities in our undergraduate and graduate programs. The bachelor's program focuses heavily#on new media and technology, with lots of chances for students to gain practical experience. Our students learn using state-of-the art audio and video equipment in our labs, as well as by working on projects with clients on the VSU campus and beyond, including Minor League Baseball and the U.S. Army, an annual field trip to media outlets like ESPN in Washington, D.C., and an annual symposium round out our students' experiences.

An internship is required#in the bachelor's program, with a#variety of#unique, hands-on learning experiences available.#Students also have the opportunity to#work on the staff of VSU's student newspaper (The Statesman), at our radio station (WVST) or at our revamped television station.

Mission Statement

The mission of the VSU Department of Mass Communications is to pursue excellence while preparing and inspiring student leaders to be transformative global media innovators who are adept at traditional and emerging communication technologies and prepared for evolving mass communication careers.

Degree Highlight Information

Mass Communication is a diverse and dynamic field that offers a wide range of rewarding career opportunities. Professionals in this industry play a crucial role in shaping public perception, disseminating information, and driving impactful communication strategies for various organizations.

Whether your strengths lie in strategic planning, creative storytelling, interpersonal connections or media production, a communications degree will certainly not limit your potential. Communication professionals are integral to shaping public perception, crafting compelling messages, and bridging gaps between organizations and their audiences. Earning a communications degree opens doors to career opportunities across various sectors, from media and marketing to journalism and public relations.

Now, more than ever, there is a need for media specialists to report, create the messages, support media literacy, and democracy throughout the world. While specific salary figures may vary based on factors like location, experience, and industry, the following list outlines some of the highest paying jobs in mass communication worldwide:

- Advertising Executive
- Public Relations Manager
- Content Strategist/Creator
- Broadcast News (Reporter, Anchor, Producer, Production)
- Social Media Manager
- Film & Video Producer
- Editor
- Organizational Communication
- Speech Writers
- Crisis Communications
- Sports Media

Accreditation Information

The Department of Mass Communications is actively preparing for accreditation with the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC).

Department Goals

In the Department of Mass Communications, our dedicated faculty and staff members have a wealth of professional#expertise and creativity#to share with students. Our accomplished communication professionals have#diverse#and#interesting backgrounds in film, television, broadcast news, audio and music, radio,#public relations and print media. Our vision is to become a leader in media education - emphasizing both scholarly and experiential experiences. We are steadily building as we are upgrading our technology and coursework to all possible best practices within our discipline.

Develop knowledge, skills, techniques, to include broadcast, multimedia, film (cinematography/sound/writing), sports, podcasting, AI, emerging media. We also provide a pathway to graduate school opportunities by

including an understanding of communication theories, media history and practices. Courses will also include legal and ethical media issues.

Program Listings

Bachelor of Arts (B.A.) in Mass Communications

The Mass Communications curriculum provides flexibility with Professional Development Courses, so that students may shape a concentration that works best for their needs. All students are required to complete an internship in a professional setting. An additional internship is possible. Students may opt to take preparation in graduate school, prepare a significant media project, and write a scholarly senior thesis.

Course Requirements: Students must maintain at least a 2.0 GPA in all courses and earn at least a "C" in all COMM courses to continue in the degree.

Major(s)

- Mass Communications, Bachelor of Arts (B.A.) (p. 315)

MASS COMMUNICATIONS

Course Descriptions

COMM 201 INTRODUCTION TO MASS COMMUNICATIONS - 3 semester hours
Analysis of the communications professions through an understanding of their structure and functions, their development, their performance, and the controls exercised over them by various groups and institutions. A survey of newspapers, film, broadcasting, advertising, and public relations.

COMM 202 INTRODUCTION TO MEDIA TECHNOLOGY - 3 semester hours Orientation to computer skills essential for today's digital environment in mass communications. Training in file and folder management, electronic messaging, file transfer via Internet and e-mail, and digital editing software for audio, images and video and other emerging technologies.
Prerequisites: ENGL-110, ENGL-111, and COMM-201 with a C or higher

COMM 205 INTRODUCTION TO JOURNALISM - 3 semester hours
Working on deadline, students are exposed to the basics of news writing; emphasis on development of interviewing, news writing, and information gathering skills. Accuracy, fairness, and ethical issues in reporting are stressed.
Prerequisites: ENGL-110, ENGL-111, and COMM-201 with C or higher

COMM 210 PUBLIC PRESENTATION - 3 semester hours
Emphasis on oral and written communications for public consumption. This course prepares students for effective oral delivery, multi-media presentations, and business communications. Students will be video recorded for feedback and improvement in quality of delivery.
Prerequisites: COBU-101 or COMM-201

COMM 231 CRITICAL LISTENING – 3 semester hours
Students to learn, measure, analyze and discuss sound more accurately. Topics include frequency recognition, anatomy and physiology of the ear, acoustics, audio data compression, and musical form and arrangement. Regular ear training exercises are included to improve listening skills.
Prerequisites: MUSI 294

COMM 301 HISTORY OF AFRICAN AMERICANS IN THE MEDIA - 3 semester hours An overview of the history and contributions of African Americans in Mass Media. Examines legislation that aids or impacts negatively on the careers of African Americans, and particularly African American women.
Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor

COMM 302 HISTORY AND APPRECIATION OF FILM - 3 semester hours Introduction to film history and criticism. Examination of motion picture genres as handled by major directors and analysis of cinema as a narrative art from beginnings to the present day. Weekly screening and discussions of important motion pictures not only as art but as they reflect and affect our times.
Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor.

COMM 303 HISTORY OF PRINT AND ONLINE TECHNOLOGY - 3 semester hours A historical review of the development of early print media into newspaper journalism and an analysis of the impact that on-line technology has had on the practice of journalism. Open to non-majors.
Prerequisite: ENGL-110, ENGL-111, and COMM 201 or permission of instructor

COMM 304 HISTORY OF BROADCASTING - 3 semester hours A detailed exploration of the historical development of radio, television, and film as mass media, with emphasis on their structure, economics, and programming. Open to non-majors.

COMM 310 MEDIA WRITING LAB - 3 semester hours Students practice advanced news writing for newspapers, magazines and on-line publication. They further refine the skills learned in COMM-205.
Prerequisites: ENGL-110, ENGL-111, COMM-201, COMM-202 and COMM-205

COMM 311 WRITING FOR BROADCAST - 3 semester hours An introductory broadcast writing course designed to familiarize students with script formats and various types of broadcast writing. While students will learn proper techniques of copy-writing employed in both television and radio production which includes documentary and continuity writing, emphasis is placed on broadcast news writing. Students will be required to write broadcast news stories as well as various type of radio and television copy.
Prerequisite: COMM-202, COMM-205

COMM 312 MEDIA RESEARCH - 3 semester hours

Students will be introduced to research skills and techniques as they apply to the mass media industry. Students will perform basic field research, learning survey construction and data analysis techniques used in the industry.
Prerequisite: ENGL-110, ENGL-111 and COMM-201, COMM-202 with C or higher.

COMM 314 PHOTOJOURNALISM - 3 semester hours Emphasizes the basic elements of photography for the mass media, including print and on-line journalism, advertising, public relations, and television. The emphasis is on the photojournalistic value of truth-telling rather than creating a fantasy or illusion. Student learns how to compose, shoot, and edit using

digital still cameras and associated computer software. This course includes foundation skills for shooting video. Open to non-majors.
Prerequisites: COMM 201, COMM-202; open to non-majors with permission of the instructor.

COMM 321 PUBLIC RELATIONS 1 - 3 semester hours
An overview of the principles, policies and research methods, as well as the historical and contemporary practices of public relations in business, government, associations, and other organizations; analysis of public relations programs, ethics of public relations practice, and options of career opportunities.
Prerequisite: COMM-201, COMM-205

COMM 322 PUBLIC RELATIONS 2 - 3 semester hours
Practice in media relations; the development of professional writing skills with emphasis on social media campaigns, external and internal communications: press releases, public service announcements, publication design, employee communications, speech writing, audio visual presentations, and news conferences.
Prerequisite: COMM-321

COMM 324 PUBLIC RELATIONS PRACTICUM - 3 semester hours
Workshops, guest speakers, and in-class exercises equip students to research, design, implement and complete public relations projects for community-based organizations. PR professionals from corporations and non-profits serve as guest lecturers, establishing a foundation from which students develop a Social Responsibility Report (hands on) and PR Case Study research paper.
Prerequisite: COMM 322

COMM 326 ORGANIZATIONAL COMMUNICATION - 3 semester hours
This course covers issues and processes used by public information officers and public relations officials in connecting a corporation or public figure with the public served.
Prerequisites: COMM-205, and either COMM-311 or COMM-351

COMM 331 AUDIO PRODUCTION - 3 semester hours
The study and practice of basic concepts, skills, and techniques involved in audio for broadcast and recording studios. Emphasis is on equipment skills, especially digital audio editing and audio console controls. The class also covers announcing techniques and writing for broadcast. This course lays the foundation for the audio component of video production and digital editing techniques.
Prerequisites: COMM-201, COMM-202, and COMM-205; open to non-majors, with permission of the instructor.

COMM 332 INTRODUCTION TO LIVE SOUND – 3 semester hours
This course introduces the concepts and practices of live sound engineering, including analog console functionality, system preparation, system management and operation. Additional focus on microphone techniques, monitoring and mixing for live sound.
Prerequisite: MUSI 294 or COMM 331

COMM 333 Pro Tools I - 3 semester hours
This course provides the foundational skills necessary for basic recording, mixing and editing within the Pro Tools environment. Students learn file structure, edit functions, time scale and ruler views, session configuration, recording and managing audio, importing audio, and much more.

COMM 334 Pro Tools II Music - -3 semester hours
This course builds intermediate Pro Tools skills that are necessary in music production. Students learn the components of an HDx system, advanced mixing and editing options, the use of alternate production tools, time operations, alignment techniques, writing and editing automation, and more.
Prerequisite: COMM 333

COMM 337 – PRO TOOLS 201 - 3 semester hours
This course covers the core concepts and skills needed to operate a digital audio system in a professional studio environment. Students will be introduced to professional audio systems as well as control surfaces. Students will go into greater depth into concepts such as automation, editing, mixing and session management. Experience will be gained through a series of class exercises and project files.
Prerequisites: COMM-336, COMM-333, MUSI-378

COMM 338 - FUNDAMENTALS OF POST - 3 semester hours
This lab offers foundation level training in audio post-production for TV, film, and other media. Processes such as dialogue editing, ADR, sound effects editing and design, Foley recording, music editing and mixing (re-recording) are investigated in lecture and practiced through personal lab projects. Through a series of project-based lab activities, students will learn how to place Foley effects, edit and replace dialog (ADR), spot and edit sound effects and music, prepare temp mixes, and create a final mix for delivery, complete hands-on-projects involving editing and mixing audio for video in the Pro Tools environment.
Prerequisites: COMM-337

COMM 338L FUNDAMENTALS OF POST LAB – 2 semester hours
This lab offers foundation level training in audio post-production for TV, film, and other media. Processes such as dialogue editing, ADR, sound effects editing and design, Foley recording, music editing and mixing (re-recording) are investigated in lecture and practiced through personal lab projects.
Prerequisites: COMM 333, COMM 357
Corequisite: COMM 338

COMM-341 TELEVISION PRODUCTION – 3 semester hours
A production course designed to familiarize students with the basic fundamentals of operating audio and video equipment in a TV studio environment and to provide a basic understanding of television system operation, production techniques, television terminology, crew responsibilities, and visual aesthetics.
Prerequisites: COMM-371

COMM 342 ADVANCED TELEVISION PRODUCTION - 3 semester hours
A continuation of COMM 341. This course is designed to expose students to the fundamentals of electronic field production (EFP) and electronic news gathering (ENG). Emphasis is placed on treatment and script development, visual aesthetics, analog and digital technology, pictorial continuity, and non-linear video editing techniques. Students will develop treatments, scripts, and storyboards in addition to producing and editing several short video projects such as public-service announcements, video promotions, and news packages. The course includes study and practical experience in television production, including television programming. Planning and videotaping of students' projects.
Prerequisite: COMM-341

COMM 351 – PRINT AND ON-LINE MEDIA JOURNALISM - 3 semester hours Students practice writing for on-line publications and assess the practicality of photos and graphics.
Prerequisites: COMM-201, COMM-202, and COMM-205

COMM 352 – PRINT AND ON-LINE MEDIA PRODUCTION - 3 semester hours This course is a continuation of COMM-351. Students learn to build web pages typical of those used by on-line publications and media professionals, using both text and graphics.
Prerequisite: COMM-351

COMM 354 COPY EDITING -3 semester hours
Emphasis on journalistic desk work; editing stories, headline writing, typography, layout functions and relationships.
Prerequisites: COMM-201, COMM-205, and COMM-351

COMM 360 WRITING FOR FILMMAKING - 3 semester hours
A screen writing course designed to familiarize students with the basic structure and dynamics of short film and feature-film screenplays. The course will focus on the aesthetics of cinematic storytelling, presenting visual grammar in combination with dialogue and narrative. The course will also examine the structure of the feature-length screenplay, beginning with a treatment and culminating with generating the "first act" of a film script.
Prerequisite: Open to non-majors, with permission of the instructor.

COMM 361 FILM GENRES - 3 semester hours

The study of a variety of film styles/genres such as westerns, musicals, melodramas, action, mystery, comedy, and horror. Focuses on themes, conventions, and narrative trends associated with particular genres, placing a strong emphasis on analyzing their influence on other film genres and on other forms of creative expression. Since the specific genres to be explored will vary, the course may be repeated for up to six credit hours as allowed by the department. Cross-listed as ENGL- 361 Film Genres.
Prerequisite: COMM-302 or permission of instructor.

COMM-371 MEDIA TECHNOLOGY WORKSHOP – 1 to 3 semester hours
This is an opportunity for students to learn more about the equipment and technology in mass communications. Students will learn to properly shoot and edit video as well as become familiar with the television studio. Students may also be assigned to studio construction or maintenance tasks, or working on specific special events, for which they will receive training and academic credit. Couse may be repeated for up to three semester hours.
Prerequisite: COMM-202; open to non-majors, with permission of the instructor.

COMM 374 COMMUNICATION GRAPHICS - 3 semester hours
This course uses photo editing tools and typography to effectively design layouts for print media and advertising, It covers the basic knowledge of computer graphics software Adobe Photoshop and Adobe InDesign as well as various printing processes.
Prerequisites: COMM-201, COMM-202

COMM 375 THE CREATIVE PROCESS IN ADVERTISING - 3 semester hours An in-depth approach to developing creative advertising for various media, with an emphasis on print. Focus is on the importance of creativity in advertising. This practice is applied to the development of original, strategically-sound, advertising campaigns.
Prerequisites: COMM-201, COMM-202, and COMM-374

COMM-376 THREE-DIMENSIONAL DESIGN FOR MASS MEDIA - 3 semester hours
The course will introduce the student to the basic elements of three-dimensional design as they apply to video and other recorded media. These will be placed in context with such factors as emotional appeal, scale, unity and balance. Student will do projects involving the basic elements of form, exploring how these elements can be utilized to design and create objects that are both esthetically appealing and structurally sound, while meeting prescribed criteria. The course will consist of slide lectures, discussions, and studio projects.
Prerequisites: COMM-201

COMM 377 IMPACT AND MEDIA – 3 semester hours
This course involves the study of cross-platform on-camera and information gathering techniques and procedures used to craft news, entertainment, and sporting programs and stories and how their emotional impact upon TV and radio audiences. Additionally, students will learn to apply lighting techniques, color and shot angels to communicate emotions of what is being shown. Joy, Pain, Fear and empathy are but a few emotions that will be explored and produced for this course. Students will do projects involving emotional elements to understand their impact and utilize them successfully as a communication tool. The course will consist of slide lectures, discussions, and studio projects.
Prerequisite: COMM 331, 341.

COMM 381 MEDIA CREATIVE PROJECT - 1 semester hour
Students enrolled in this course must prepare a proposal for a significant creative work, and they must secure permission from a faculty sponsor. Typical projects might include an audio or video documentary, a book writing project, a series of magazine articles, a substantial Web page design, a sizable photo portfolio, etc. The student should seek a faculty sponsor for this course, such that a good match exists between the student's area of interest, the job site, and the faculty sponsor.
Prerequisites: Junior or senior standing, and prior approval of faculty sponsor.

COMM 383 SERVICE LEARNING PROJECT - 1 semester hour
Students enrolled in this course will participate in an on-campus or community-centered activity, relating some aspect of mass communications with community needs. A typical project might be to help school children develop multi-media presentations; serve as a resource person for school media projects, etc. The student should seek a faculty sponsor for this course, such that a good match exists between the students are of interest, the job site, and the faculty sponsor's areas of expertise.
Prerequisites: Permission of faculty sponsor, and prior approval of job site supervisor.

COMM 389 SPECIAL TOPICS IN MASS MEDIA - 3 semester hours
Working under direction of a professor, a student explores a specific area or field relating to mass communications.
Prerequisites: COMM-201, COMM-202, COMM-205, Junior standing, and prior approval of the instructor.

COMM 391 GRADUATE SCHOOL PREPARATION 1 - 3 semester hours
Students who anticipate

attending graduate school will receive orientation to the academic rigor expected for post-college studies. Students will investigate graduate programs appropriate to their interests and training, becoming familiar with entrance requirements and courses likely to be encountered. The course will culminate in preparing and defending a graduate-level research paper, including following the requisite writing style guide, such as MLA or APA.
Prerequisites: COMM-201, COMM-202, COMM, 205, either COMM-311 or COMM-351, completion of a college-level research and statistics course such as SOCI-317, Junior or senior standing, and approval of the student's academic advisor.

COMM 411 FIELD OBSERVATION IN MASS MEDIA - 1 semester hour This course gives students the opportunity to observe media practitioners in the workplace. Students will keep journals of their observations. Students are expected to document at least 30 hours of on-site observation using journal entries, photography, audio or video recordings, as appropriate to their assignment, using these materials to prepare a comprehensive report of the experience. If circumstances permit, the student is allowed to perform work on the job site. The student should seek a faculty sponsor for this course, such that a good match exists between the student's area of interest, the job site, and the faculty sponsor's expertise.
Prerequisites: Junior standing, permission of faculty sponsor, prior approval of job site supervisor.

COMM 413 MEDIA ARGUMENTATION AND DEBATE - 1 semester hour Students will learn the art and technique of argumentation and debate and participate in debates on controversial issues affecting media professionals.
Prerequisites: Junior or senior standing. Open to non-majors, with permission of instructor.

COMM 415 MEDIA MANAGEMENT - 3 semester hours Students will be prepared for future management positions in the broadcast media, through the study of concepts and principles of media management. Students will examine how media companies function today, and how students can prepare themselves as future managers, producers or talent agents.
Prerequisites: COMM-201, COMM-202, COMM-205, and Senior standing

COMM 417 MASS MEDIA LABORATORY - 1 semester hour Mass Media labs will supplement the content of mass communications lectures. The laboratory is designed to help students develop their specific communication skills and apply theories through various exposure and/or experiences. It will help mass communications students become more informed and be discerning media consumers. Laboratories are break-out sessions that will be hosted by different faculty members or guests who will provide an additional syllabus and a 1 credit grade. The sessions are based on the content of the associated class lecture (journalism lab, advertising lab, discovery lab, leadership development lab). The instructor will have a schedule of assignments, readings, field trips and discussions planned for students.
Prerequisites: For Mass Communications majors only.

COMM 418 PERFORMANCE IN POPULAR CULTURE - 3 semester hours This course will study the development of popular music and its African American roots and heritage. The study begins with the remnants of African musical traits that survived slavery and traces them through blues, ragtime, jazz, blues and rhythm and blues, and on into rap and hi-hop and other movements. The discussion will focus on the musical traits of each, the relationship to African American popular music, and the societal effects on the music as well as the music's effect on society.
Open to non-majors.

COMM 419 POPULAR CULTURE - 3 semester hours This course surveys the history of popular culture, media effects on society, theories surrounding media criticism, and current topics and trends. Students will be expected to study and critically analyze mass media artifacts and texts.
Prerequisites: COMM-205 and Junior standing. Open to non-majors with permission of the instructor.

COMM 431 ADVANCED AUDIO PRODUCTION - 3 semester hours A continuation of COMM-331 Audio Production; further study and practical experience in advanced audio production techniques, including radio station programming, television studio audio control, recording studio and venue sound reinforcement requirements. Student projects will focus on various types of productions done at both commercial and noncommercial stations. Open to non-majors with permission of instructor.

Prerequisite: COMM-331 Audio Production or permission of instructor.

COMM 432 APPLIED STUDIO TECHNIQUES – 1 semester hour
Investigates audio fundamentals, microphone techniques, signal flow, common recording technologies, and studio operation procedures.
Prerequisite: COMM 332 or Permission of Instructor
Corequisite: COMM 432L

COMM 432L APPLIED STUDIO TECHNIQUES LAB – 2 semester hours
Students learn microphone, console, and session management techniques by recording live performers. In personal labs, students hone mixing and recording skills.
Prerequisite: COMM 332
Corequisite: COMM 432L

COMM 433 ADVANCED AUDIO POST – 3 semester hours
Students gain further experience in the production of audio for visual medias. Students complete extensive projects and receive significant studio time to record, edit, and mix sound effects, Foley, dialogue, and music.
Prerequisites: COMM 378, COMM 378L

COMM 445 NEWS PRODUCTION - 3 semester hours This is an advanced-level broadcast production course designed to provide students with practical experience in developing, producing, and directing a broadcast-quality 15-minute television newscast. Based upon previous experience, students will be assigned to perform a number of different functions such as researching topics, writing broadcast scripts, formatting and timing show segments, shooting and editing video, serving as talent, and producing video packages. Each student is required to write and produce segments of the newscast on a weekly basis and well as performing other assigned tasks such as operating production equipment. This course requires a large amount of work outside of class.
Prerequisites: COMM-311, COMM-331, COMM-341, COMM-342, or permission of the instructor.

COMM 473 MULTI-MEDIA TECHNOLOGIES - 3 semester hours A practical application of new technology, including computer and digital technology, interactive media, telecommunications, and virtual reality. The course gives students familiarity with current media technologies used to produce, store and

share sound, image and video files, and in the production of Web design and Web-based publishing. Open to non-majors with permission of the instructor.
Prerequisites: COMM-201, COMM-202, and Junior or Senior standing and permission of instructor.

COMM 475 BROADCAST ENGINEERING CERTIFICATION - 3 semester hours
This course is designed for both Mass Communications and Electrical Engineering students who are focused on the technical aspects of broadcast technology. Students will survey broadcast technology and the particular demands placed on combining audio and RF environments. Students are to work toward formal certification, such as an FCC General Radiotelephone Operator's License, the certification by the Society of Broadcast Engineers, or the Technician Class Amateur Radio License.
Prerequisite: Permission of instructor.

COMM 465 CINEMATOGRAPHY - 3 semester hours
This is a hands-on course designed to expose students to the fundamentals of single-camera production for film and television and to develop a basic understanding of filmmaking and videography. Emphasis is placed on drama script and storyboard development, shot selection, pictorial continuity, and basic video editing techniques and aesthetics. Students will develop treatments, scripts, and storyboards and produce a short dramatic film project.
Prerequisites: COMM-314, COMM-371, COMM 373, and Junior or Senior standing.

COMM 490 MEDIA LAW AND ETHICS SURVEY- 3 semester hours
A study of legal issues and constitutional freedoms affecting the mass media, with emphasis on libel, copyright labels, FCC rules and regulations, the principles of professional ethics, and the social responsibility of mass communications. Prerequisites: COMM-201, and Senior standing

COMM 491 GRADUATE SCHOOL PREPARATION 2 - 3 semester hours
Students who anticipate attending graduate school will receive orientation to the academic rigor expected for post-college studies. Students will apply to one or more graduate programs appropriate to their interests and training, and they will prepare for and may take the relevant entrance exam, such as the GRE. As a continuation of COMM-391, this course will include further training in preparing and defending a graduate- level research paper, including following the requisite writing style guide, such as MLA or APA.
Prerequisites: COMM-391, Senior standing.

COMM-496 Internship in Mass Media – 3 semester hours, Fall, Spring, Summer
Supervised work experience in mass media with emphasis on practical application of classroom concepts. Minimum of 120 hours of assigned work, typically spread across four weeks or more, to receive (3) units of academic credit under the direction of the Internship Supervisor on- site. Regular mandatory meetings with the Mass Communications Internship Coordinator; weekly written reports, site evaluations, mid-term report and a final report. Mandatory class schedule with Mass Communications Internship Coordinator as specified in the course syllabus. A second internship with a significantly different assignment may be conducted for an additional three semester hours, with approval of the internship coordinator and faculty advisor.
Prerequisites: Senior standing and prior approval and permission of the Mass Communications Internship Coordinator.

COMM 497 INTERNSHIP IN MASS MEDIA - 3 semester hours
Supervised work experience in mass media with emphasis on practical application of classroom concepts. Minimum of 120 hours of assigned work, typically spread across four weeks or more, to receive (3) units of academic credit under the direction of the Internship Supervisor on- site. Regular mandatory meetings with the Mass Communications Internship Coordinator; weekly written reports, site evaluations, mid-term report and a final report. Mandatory class schedule with Mass Communications Internship Coordinator as specified in the course syllabus. A second internship with a significantly different assignment may be conducted for an additional three semester hours, with approval of the internship coordinator and faculty advisor.
Prerequisites: Senior standing and prior approval and permission of the Mass Communications Internship Coordinator.

COMM-499 SENIOR SEMINAR IN MASS COMMUNICATIONS - 3 semester hours
A capstone course for Mass Communications majors focused on reading and researching selected topics in mass communications; designed to integrate knowledge in the various areas of mass communications and to prepare students to take exit examination, produce a portfolio, and gain experience in research and oral presentation.
Prerequisite: To be taken in the last semester of a student's Mass Communications curriculum.

Mass Communications Major, Bachelor of Arts (B.A.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
GE Science Electives (p. 147)		4
GE Global Studies Electives (p. 146)		3
GE History Electives (p. 146)		3
	Credit Hours	**16**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
HPER 170	Health And Wellness	2
COMM 201	Introd to Mass Communications	3
COMM 202	Introd to Media Technology	3
COMM 205	Introduction to Journalism	3
	Credit Hours	**17**
Sophomore Year		
1st Semester		
GE Humanities Electives (p. 146)		3
SPEE 215	Voice And Diction	3
ENGL 201	Introduction To Literature	3
Restricted Elective	COMM History (Choose one: COMM 301, COMM 302, COMM 303, or COMM 304)	3
Restricted Elective	Tier 2-Foundations (Choose one: COMM 311, COMM 351, or COMM 360)	3
	Credit Hours	**15**
2nd Semester		
Restricted Elective	Minor or Liberal Arts & Science Course	3
Restricted Elective	Minor or Liberal Arts & Science Course	3
Restricted Elective	Tier 3 COMM Course	3

Restricted Elective	Tier 3 COMM Course	3
GE Social Science Electives (p. 147)		3
	Credit Hours	**15**
Junior Year		
1st Semester		
Restricted Elective	Course requires Advisor Approval	3
Restricted Elective	Minor or Liberal Arts & Science Course	3
Restricted Elective	Minor or Liberal Arts & Science Course	3
Unrestricted Elective		3
Restricted Elective	Tier 3 COMM Course	3
	Credit Hours	**15**
2nd Semester		
Restricted Elective	Minor or Liberal Arts & Science Course	3
Restricted Elective	Minor or Liberal Arts & Science Course	3
Unrestricted Elective		3
Unrestrictive Elective		3
Restricted Elective	Tier 3 COMM Course	3
	Credit Hours	**15**
Senior Year		
1st Semester		
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Restricted Elective	Tier 3 COMM Course	3
COMM 490	Media Law and Ethics Survey	3
	Credit Hours	**15**
2nd Semester		
Unrestricted Elective		3
Unrestricted Elective		2
Restricted Elective	Tier 3 COMM Course	1
COMM 497	2nd Internship in Mass Media	3
COMM 499	Senior Seminar in MCOM	3
	Credit Hours	**12**
	Total Credit Hours	**120**

Note: Courses with COMM prefixes require a passing grade of C or better.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
SPEE 215	Voice And Diction	3
COMM 201	Introd to Mass Communications	3
COMM 202	Introd to Media Technology	3
COMM 205	Introduction to Journalism	3
Total Credit Hours		**12**

Code	Title	Credit Hours
COMM 490	Media Law and Ethics Survey	3
COMM 497	2nd Internship in Mass Media	3
COMM 499	Senior Seminar in MCOM	3
Total Credit Hours		**9**

Code	Title	Credit Hours
Restricted Electives		43
Unrestricted Electives		23
Total Credit Hours		**66**

Code	Title	Credit Hours
General Education		33
Core Requirements		12
Major/Concentration Requirements		9
Electives		66
Total Credit Hours		**120**

Department of Military Science

Chairperson: Eric Palicia
Location: Jessie B. Bolling Hall
Contact Information: 804-524-5543 | epalicia@vsu.edu (http://catalog.vsu.edu/undergraduate/college-humanities-social-sciences/department-military-science/epalicia@vsu.edu)

Department Overview

The Reserved Officers' Training Corps (ROTC) Program consists of two parts: the basic course and the advanced course. The student normally pursues the basic course during the freshman and sophomore years, and the advanced course is normally pursued during the junior and senior years. Each advanced- course student is entitled to an allowance of $400.00 per month up to 10 months per year. Advanced-course students are required to attend a six-week ROTC summer camp at the completion of their junior year. For this summer training, the student receives over $700.00 plus travel pay to and from camp. Successful completion of the ROTC program qualifies the student for appointment as a second lieutenant in the Regular Army, Army Reserve, or Army National Guard.

Mission Statement

To commission the future officer leadership of the U.S. Army and motivate young people to be better Americans.

Department Goals

The objectives of the Department of Military Science are:

- to motivate selected students,
- to provide an understanding of the nature and operation of the United States Army,
- to develop the leadership and managerial potential of students,
- to encourage the development of mental and moral standards essential to military service, and
- to train students for commissioning in the United States Army, Army Reserves, or Army National Guard.

Program Listings

Minor in the Department

A Minor in Military Science is offered with a minimum of 15 hours of study.

SUMMARY
DEPARTMENT OF MILITARY SCIENCE

Freshman Year		
1st Semester		**Credit Hours**
MILS 101	Introduction to Leadership	2
MILS 403	Leadership Laboratory	0
	Credit Hours	**2**
2nd Semester		
MILS 102	Introduction to Leadership	2
MILS 404	MILS Independent Study	0
	Credit Hours	**2**
Sophomore Year		
1st Semester		
MILS 201	Foundations of Leadership *	2
MILS 403	Leadership Laboratory	0
	Credit Hours	**2**
2nd Semester		
MILS 202	Foundations of Leadership *	2
MILS 404	MILS Independent Study	0
	Credit Hours	**2**
Summer Semester		
MILS 300	Leadership Training Course	4
*Basic Leadership Training can be substituted for the 100 and 200 level in certain situations.		
	Credit Hours	**4**
Junior Year		
1st Semester		
MILS 301	Tactical Leadership	3
MILS 403	Leadership Laboratory	0
	Credit Hours	**3**
2nd Semester		
MILS 302	Applied Leadership	3
MILS 404	MILS Independent Study	0
	Credit Hours	**3**
Summer Semester		
MILS 403	Leadership Laboratory	0
MILS 404	MILS Independent Study	6
	Credit Hours	**6**
Senior Year		
1st Semester		
MILS 401	Developmental Leadership	3
MILS 403	Leadership Laboratory	0
	Credit Hours	**3**
2nd Semester		
MILS 402	Adaptive Leadership	3
MILS 404	MILS Independent Study	0
	Credit Hours	**3**
	Total Credit Hours	**30**

Requirements for Commissioning:

26 hours Military Science

3 hours American Military History - HIST 304

3 hours Written/Oral Communication Skills - GEEN 310

3 hours Computer Literacy 3 hours Human Behavior

Contact the Professor of Military Science for additional information.

NOTE: ROTC students have an option of regular schedule class time for HIST 164-15 and HPER 165-11

or selecting ROTC class time (0600-0650). See catalog for course schedule

Requirements for Commissioning:

26 hours Military Science

3 hours American Military History - HIST 304

3 hours Written/Oral Communication Skills - GEEN 310

3 hours Computer Literacy 3 hours Human Behavior

Contact the Professor of Military Science for additional information.

NOTE: ROTC students have an option of regular schedule class time for HIST 164-15 and HPER 165-11

or selecting ROTC class time (0600-0650). See catalog for course schedule

MILITARY SCIENCE

Course Descriptions

MILS 101 INTRODUCTION TO LEADERSHIP - 2 semester hours

A study of the organization of the Army and ROTC, with emphasis on the local program and career opportunities for the ROTC graduates. Significance of military courtesy, discipline, customs and traditions of the service.

MILS 102 INTRODUCTION TO LEADERSHIP - 2 semester hours

A study of the organization of the Army and ROTC, with emphasis on the local program and career opportunities for the ROTC graduates. Significance of military courtesy, discipline, customs and traditions of the service.A study of the military as a profession, the historical growth and development of the Army, stressing the magnitude of management implications. Development of leadership through practical exercises.

MILS 201 FOUNDATIONS OF LEADERSHIP - 2 semester hours

A study of the functions, duties, and responsibilities of junior leaders, with continuing development of leadership through practical exercises.

MILS 202 FOUNDATIONS OF LEADERSHIP - 2 semester hours

A study of basic military skills and operations of the basic military team, to include military geography, and the use of maps and aerial photographs.

MILS 301 TACTICAL LEADERSHIP - 3 semester hours

A course stressing the development of the small unit leader skills, basic military skills, physical fitness and squad and platoon tactics.

Prerequisites: MILS 101; MILS 102; MILS 201; MILS 202

MILS 302 APPLIED LEADERSHIP - 3 semester hours

A course stressing the development of military skills with emphasis placed upon physical fitness, map reading and communications. Includes down-proofing exercises, field training exercises, and drill and ceremonies.

Prerequisite: MILS 301

MILS 401 DEVELOPMENTAL LEADERSHIP - 3 semester hours

A study of officer-enlisted relationship, staffs procedures, military writing and correspondence and military justice.

Prerequisites: MILS 301; MILS 302

MILS 402 ADAPTIVE LEADERSHIP - 3 semester hours

Pre-commissioning seminars, study of Officer Evaluation Reports (OER's), Non-Commissioned Officer Evaluation Reports (NCOER's) division organizational structure, personal affairs, and unit administration are part of this course.

Prerequisites: MILS 301; MILS 302; (1) Students with previous military experience may be given semester hour for these prerequisites.

MILS 403 LEADERSHIP LABORATORY – 3 semester hours

Serves as learning laboratories for hands-on practical experiences. Training is supplementary and includes operations and tactics, land navigation, first aid, and general military subjects. The Army Physical Fitness Test (APFT) is administered to assess the state of physical development. (All cadets must participate in the 2- hour leadership lab.)

MILS 404 MILITARY SCIENCE INDEPENDENT STUDY - 3 to 6 semester hours

This internship is offered primarily to ROTC cadets to allow them to obtain practical work experience in their major under supervised conditions. The internship provides real-world application in Marketing, Political Science, Social Science, History, Physical Education, etc. majors with emphasis on Army or ROTC aspects.

MILS 30011 BASIC TRAINING COURSE - 4 semester hours

This 42-day leadership skills course at Fort Knox, KY, equates to Military Science 101, 102, 201, and 202. Student will be given the challenges of leadership, physical fitness, rappelling, drown-proofing, basic tactical maneuvering, use of basic Army weapons, map reading, compass course and basic military drill and ceremonies.

MILS 30311 LEADERSHIP DEVELOPMENT AND ASSESSMENT COURSE - 6 semester hours

**Internship semester hours can be used during any semester for 3 to 6 semester hours.

Department of Music

Chairperson: Dr. Samuel L. Rowley
Location: Davis Hall, Room 202
Contact Information: (804) 524-5302 | srowley@vsu.edu

Department Overview

With modern curricular programs, nationally recognized faculty and ensembles, engaging events, and active community outreach, the Department of Music provides students with unique and robust experiences and a foundation for professional opportunities and lifelong engagement in the field of music. The department supports several curricular paths for music majors and minors, as well as courses and ensembles for students of all majors. The **Bachelor of Arts (B.A.) in Music** degree has optional concentrations in **Jazz Studies** and **Music Production Technology**. The **Bachelor of Music (B.M.)** is a professional music degree with programs in **Music Education** and **Music Performance**. The department also offers **Minor in Music** and **Minor in Music Production Technology**.

Mission Statement

The mission of the Department of Music is to maintain a level of academic excellence established by the university and a level of artistic achievement competitive with national standards. The Department of Music promotes diverse musical experiences that cross-cultural boundaries, creative use of technologies, interaction with the community served by the university, and contact with the larger musical community. Through these experiences, students gain awareness of their role in the university, local, national, and global community, and use that awareness to develop personal goals for future efforts and achievements.

Student Organizations

Student-led organizations hosted by the Department of Music include:

- Kappa Kappa Psi National Honorary Band Fraternity
- Tau Beta Sigma National Honorary Band Sorority

- Sigma Alpha Iota International Music Fraternity for Women, Inc.
- Phi Mu Alpha Sinfonia Fraternity of America, Inc.
- National Association for Music Education (NAfME) Collegiate Chapter
- Audio Engineering Society Student Section

Accreditation Information

The Department of Music at Virginia State University is accredited by the National Association of Schools of Music to offer Bachelor of Arts in Music and Bachelor of Music degrees. The accreditation information can be found here: NASM (https://nasm.arts-accredit.org/directory-lists/accredited-institutions/search/?id=I0635)

Department Goals

The Department of Music aims:

- To provide students with performance opportunities that help them become effective soloists and ensemble musicians.
- To offer curricula at various levels appropriate to the needs of the students and purposes of each program according to national accreditation standards.
- To provide a variety of courses to meet the needs of non-music majors so that they may broaden their professional backgrounds and become more well-rounded individuals.
- To provide the University and community with professional services and expertise, thereby increasing their awareness and knowledge of the musical arts.
- To provide a strong background for students who pursue graduate study in music.

Program Listings

Bachelor of Music (B.M.)

The **Bachelor of Music** is a professional degree that prepares students for careers in music.

- The **Music Education major** prepares students for careers as music educators. The curriculum includes the core music curriculum and performance activities, music education courses and practicum experiences, professional education courses, and a semester of student teaching. Students who complete the curriculum and state requirements earn licensure to teach music in the Commonwealth of Virginia with one of two available endorsements: Instrumental PreK–12 and Vocal/Choral PreK–12.
- The **Performance major** prepares students for careers and advanced study in music performance, and is available in the applied areas of instrument (string, woodwind, brass, percussion), keyboard (piano, organ), and voice. Students complete eight semesters of applied music, three solo recitals, and participate in a variety of ensemble experiences. Proficiency requirements in this concentration include the development of advanced performance skills, knowledge of the key repertoire in the applied area, and pedagogical knowledge and skills required for studio teach in the applied area.

Bachelor of Arts (B.A.) in Music

The **Bachelor of Arts in Music** degree merges the study and practice of music with a broad range of exposure to the liberal arts. With a large component of open electives and a flexible senior project, the program is designed to allow students to create customized areas of focus inside and outside of music, as well the possibility of a minor or second major in another field. Graduates often pursue careers in the music industry or advanced study in music or related fields (such as music therapy or education), and some move into a different professional field, strengthened by the habits and ways of thinking developed in the study of music.

For students who want the flexibility of a liberal arts program, but with an added area of specialization, two areas of concentration are available. These take advantage of unique strengths of the department, allowing students to develop a strong foundation for future work in the two fields.

- The **Jazz Studies concentration** accomplishes this with a specialized curriculum (including jazz theory, improvisation, arranging, history), notable faculty and guest artists, and ample performance opportunities through jazz ensembles and small group settings.
- The **Music Production Technology concentration** accomplishes this through hands-on access to music production facilities, recording and production opportunities, a broad range of courses and specializations, access to music industry partners such as the Audio Engineering Society (AES) and the National Association of Music Merchants (NAMM), and access to industry certifications, including Pro Tools Specialist. After completing the core requirements, students have a wide array of options for elective courses, including advanced recording and production techniques, music and sound design for film and video games, and music business.

Minor in Music

The Department offers two different minors. Admission is contingent on faculty approval.

- The **Minor in Music** is ideal for students who want to participate in music department ensembles and activities while enhancing their knowledge, skills, and abilities in music through selected courses and applied study.
- The **Minor in Music Production Technology** consists of courses and electives that are available in the music major with the Music Production Technology concentration. While traditional music coursework and ensemble participation is available, they are not part of the requirements for this minor.

  Course Requirements for All Music Majors and Minors - Students must earn a grade of C or higher in all courses and electives taken to meet degree requirements.

Participation without a Major or Minor in Music - Students who are not in a music major or minor have opportunities to participate in Department of Music offerings, including ensembles and courses that are designed for the general student population.

Department of Music Performance Ensembles - Many ensembles are open to all students through an audition process. The ensembles See course descriptions for details.

- ***Concert Band***
- ***Wind Symphony***
- ***Marching Band (Trojan Explosion)***
- ***Pep Band***
- ***Symphony Orchestra***
- ***Jazz Ensemble***
- ***Concert Choir***
- ***Gospel Chorale***
- ***String Ensemble***
- ***Percussion Ensemble***
- ***Jazz Combo***
- ***Live Music Ensemble***
- ***Various small ensembles including chamber music and world music.***

Major(s)

- Music, Bachelor of Arts, (B.A.) (p. 328)
- Music, Bachelor of Arts with a Concentration in Jazz Studies (B.A.) (p. 330)
- Music, Bachelor of Arts with a Concentration in Production Technology (B.A.)
- Music Major, BM in Keyboard Performance (p. 336)
- Music Major, BM in Instrumental Performance (p. 334)
- Music Major, BM in Vocal/Choral Music with a Minor in Secondary Education PreK-12 (p. 339)
- Music Major, BM in Vocal Performance (p. 337)
- Music Major, BM in Instrumental Music with a Minor in Secondary Education PreK-12 (p. 333)
- Music Major, BM with a Concentration in Sound Recording Technology (p. 340)

Minor(s)

- Music Minor (p. 342)
- Minor in Music Production Technology (p. 342)

Music (MUSI)

MUSI 101. Applied Major Piano. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 102. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 103. Applied Major Piano. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected late intermediate to early advanced compositions from Classic, Romantic and 20th Century periods.

MUSI 104. Applied Major Piano. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Bach- Two Part Inventions Selected early Haydyn sonatas, Mozart sonatas, C.P.E. Bach, or Beethoven op. 49, 79. Selected compositions from the Romantic and/or 20th Century periods.

MUSI 105. Class Piano I. (1 Credit)
Development of basic keyboard skills and technique including introduction of scales, chords, arpeggios, harmonization, transposition, sight-reading, and simple solo repertoire. For music majors and minors whose principal instrument is not piano.

MUSI 106. Class Piano II. (1 Credit)
Continuing development of essential keyboard skills and technique including ability to play major and minor scales, harmonize and transpose in a variety of keys, and perform beginner to intermediate-level solo piano repertoire. Prerequisite: MUSI 105.

MUSI 111. Applied Voice Major. (2 Credits)
Advanced technical study and repertoire development. Representative literature from principal historical periods. Preparation for senior recital.

MUSI 112. Applied Voice Major. (2 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 113. Applied Voice Major. (3 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 114. Applied Voice Major. (3 Credits)
Basic fundamentals of singing: breathing, placement, agility. Several studies in Concone 50 lessons for the middle of the voice. Early Italian songs of the 16th and 17th centuries. Early English songs of John Dowland, Henry Purcell, etc.

MUSI 115. Voice Class I. (1 Credit)
The basics of vocal technique taught in a group lesson setting. Students learn correct vocal technique and have lab experience teaching beginning vocal techniques individually, in small groups, and in larger classes. This course is designed for music majors whose principal applied area is not voice. Fall semesters.

MUSI 116. Voice Class II. (1 Credit)
The basics of vocal technique taught in a group lesson setting, continued from MUSI 115. Students learn correct vocal technique and have lab experience teaching beginning vocal techniques individually, in small groups, and in larger classes. This course is designed for music majors whose principal applied area is not voice. Spring semesters. Prerequisite: MUSI 115.

MUSI 117. Seminar. (0 Credits)
Weekly meeting for all music majors at students enrolled in applied music courses perform as part of their applied course requirements. Seminar is also a time for faculty to communicate general information to students, for students to ask questions, and for faculty and guest performances and lectures.

MUSI 121. Applied Major Instrument. (2 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to tonal production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios. Embouchure development, tone production. Selected technical and solo material.

MUSI 122. Applied Major Instrument. (2 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to tonal production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios. Embouchure development, tone production. Selected technical and solo material.

MUSI 123. Applied Major Instrument. (3 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to ton al production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos. APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios .Embouchure development, tone production. Selected technical and solo material.

MUSI 124. Applied Major Instrument. (3 Credits)
Methods pertinent to development of good tone production, proper breath usage, embouchure information, articulation and musical interpretation in correlation with basic elements of musicianship. Selected technical and solo materials. APPLIED PERCUSSION Snare drum and timpani technique. Basic elements of musicianship applied to ton al production, rhythm, dynamics, sight-reading, tuning, pedaling, intonation, sticking, rudiments and control. Standard technical studies and solos. APPLIED STRINGS Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature. APPLIED WOODWINDS Basic musicianship and technical studies including studies which include major, minor, and chromatic scales and arpeggios .Embouchure development, tone production. Selected technical and solo material.

MUSI 141. Applied Minor Instrument. (1 Credit)
These courses are for applied minor instruction in the instrumental or vocal area. Prerequisite: Permission from the applied instructor.

MUSI 142. Applied Minor Instrument. (1 Credit)
These courses are for applied minor instruction in the instrumental or vocal area. Prerequisite: Permission from the applied instructor.

MUSI 153. Piano Fundamentals. (1 Credit)
Development of rudimentary skills and technique at the keyboard, including note-reading, keyboard basics, five-finger patterns, chords, and beginning level transposition, harmonization, and repertoire.

MUSI 154. Music Fundamentals. (3 Credits)
Introduction to the fundamental elements of music notation and tonal harmony, including pitch, meter, rhythm, intervals, keys, scales, chords, melody, cadence, and essential harmonic progression. This course is available to students who are not music majors upon availability.

MUSI 155. Technology for Musicians. (2 Credits)
Introduction to the fundamental elements of music notation and tonal harmony, including pitch, meter, rhythm, intervals, keys, scales, chords, melody, cadence, and essential harmonic progression. This course is available to students who are not music majors upon availability.

MUSI 181. Music Theory I. (3 Credits)
Students develop proficiency with the fundamentals of music notation and the essential elements of tonal music through listening, analysis, and written exercises. Corequisite: MUSI 183.

MUSI 182. Music Theory II. (3 Credits)
Continued development of proficiency with elements of tonal music through listening, analysis, and model composition (two-voice counterpoint and four-part harmonic progression). Prerequisite: MUSI 181, Corequisite MUSI 184.

MUSI 183. Aural Skills I. (1 Credit)
Solfege, rhythm syllabification, singing and recognition of simple diatonic melodic patterns and rhythmic patterns of increasing complexity, basic harmony applied to keyboard and dictation exercises. Corequisite: MUSI 181.

MUSI 184. Aural Skills II. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition in the context of diatonic harmony. Corequisite: MUSI 182.

MUSI 191. Methods & Techniques:Strings. (1 Credit)
Study of violin, viola, cello, and bass with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels. Fall semesters.

MUSI 192. Method & Techniques:Percussion. (1 Credit)
Study of percussion instruments and techniques with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels. Spring semesters.

MUSI 198. Jazz Appreciaton. (3 Credits)
This course is designed to provide the general student with knowledge and understanding of the history, structure and style of various types of jazz literature and artists.

MUSI 199. Music Appreciation. (3 Credits)
A study of music designed to provide the general student with knowledge and understanding of the history, structure and style of various types of music literature.

MUSI 200. Blacks in American Music. (3 Credits)
A humanities course concerned with the full range of Black contributions to music from African heritage to the present day.

MUSI 201. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods.

MUSI 202. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major and Minor for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods.

MUSI 203. Musicianship for Keybrd Maj I. (1 Credit)
Development of basic musicianship skills and technique including, harmonization, transposition, sight-reading, chord progressions, and advanced scales and arpeggios. For music majors and minors whose principal instrument is piano.

MUSI 204. Musicianship for Keybrd Maj II. (1 Credit)
Continuing development of essential musicianship skills including chord progressions, transposition, harmonization, sight-reading, and advanced scales and arpeggios. For music majors and minors whose principal instrument is piano. Prerequisite: MUSI 203.

MUSI 205. Class Piano III. (1 Credit)
Continuing development of essential keyboard skills technique including major and minor scales and arpeggios, modal harmonization and harmonization utilizing a variety of seventh chords, transposition and sight-reading of vocal and ensemble scores utilizing transposing instruments, and learning intermediate level solo piano repertoire. Prerequisite: MUSI 106.

MUSI 206. Class Piano IV. (1 Credit)
Development of essential keyboard skills and technique for professional competency in keyboard playing. Preparation for the piano proficiency examination, including major, minor scales and arpeggios, harmonization utilizing chromatic harmonies, ability to transpose and read open score vocal and instrumental literature at the keyboard up to three staves, and the preparation and performance of intermediate/early advanced piano repertoire. Prerequisite: MUSI 205.

MUSI 208. Jazz Piano I. (2 Credits)
This course serves both Jazz Studies students and Keyboard Performance students, with the purpose of the development of keyboard skills for jazz with emphasis on traditional and extended harmony and voicing applicable to basic performance, accompaniment, composition, and sight-reading. Fall semesters.

MUSI 209. Jazz Piano II. (2 Credits)
Continued development of keyboard skills for jazz with emphasis on traditional and extended harmony and voicing applicable to basic performance, accompaniment, composition, and sight-reading. Spring semesters. Prerequisite: MUSI 208.

MUSI 210. Piano Proficiency. (0 Credits)
The piano proficiency assessment is a demonstration of the student's progress in functional keyboard study through the curriculum of Class Piano I–IV (and Keyboard Musicianship for students in applied piano). This assessment provides program assessment as well as data for the sophomore review of satisfactory progress.

MUSI 211. Applied Voice Major. (2 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German Lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 212. Applied Voice Major. (2 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German Lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 213. Applied Voice Major. (3 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 214. Applied Voice Major. (3 Credits)
Continuation of basic fundamentals: breathing, placement, agility, diction. Scales (major and minor) Concone and Panofka. Addition of German lieder of Schubert and Schumann. Early operatic arias in Italian.

MUSI 215. Voice Class. (1 Credit)
This course is designed for the non-voice major, i.e., keyboard, band and orchestral instrumental majors. The vocal mechanism and performance practices, including expression and interpretation through vocal literature (to include French and German songs) will be discussed. Prerequisite: MUSI 116.

MUSI 216. Voice Class. (1 Credit)
This course is designed for the non-voice major, i.e., keyboard, band and orchestral instrumental majors and is a continuation of MUSI 215 VOICE CLASS. Prerequisite: MUSI 215.

MUSI 221. Applied Major Instrument. (2 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios. Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance; tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 222. Applied Major Instrument. (2 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios. Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance; tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 223. Appled Major Instrument. (3 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios.Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance, tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 224. Applied Major Instrument. (3 Credits)
Continuation of the study of basic musicianship, embouchure development, intervals, scales and study of arpeggios.Articulations, transposition and selected technical studies. Standard orchestral, solo and ensemble literature. APPLIED PERCUSSION Continuation of snare drum, timpani and basic musicianship studies. Study xylophone, marimba, bass drum, cymbals, traps and other mallet instruments. Selected technical, solo and ensemble literature. APPLIED STRINGS Application of technique to performance, tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature. APPLIED WOODWINDS Continuation of principles and techniques studied previous year including all scales, intervals, arpeggios, characteristic tone production, articulations, rhythms, sight-reading, standard technical, solo and ensemble material.

MUSI 235. Jazz Improvisation I. (2 Credits)
This performance-centered class introduces basic skills essential to effective jazz improvisation, with emphasis on developing a vocabulary of scales and patterns, ear training, reading and listening analysis, playing in various styles, and effective practice habits. Fall semesters. Corequisite: MUSI 297.

MUSI 236. Jazz Improvisation II. (2 Credits)
This performance-centered class builds skills essential to effective jazz improvisation, with emphasis on connecting patterns to melodic and harmonic structure, motivic development, building a solo or arrangement, transcription, and extending to more styles. Spring semesters. Prerequisite: MUSI 235, Corequisite: MUSI 298.

MUSI 237. Jazz Improvisation III. (2 Credits)
In this advanced jazz improvisation course, students develop skills further to craft and perform compelling improvisation and engage with others in improvisatory jazz music making. Fall semesters. Prerequisites: MUSI 298, MUSI 236.

MUSI 238. Jazz Improvisation IV. (2 Credits)
A study of the history, theories, and application of jazz improvisation via literature review, transcription, and performance toward the development of the student's unique individual improvisational voice.

MUSI 241. Applied Minor Instrument. (1 Credit)
These courses continue applied minor instruction in the instrumental or vocal area.

MUSI 242. Applied Minor Instrument. (1 Credit)
These courses continue applied minor instruction in the instrumental or vocal area.

MUSI 253. Instrumental Survey. (1 Credit)
A course designed to acquaint majors with the historical development, nomenclature, methods of tone production, transpositions, and basic instructional methods of the brass, percussion, string, and woodwind instruments.

MUSI 258. Vocal Diction I. (1 Credit)
A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. For music education majors. Fall semesters.

MUSI 259. Vocal Diction II. (1 Credit)
A study of the International Phonetic Alphabet (IPA) and its application to singing in French, German, and other languages. For music education majors. Spring semesters. Prerequisite: MUSI 258.

MUSI 280. Sophomore Recital. (0 Credits)
A fifteen-minute Sophomore Recital is required of all music majors in every degree program and concentration. It provides a snapshot of student progress in the first four semesters of applied study and serves as a program assessment point and provides data for the sophomore review of satisfactory progress. The student consults with the applied instructor to prepare for and schedule the recital. Concurrent with applied study (MUSA 1xx)

MUSI 281. Music Theory III. (3 Credits)
Continued development of proficiency with the structures of tonal music, including chromatic harmony and essentials of classical form, through listening, analysis, and model composition. Prerequisite: MUSI 182, Corequisite: MUSI 283.

MUSI 282. Music Theory IV. (3 Credits)
This course builds on the development of proficiency with the structures of tonal music, including large forms and advanced analytic techniques, and helps students develop a working knowledge of the structures of post-tonal music. Prerequisite: MUSI 281, Corequisite: MUSI 284.

MUSI 283. Aural Skills III. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition in the context of tonal harmony, with the addition of chromatic harmony, more complex melodic, metric, and rhythmic contexts, and recognition of formal characteristics. Prerequisite: MUSI 184, Corequisite: MUSI 281.

MUSI 284. Aural Skills IV. (1 Credit)
Continued development of sight-singing, dictation, keyboard skills, and aural recognition using a full complement of chromatic harmony with the addition of modulation, recognition of formal characteristics, and performance/recognition of common extended harmonies and non-tertian structures.

MUSI 285. Music History I. (3 Credits)
A survey of the development of Western music from antiquity through the Baroque period. Fall semesters. Prerequisite: MUSI 182.

MUSI 286. Music History II. (3 Credits)
A survey of Western music from the pre-Classical era through the Romantic era. Spring semesters. Prerequisite: MUSI 182, MUSI 285.

MUSI 287. Elementary Conducting. (2 Credits)
The basic principles of conducting vocal/instrumental groups. Laboratory experience with vocal and instrumental groups is required. Spring semesters. Prerequisite: MUSI 281.

MUSI 288. Vocal Diction I. (2 Credits)
A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. For Voice Performance majors.

MUSI 289. Vocal Diction II. (2 Credits)
A study of the International Phonetic Alphabet (IPA) and its application to singing in French, German and other languages. For Voice Performance majors.

MUSI 290. Music History III. (3 Credits)
A survey of Western Music beginning with the 20th Century and continuing to contemporary times.

MUSI 292. Introd to the Music Industry. (2 Credits)
An overview of the Music Industry. Areas of study will include industry history, culture, and current career options.

MUSI 294. Introd to the Recording Studio. (3 Credits)
An overview of Modern Recording Production. Topics will include an introduction to digital audio technology, sequencing, the use of MIDI, the application of computers and MIDI technology, using Music Writing Software, and the basics of Sampling and Synthesis. Hands-on experience required. For Music Majors Only.

MUSI 294L. Introd to the Recording Studio. (1 Credit)
MUSI 294L Introduction to the Recording Studio - 1 semester hour Spring This Lab introduces basic mixing, signal flow and signal processing techniques. Students will be given weekly hands on projects. The content of the lab will coincide with the lecture presentations. Prerequisite(s): MUSI 292 Corequisite(s): MUSI 294.

MUSI 295. Methods & Techniques:Woodwinds. (1 Credit)
Study of woodwind instruments with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels.

MUSI 296. Methods & Techniques: Brass. (1 Credit)
Study of brass instruments with an emphasis on developing the skills necessary for teaching the instruments on elementary and intermediate levels.

MUSI 297. Jazz Theory I. (3 Credits)
The study of the rudiments of music as idiomatically applied to jazz, extending beyond the conventions of common-practice tertain harmony, to include extended harmonic tensions, quartal harmony, modal harmony, use of altered scales, and non-traditional harmonic progression.

MUSI 298. Jazz Theory II. (3 Credits)
Continuation of jazz harmony concepts from MUSI 296 and 285. This course includes music of a wider variety of styles and levels of complexity. More time is spent with analysis, transcription, reharmonization, and model composition.

MUSI 301. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Select repertoire and begin preparation of Senior Recital.

MUSI 302. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Select repertoire and begin preparation of Senior Recital.

MUSI 303. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 304. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 305. Introduction to Live Sound. (3 Credits)
MUSI 305 - Introduction to Live Sound - 3 semester hours Spring This course introduces the concepts and practices of live sound engineering, including analog console functionality, system preparation, system management and operation. Additional focus on microphone techniques, monitoring and mixing for live sound. Prerequisite(s): MUSI 294 or COMM 331.

MUSI 308. Jazz Composition & Arranging I. (2 Credits)
Writing and arranging for small jazz groups, and introductory exercises in writing for larger ensembles.

MUSI 309. Jazz Composition &Arranging II. (2 Credits)
Continuation of MUSI 208, writing and arranging for large jazz groups and completing larger projects.

MUSI 311. Applied Voice Major. (2 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. Preparation for senior recital.

MUSI 312. Applied Voice Major. (2 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. Preparation for senior recital.

MUSI 313. Applied Voice Major. (3 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. In MUSI 314 a junior recital is required. A Jury will be heard six weeks before public performance date for approval.

MUSI 314. Applied Voice Major. (3 Credits)
American art songs of John Duke, Richard Hageman, Ernest Charles and others. Continuation of Schumann and Schubert songs. Study of Mozart arias. In MUSI 314 a junior recital is required. A Jury will be heard six weeks before public performance date for approval.

MUSI 315. Pro Tools 101. (3 Credits)
This course provides the foundations for basic recording, mixing and editing within the Pro Tools environment. Areas of focus include building multi- track sessions, recording and importing audio and MIDI, editing session media, navigating sessions and arranging media on tracks, and using basic processing and mixing techniques to finalize a production.

MUSI 316. Pro Tools 110. (3 Credits)
This course expands upon the basic principles taught in Pro Tools 101 and introduces the core concepts and techniques students need to competently operate a Pro Tools system running mid-sized sessions. Students learn to build sessions designed for commercial purposes and improve the results of their recording, editing, and mixing efforts and gain experience setting up sessions, importing media, working with digital video, spotting sound effects, using loop recording and MIDI Merge techniques, working with virtual instruments, warping with Elastic Audio, applying Real-Time Properties, creating clip loops, applying signal processing, using automation, and using sub mixes and track groups to simplify a final mix.

MUSI 317. Seminar. (0 Credits)
Weekly meeting for all music majors at students enrolled in applied music courses perform as part of their applied course requirements. Seminar is also a time for faculty to communicate general information to students, for students to ask questions, and for faculty and guest performances and lectures.

MUSI 321. Applied Major Instrument. (2 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Preparation for senior recital. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Preparation for senior recital. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Preparation for senior recital. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourths, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo, ensemble and orchestral literature. Preparation for senior recital.

MUSI 322. Applied Major Instrument. (2 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Preparation for senior recital. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Preparation for senior recital. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Preparation for senior recital. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourths, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo, ensemble and orchestral literature. Preparation for senior recital.

MUSI 323. Applied Major Instrument. (3 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Junior recital required in MUSI 324. A Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourth, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo ensemble and orchestral literature. Junior recital is required for MUSI 324. A Jury will be heard six weeks before public performance date for approval.

MUSI 324. Applied Major Instrument. (3 Credits)
APPLIED BRASS Continuation of previous studies. More intensive study of stylistic interpretative, technique, transposition and standard solo, ensemble and orchestral literature for brasses from principal historical periods. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED PERCUSSION Continuation and expansion of prior technical studies, solos and ensemble literature to include more advanced studies, multi-percussion techniques and new notational system. Junior recital required in MUSI 324. A Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Continuation of technical studies, expansion of repertoire and development of performance skills. Junior recital is required in MUSI 324. A Jury will be heard six weeks before public performance date for approval. APPLIED WOODWINDS More advanced technical study and repertoire development. Scales in thirds, fourth, and fifths, extended arpeggios, articulatory studies, range and dynamic development. Representative solo ensemble and orchestral literature. Junior recital is required for MUSI 324. A Jury will be heard six weeks before public performance date for approval.

MUSI 325. Applied Studio Techniques. (3 Credits)
MUSI 325 - Applied Studio Techniques - 1 semester hour Fall/Spring Investigates audio fundamentals, microphone techniques, signal flow, common recording technologies, and studio operation procedures. Prerequisite(s): COMM 332/MUSI 305 Corequisite(s): MUSI 325L.

MUSI 325L. Applied Studio Techniques Lab. (2 Credits)
MUSI 325L Applied Studio Techniques Laboratory - 2 semester hours Fall/Spring Students learn microphone, console, and session management techniques by recording live performers. In personal labs, students hon mixing and recording skills. Prerequisite(s): COMM 332/ MUSI 305 Corequisite(s): MUSI 325.

MUSI 354. Marching Band Techniques. (2 Credits)
A comprehensive study of marching band show design, drill, writing, charting techniques, marching band teaching techniques, rehearsal organization, selecting and purchase of equipment and materials, proper administrative organization, band travel planning and public relations.

MUSI 357. Electronic Music. (3 Credits)
An introduction to synthesizer programming, sampling, audio processing, and MIDI with a focus on history, theory, and application. Coursework includes synthesizer programming with virtual instruments, basic sampling techniques with software samplers, audio manipulation techniques within the context of contemporary music production, and MIDI sequencing within digital audio workstations (DAWs).

MUSI 358. Electronic Music Laboratory. (0 Credits)

MUSI 360. Fund of Sound Des for Film&Vid. (3 Credits)
Students learn to create and implement sound design elements in film and video game productions. Students learn basic sound effects capturing, processing, editing, and implementation techniques within Film and TV productions as well as game engines such as Unreal and Unity. Students also learn workflow structure, file management, and how to prepare deliverables. Prerequisite MUSI 357 or instructor approval.

MUSI 373. Opera & Musical Theatre Wrkshp. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 374. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 377. History of Music Technology. (2 Credits)
An overview of history of electronic music and music technology. Topics will include synthesizers, oscillators, envelope generators, basics of electronic sound production, waveform theory, modulation theory, basics of acoustics, and more advanced topics in electronic music synthesis. Hands-on experience required. Prerequisites: MUSI 181, MUSI 182, MUSI 183, MUSI 184, MUSI 292, and MUSI 294.

MUSI 378. Music Comp for Film & Video Ga. (3 Credits)
This course is designed to develop foundational music composition skills based on the needs of visual and interactive media productions. Topic include working with video files in a DAW, syncing music compositions to picture, creating looping compositions for video games, MIDI based compositional techniques with synths and virtual orchestral instruments, and mixing virtual instrument compositions.

MUSI 381. Counterpoint. (3 Credits)
This course provides survey of contrapuntal techniques in chronological sequence, with focus on composition exercises and analysis. More detailed emphasis is placed on sixteenth-century modal counterpoint and eighteenth-century fugue.

MUSI 384. Jazz History. (2 Credits)
The study of the history of jazz from its origins in slave songs (spirituals and work songs), Western classic music (from monophony through common practice and 20th century music), and other ethnic music.

MUSI 385. Vocal Literature I. (2 Credits)
A survey of the art song in historical perspective. A detailed analysis and study of selected songs are included in order to develop a sense of style and application for the art of singing.

MUSI 386. Arranging. (2 Credits)
Instrumentation and arranging with particular focus on music education settings.

MUSI 388. Adv Instrumental Conducting. (2 Credits)
This course will give students the knowledge, tools, insights and opportunity to develop and refine individual conducting skills. During the course students will cultivate a comprehensive understanding of effective and efficient rehearsal techniques, verbal and non-verbal communication, score study and analysis, artistic gestures, and meaningful rehearsal strategies.

MUSI 389. Advanced Choral Conducting. (2 Credits)
Conducting techniques with particular attention to interpretation, techniques of choral conducting, tempo, diction, nuance, seating of choral groups, and the testing and auditioning of vocalists. Prerequisite: MUSI 287.

MUSI 390. Sample Based Production. (3 Credits)
Students learn and apply sampling technology used in genres such as Hip-Hop, Electronic Dance Music, and Pop. Topics include building arrangements with samples, sound design using samples, creating custom sample-based software instruments, and performing live with samplers and electronic music controllers.

MUSI 390L. Sample Based Production Lab. (1 Credit)
MUSI 390L Sample Based Production Laboratory - 1 semester hour Fall This lab introduces basic techniques when working with sampling hardware and software. The skills learned in this class will help prepare the student for work in the field of contemporary audio and music production. Prerequisite(s): MUSI 357 Electronic Music Corequisite(s): MUSI 390.

MUSI 393. Methods & Practicum in Elem ME. (3 Credits)
Study of current methods and materials of music education at the elementary level. Orff, Dalcroze, Kodaly, Gordon, and other current music education approaches for the young child are discussed, observed, and demonstrated. An intensive directed practicum is a fundamental aspect of this course.

MUSI 396. 20th Century Music. (2 Credits)
An overview of art music in the 20th Century, concentrating on the ways in which the different styles have developed and interacted throughout the century, the knowledge of major composers and their most prominent style characteristics.

MUSI 397. Music In The Romantic Period. (2 Credits)
A study of the music literature of the Romantic Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 398. Music In The Classical Period. (2 Credits)
A study of the music literature of the Classical Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 399. Music In The Baroque Period. (2 Credits)
A study of the music literature of the Baroque Period in historical perspective. Emphasis will be placed on major composers, genres, forms, styles, and performance mediums. Prerequisite: MUSI 290.

MUSI 401. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 for Arpeggios- Major, Minor, and Diminished and Dominant 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation and presentation of Junior Recital (required to pass MUSI 304).

MUSI 402. Applied Piano Major. (2 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods. Preparation of Senior Recital.

MUSI 403. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods, including work with a piano concerto. . Preparation of Senior Recital.

MUSI 404. Applied Piano Major. (3 Credits)
Major Scales- 4 octaves, hands together in parallel motion Minor Scales- 4 octaves, hands together in parallel motion, 3 forms Arpeggios- Major, Minor, and Diminished 7ths for 4 octaves, hands together Chromatic scale- 4 octaves, hands together in parallel motion Selected compositions from the Baroque, Classical, Romantic and 20th Century periods, including work with a piano concerto. . Preparation of Senior Recital.

MUSI 405. Advanced Media Sound Design. (3 Credits)
Students build upon skills learned in MUSI 360. Students explore concepts of immersive audio formats including surround sound, Ambisonics, and Dolby Atmos. This course also introduces basic use of game engines such as Unity, and the basics of audio middleware applications for game development such as Wwise and FMOD.

MUSI 411. Applied Voice Major. (2 Credits)
Continuation of basic voice study. Arias from both opera and oratorio.

MUSI 412. Applied Voice Major. (2 Credits)
Continuation of basic voice study. Arias from both opera and oratorio.

MUSI 413. Applied Voice Major. (3 Credits)
Continuation of basic voice study. Arias from both opera and oratorio. Preparation for senior recital.

MUSI 415. Music Business. (3 Credits)
MUSI 415 Music Business - 3 semester hours Spring Music business surveys the changing landscape of the modern music industry. Students entering into a career in sound production and technology should be aware of the music business trends, practice and basic legalities. Topics will include copyright law, royalties, entrepreneurship, and streaming. Prerequisite(s): COMM 338 and COMM 338L Fundamentals of Post or by permission from Instructor Corequisite(s):

MUSI 421. Applied Major Instrument. (2 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills.

MUSI 422. Applied Major Instrument. (2 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills.

MUSI 423. Applied Major Instrument. (3 Credits)
APPLIED BRASS Advanced technical study and repertoire development. Representative literature from principal historical periods. Preparation for senior recital. APPLIED STRINGS Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills. APPLIED PERCUSSION Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. Preparation for senior recital. APPLIED WOODWINDS Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills. Preparation for senior recital.

MUSI 424. Senior Recital. (3 Credits)
APPLIED BRASS Preparation and presentation of senior recital. Senior recital Jury will be heard by voice faculty six weeks before public performance date for approval. APPLIED PERCUSSION Preparation and presentation of senior recital. Senior recital Jury will be heard six weeks prior to public performance date for approval. APPLIED STRINGS Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. APPLIED WOODWINDS Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval.

MUSI 425. Advanced Mixing. (3 Credits)
This course extends mixing theory, and the vocabulary of Fundaments of Mixing, by examining advanced signal processing techniques in a mixing context. In addition, the topics of data backup, the mastering process, and master recording delivery will be discussed. Prerequisite(s): MUSI 325.

MUSI 425L. Advanced Mixing Lab. (1 Credit)
MUSI 425L Advanced Mixing - 1 semester hour Spring This lab applies advanced mixing techniques. Mixing techniques include working with large format sessions, parallel processing, mix templates, and mastering. Prerequisite(s): COMM 432 Applied Studio Techniques Corequisite(s): MUSI 425.

MUSI 426. Advanced Music Production. (3 Credits)
Students apply recording, mixing, and mastering techniques. Students are responsible for selecting an artist, helping them prepare and record their material, then mix, master, and deliver results in a production-ready package.

MUSI 428. Music Industry Internship. (3 Credits)
An internship in the music industry field. Students must work a total of 120 Hours within the semester taken.

MUSI 431. Piano Literature I. (2 Credits)
A survey of the solo and concerto literature for the piano, beginning with its antecedents in the harpsichord/clavichord repertoire and extending through the piano music of Beethoven and Schubert.

MUSI 433. Piano Pedagogy I. (2 Credits)
An introduction to the art of teaching the piano, including surveys of individual and group beginning methods, introduction to elementary repertoire, piano teaching as a business, and practical experience in piano teaching. Required for Keyboard Performance majors; recommended for non-majors who wish to teach piano.

MUSI 473. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 474. Opera Workshop. (1 Credit)
Designed to provide experiences in the performance of opera and opera scenes.

MUSI 475. Special Topics in Music. (2 Credits)
A temporary or topic-specific course for exploration of specific or advanced topics in music of relevance to upper-level music majors.

MUSI 478. Student Teaching in Music. (3 Credits)

MUSI 479. International Jazz Studies. (3 Credits)
A course on the influence of jazz--as a uniquely American art form--in other cultures across the globe as a musical staple of performance and musicology in international performance and education at all levels.

MUSI 480. Senior Recital. (0 Credits)
A 50 to 60-minute Senior Recital is required of students in the Performance concentration of the Bachelor of Music degree. It is normally presented during the last semester of applied study. The Senior Recital represents a culmination of student progress in applied study through the degree program. The student consults with the applied instructor in planning the recital. Planning should begin in the last part of the third year of study. Students may not register for Senior Recital if they have not passed MUSI 210 Piano Proficiency. Prerequisite: MUSI 210, Corequisite: MUSA 3xx.

MUSI 481. Vocal Literature II. (2 Credits)
Introduction to vocal literature, including opera, oratorio, art song, and other forms.

MUSI 482. Instrumental Pedagogy. (2 Credits)
Designed to explore current and historical pedagogical approaches to the teaching of band and orchestral instruments.

MUSI 483. Vocal Pedagogy. (2 Credits)
Designed to explore the current and historical pedagogical approaches to the teaching of vocal music.

MUSI 484. Piano Pedagogy. (2 Credits)
An introduction to the art of teaching the piano, including surveys of individual and group beginning methods, introduction to intermediate repertoire, history of piano technique, and piano teaching as a business. Required for Piano Performance Majors. Recommended for non-majors who wish to teach piano.

MUSI 485. Orchestration. (2 Credits)
Continued study of vocal literature, including opera, oratorio, art song, and other forms.

MUSI 486. Piano Literature. (2 Credits)
A survey of the solo and concerto literature for the piano beginning with its antecedents in the harpsichord repertoire and extending to the major trends and works of the twentieth century.

MUSI 487. Art of Accompanying. (1 Credit)
Preparation for collaborative pianism in duo and chamber music settings. Repeatable, three semesters required for keyboard performance majors.

MUSI 489. Senior Project Preparation. (1 Credit)
For students in the Bachelor of Arts in Music program who are preparing a capstone project, this course provides the means to work with the project advisor. It should be taken the semester before and the semester of the completion and presentation of the project. In the semester of project completion and presentation, the student must also register for MUSI 490 Senior Research Project.

MUSI 490. Senior Project. (0 Credits)
The senior research project is a capstone artifact in the B.A. Music Research concentration. This assessment provides final program assessment for the Music Research concentration. This course uses pass/fail grading.

MUSI 491. Methods & Practicum in 2nd IME. (3 Credits)
Designed for instrumental music education majors, this course will provide students with an understanding of resources and techniques for the proper supervision and delivery of instruction in the instrumental music program. Emphasis will also be placed on rehearsal management, organization, personnel, scheduling, knowledge of literature, pedagogy, and other important aspects of running an effective secondary instrumental music program. The practicum aspect of the course is designed to provide instrumental music education students the opportunity to observe and teach at the middle school and high school level in a public-school instrumental classroom.

MUSI 493. Methods & Practicum in 2nd CME. (3 Credits)
Designed for choral music education majors, this course will provide students with an understanding of resources and techniques for the proper supervision and delivery of instruction in the choral music program. Emphasis will also be placed on rehearsal management, organization, personnel, scheduling, knowledge of literature, pedagogy, and other important aspects of running an effective secondary choral music program. The practicum aspect of course is designed is designed to provide choral music education students the opportunity to observe and teach at the middle school and high school level in a public-school choral classroom.

MUSI 495. Vocal Literature. (2 Credits)
The introduction of representative solo and ensemble literature for voice.

MUSI 496. Instrumental Literature. (2 Credits)
A course designed for the instrumental music major which introduces representative literature for the instruments of the orchestra and band.

MUSI 497. Studio Seminar. (2 Credits)
An advanced studio practicum and capstone course allowing students to fine tune recordings and media content they have created throughout their time in the Recording Arts program. Students organize a portfolio and website of their work which they present in a recital lecture/performance.

MUSI 499. Senior Recital. (0 Credits)
A 30 to 40-minute Senior Recital represents a culmination of student progress in applied study through the degree program. The student consults with the applied instructor in planning the recital. Planning should begin in the last part of the third year of study. This course uses pass/fail grading. Students may not register for Senior Recital if they have not passed MUSI 210 Piano Proficiency.

Music Major, Bachelor of Arts (B.A.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3

MUSI 105	Class Piano Applied Keyboard students take MUSI 115 & 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
GE Wellness/Health Electives (p. 147)		2
MUSI 106	Class Piano Applied Keyboard students take MUSI 115 & 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
MUSI 118		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
Sophomore Year		
1st Semester		
GE History Electives (p. 146)		3
Restricted Elective	GE COURSE	3
MUSI 205	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 281	Form And Analysis	3
MUSI 283	Sight Sing & Ear Train	1
MUSI 217		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**14**
2nd Semester		
GE Science Electives (p. 147)		4
Unrestricted Elective		3
MUSI 200	Blacks in American Music	3
MUSI 206	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 210	Piano Proficiency	0
MUSI 284	Aural Skills IV	1
MUSI 218		0
MUSI 280	Sophomore Recital	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**15**
Junior Year		
1st Semester		
GE Literature Electives (p. 147)		3
Restricted Elective	GE COURSE	3
Restricted Elective	MUSIC COURSE	3
MUSI 285	Music History	3
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**15**
2nd Semester		
GE Social Science Electives (p. 147)		3
Restricted Elective	GE COURSE	3
Unrestricted Elective		2
MUSI 286	Music History	3
MUSI 287	Elementary Conducting	2
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**16**
Senior Year		
1st Semester		
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		2
Unrestricted Elective		2
Restricted Elective	MUSIC COURSE	3
MUSI 489	Senior Thesis	1
	Credit Hours	**14**
2nd Semester		
GE Global Studies Electives (p. 146)		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Restricted Elective	MUSIC COURSE	3
MUSI 489	Senior Thesis	1
MUSI 490	Senior Research Project	0
	Credit Hours	**16**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1

MUSI 206	Class Piano IV	1
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSI 287	Elementary Conducting	2
MUSIC HISTORY COURSE	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 489 & 489	Senior Project Preparation and Senior Project Preparation (TAKEN TWO SEMESTERS)	2
MUSI 490	Senior Project	0
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	
MUSI 280	Sophomore Recital	
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Arts with a Concentration in Jazz Studies (B.A.)

Course	Title	Credit Hours
Freshman Year		
1st Semester		
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano I Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 181	Music Theory I	3
MUSI 183	Aural Skills I	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
HPER 170	Health And Wellness	2
MUSI 106	Class Piano II Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 182	Music Theory II	3
MUSI 184	Aural Skills II	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
Sophomore Year		
1st Semester		
GE History Electives (p. 146)		3
Restricted Elective	GE COURSE	3
MUSI 155	Technology for Musicians	2
MUSI 205	Class Piano III Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 235	Jazz Improvisation I	2
MUSI 297	Jazz Theory I	3
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**17**
2nd Semester		
GE Science Electives (p. 147)		4
MUSI 200	Blacks in American Music	3
MUSI 206	Class Piano IV Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 210	Piano Proficiency	0
MUSI 236	Jazz Improvisation II	2
MUSI 298	Jazz Theory II	3
MUSI 117	Seminar	0
MUSI 280	Sophomore Recital	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
Junior Year		
1st Semester		
GE Literature Electives (p. 147)		3
Restricted Elective	GE COURSE	3
Restricted Elective	JAZZ STUDIES COURSE	2
MUSI 285	Music History I	3
MUSI 308	Jazz Composition & Arranging I	2
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
GE Social Science Electives (p. 147)		3
Restricted Elective	GE COURSE	3
Unrestricted Elective		3
MUSI 286	Music History II	3
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**15**

Senior Year		
1st Semester		
GE Global Studies Electives (p. 146)		3
Unrestricted Elective		3
Unrestricted Elective		3
Restricted Elective	JAZZ STUDIES COURSE	2
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**14**
2nd Semester		
Restricted Elective	GE COURSE	3
Unrestricted Elective		3
Unrestricted Elective		2
MUSI 384	Jazz History	2
MUSI 317	Seminar	0
MUSI 499	Senior Recital	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**13**
	Total Credit Hours	**121**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 155	Technology for Musicians	2
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
or MUSI 203	Musicianship for Keybrd Maj I	
MUSI 206	Class Piano IV	1
or MUSI 204	Musicianship for Keybrd Maj II	
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSIC HISTORY COURSES	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 287	Elementary Conducting	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	
MUSI 280	Sophomore Recital	
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Arts with a Concentration in Production Technology (B.A.)

Course	Title	Credit Hours
Freshman Year		
1st Semester		
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano I Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 181	Music Theory I	3
MUSI 183	Aural Skills I	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2

MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
MUSI 106	Class Piano II Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 182	Music Theory II	3
MUSI 184	Aural Skills II	1
MUSI 292	Introd to the Music Industry	2
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
Sophomore Year		
1st Semester		
GE History Electives (p. 146)		3
GE Wellness/Health Electives (p. 147)		2
MUSI 205	Class Piano III Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 294	Introd to the Recording Studio	3
MUSI 294L	Introd to the Recording Studio	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**17**
2nd Semester		
MUSI 200	Blacks in American Music	3
MUSI 206	Class Piano IV Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 210	Piano Proficiency	0
MUSI 284	Aural Skills IV	1
MUSI 305	Introduction to Live Sound	3
MUSI 315	Pro Tools 101	3
MUSI 117	Seminar	0
MUSI 208	Jazz Piano I	2
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
Junior Year		
1st Semester		
GE Literature Electives (p. 147)		3
GE Social Science Electives (p. 147)		3
Restricted Elective	GE COURSE	3
Unrestricted Elective		3
MUSI 357	Electronic Music	3
MUSE 345	Recording Studio Musicianship	1
	Credit Hours	**16**
2nd Semester		
GE Science Electives (p. 147)		4
Restricted Elective	GE COURSE	3
Restricted Elective	MUS PROD TECH COURSE	3
MUSI 285	Music History I	3
MUSE 345	Recording Studio Musicianship	1
	Credit Hours	**14**
Senior Year		
1st Semester		
GE Global Studies Electives (p. 146)		
Unrestricted Elective		3
Unrestricted Elective		3
MUSI 286 or MUSI 290	Music History II or Music History III	3
	Credit Hours	**12**
2nd Semester		
Restricted Elective	GE COURSE	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		2
Restricted Elective	MUS PROD TECH COURSE	3
MUSI 497	Studio Seminar	2
	Credit Hours	**16**
	Total Credit Hours	**121**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
MUSI 106	Class Piano II	1
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
MUSI 206	Class Piano IV	1
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSI 287	Elementary Conducting	2
MUSIC HISTORY COURSE	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	

MUSI 489 & 489	Senior Project Preparation and Senior Project Preparation (TAKEN TWO SEMESTERS)	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSE (ENSEMBLE) Courses (Min. 4 semesters major ensemble, 2 semesters small ensemble)		
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	0
MUSI 280	Sophomore Recital	0
MUSA (APPLIED STUDY) Courses (2 credit hours, 6 semesters)		
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Music with a Concentration in Music Education (B.M.)

Freshman Year

1st Semester		Credit Hours
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 155	Technology for Musicians	2
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
EDUC 200	Technology in the Classroom	3
MUSI 106	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
MUSI 118		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**17**

Sophomore Year

1st Semester		
GE History Electives (p. 146)		3
GE Literature Electives (p. 147)		3
EDUC 201	Seminar in Education	3
MUSI 191	Strings	1
MUSI 205	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 281	Form And Analysis	3
MUSI 217		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**17**
2nd Semester		
GE Wellness/Health Electives (p. 147)		2
EDUC 202	Foundations of Education	3
PSYC 212	Human Growth & Development	3
MUSI 192	Percussion	1
MUSI 206	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 210	Piano Proficiency	0
MUSI 282	20 Century Music Theory	3
MUSI 117	Seminar	0
MUSI 280	Sophomore Recital	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**

Junior Year

1st Semester		
GE Science Electives (p. 147)		4
EDUC 315	Data Driven Instructional Desi	3
MUSI 295	Wood Winds	1
MUSI 285	Music History	3
MUSI 485	Orchestration	2
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
SPED 403	Classroom Mgmt Ed Setting (FE)	3
MUSI 296	Brass Winds	1
MUSI 286	Music History	3
MUSI 287	Elementary Conducting	2
MUSI 393	Music Elementary Specialist	3
MUSI 317	Seminar	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**15**

Senior Year

1st Semester		
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
MUSI 290	Music History	3
MUSI 388	Advanced Instrument Conducting	2
MUSI 491	Music Instrumental Specialist	3
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
MUSI 499	Senior Recital	1
	Credit Hours	**17**

2nd Semester		
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
MUSI 478	Student Teaching in Music	3
	Credit Hours	**15**
	Total Credit Hours	**129**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
MUSI 106	Class Piano II	1
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
MUSI 206	Class Piano IV	1
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSI 287	Elementary Conducting	2
MUSIC HISTORY COURSE	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 489 & 489	Senior Project Preparation and Senior Project Preparation (TAKEN TWO SEMESTERS)	2
MUSI 490	Senior Project	0
Total Credit Hours		**27**

Code	Title	Credit Hours
Specialization Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	0
MUSI 280	Sophomore Recital	0
Music Education - Instrumental		42
Total Credit Hours		**60**

Code	Title	Credit Hours
Restricted Electives	No restricted electives required for this concentration	0
Unrestricted Electives	No unrestricted electives required for this concentration	0
Total Credit Hours		**0**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Music with a Concentration in Instrumental Performance (B.M.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 117	Seminar	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 102	Wind Symphony	1
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MUSI 113	Applied Voice Major	3
GE Wellness/Health Electives (p. 147)		2
MUSI 106	Class Piano Applied Keyboard students take MUSI 115 and 116 (Voice Class I & II) or two semesters of MUSA 102 Applied Minor Voice.	1
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
MUSI 118		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 102	Wind Symphony	1
	Credit Hours	**16**

Sophomore Year		
1st Semester		
GE History Electives (p. 146)		3
GE Science Electives (p. 147)		4
MUSI 205	Class Piano Applied Keyboard students take MUSI 203 and 204 (Musicianship for Keyboard Majors I & II).	1
MUSI 281	Form And Analysis	3
MUSI 283	Sight Sing & Ear Train	1
MUSI 217		0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 102	Wind Symphony	1
	Credit Hours	**15**
2nd Semester		
GE Humanities Electives (p. 146)		3
MUSI 155	Technology for Musicians	2
MUSI 206	Class Piano	1
MUSI 210	Piano Proficiency	0
MUSI 281	Form And Analysis	3
MUSI 284	Aural Skills IV	1
MUSI 218		0
MUSI 280	Sophomore Recital	0
MUSA 1xx Course	APPLIED STUDY	2
MUSE 102	Wind Symphony	1
MUSE 1xx Course	SMALL ENSEMBLE	1
	Credit Hours	**14**
Junior Year		
1st Semester		
Unrestricted Elective		3
Restricted Elective		3
MUSI 285	Music History	3
MUSI 381	Counterpoint	3
MUSI 317	Seminar	0
MUSA 3xx Course		2
MUSE 302 or MUSE 307	Wind Symphony or Symphony Orchestra	1
MUSE 3xx Course	SMALL ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
GE Literature Electives (p. 147)		3
MUSI 286	Music History	3
MUSI 287	Elementary Conducting	2
MUSI 317	Seminar	0
MUSI 380		2
MUSA 3xx Course	APPLIED STUDY	2
MUSE 302	Wind Symphony	1
MUSE 3xx Course	SMALL ENSEMBLE	1
	Credit Hours	**14**
Senior Year		
1st Semester		
Unrestricted Elective		3
Restricted Elective	MUSIC COURSE	3
MUSI 290	Music History	3
MUSI 496	Instrumental Literature	2
MUSI 317	Seminar	0
MUSA 3xx Course		2
MUSI 302	Applied Piano Major	2
MUSA 3xx Course	SMALL ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
GE Global Studies Electives (p. 146)		3
Unrestricted Elective		2
Restricted Elective	MUSIC COURSE	3
MUSI 396	20th Century Music (OR MUSI 397 OR MUSI 398 OR MUSI 399)	2
MUSI 482	Instrumental Pedagogy	2
MUSI 317	Seminar	0
MUSI 480	Senior Recital	0
MUSA 3xx Course	APPLIED STUDY	2
MUSE 302	Wind Symphony	1
	Credit Hours	**15**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
MUSI 106	Class Piano II	1
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
MUSI 206	Class Piano IV	1
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSI 287	Elementary Conducting	2
MUSIC HISTORY COURSE	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 489 & 489	Senior Project Preparation and Senior Project Preparation (TAKEN TWO SEMESTERS)	2

MUSI 490	Senior Project	0
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	0
MUSI 280	Sophomore Recital	0
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Music with a Concentration in Keyboard Performance (B.M.)

Freshman Year

1st Semester		Credit Hours
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 115	Voice Class	1
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 117	Seminar	0
MUSA 111	Applied Piano	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**14**

2nd Semester

ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
MUSI 116	Voice Class	1
MUSI 155	Technology for Musicians	2
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
MUSI 118		0
MUSA 111	Applied Piano	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**

Sophomore Year

1st Semester

GE History Electives (p. 146)		3
MUSI 203	Musicianship for Keyboard Majors I	3
MUSI 208	Jazz Piano I	2
MUSI 281	Form And Analysis	3
MUSI 283	Sight Sing & Ear Train	1
MUSI 292	Introd to the Music Industry	2
MUSI 117	Seminar	0
MUSA 111	Applied Piano	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**17**

2nd Semester

GE Wellness/Health Electives (p. 147)		2
GE Science Electives (p. 147)		4
MUSI 204	Musicianship for Keyboard Majors II	3
MUSI 210	Piano Proficiency	0
MUSI 281	Form And Analysis	3
MUSI 284	Aural Skills IV	1
MUSI 117	Seminar	0
MUSI 280	Sophomore Recital	0
MUSA 111	Applied Piano	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**

Junior Year

1st Semester

GE Humanities Electives (p. 146)		3
Restricted Elective	MUSIC COURSE	2
MUSI 285	Music History	3
MUSI 431		2
MUSI 381	Counterpoint	3
MUSI 317	Seminar	0
MUSA 311	Applied Piano	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**16**

2nd Semester

GE Social Science Electives (p. 147)		3
MUSI 286	Music History	3
MUSI 287	Elementary Conducting	2
MUSI 432		2
MUSI 487	Art Of Accompaniment	2
MUSI 317	Seminar	0
MUSI 380		2
MUSA 311	Applied Piano	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**17**

Senior Year

1st Semester

GE Literature Electives (p. 147)		3
MUSI 290	Music History	3
MUSI 388 or MUSI 389	Advanced Instrument Conducting or Advanced Choral Conducting	2
MUSI 433		3
MUSI 487	Art Of Accompaniment	2
MUSI 317	Seminar	0
MUSI 101	Applied Major Piano	2
MUSA 311	Applied Piano	2
MUSE 3xx Course	ENSEMBLE	1
	Credit Hours	**18**

2nd Semester

GE Global Studies Electives (p. 146)		3
Unrestricted Elective		3

MUSI 396	20th Century Music	2
or MUSI 397	or Music In The Romantic Period	
or MUSI 398	or Music In The Classical Period	
or MUSI 399	or Music In The Baroque Period	
MUSI 487	Art Of Accompaniment	2
MUSI 317	Seminar	0
MUSI 434		3
MUSI 480	Senior Recital	0
MUSA 311	Applied Piano	2
MUSE 3xx Course		1
	Credit Hours	**16**
	Total Credit Hours	**130**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 155	Technology for Musicians	2
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
or MUSI 203	Musicianship for Keybrd Maj I	
MUSI 206	Class Piano IV	1
or MUSI 204	Musicianship for Keybrd Maj II	
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSIC HISTORY COURSE	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 287	Elementary Conducting	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level)) (0 credit hours, corequisite with Applied, 6 semesters)	0
MUSI 280	Sophomore Recital	0
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Bachelor of Music with a Concentration in Vocal Performance (B.M.)

Freshman Year		
1st Semester		**Credit Hours**
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano	1
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 117	Seminar	0
MUSA 112	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**14**
2nd Semester		
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
GE Wellness/Health Electives (p. 147)		2
MUSI 106	Class Piano	1
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
MUSA 112	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**16**

Sophomore Year		
1st Semester		
Restricted Elective	Foreign Language I Course	3
MUSI 205	Class Piano	1
MUSI 281	Form And Analysis	3
MUSI 283	Sight Sing & Ear Train	1
MUSI 288	Vocal Diction	2
MUSI 117	Seminar	0
MUSA 112	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**13**
2nd Semester		
Restricted Elective	Foreign Language II Course	3
MUSI 155	Technology for Musicians	2
MUSI 206	Class Piano	1
MUSI 210	Piano Proficiency	0
MUSI 281	Form And Analysis	3
MUSI 284	Aural Skills IV	1
MUSI 289	Vocal Diction	2
MUSI 117	Seminar	0
MUSI 280	Sophomore Recital	0
MUSA 112	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**15**
Junior Year		
1st Semester		
GE Science Electives (p. 147)		4
MUSI 285	Music History	3
MUSI 373	Opera Workshop	1
MUSI 381	Counterpoint	3
MUSI 317	Seminar	0
MUSA 312	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**14**
2nd Semester		
GE Social Science Electives (p. 147)		3
Restricted Elective	MUSIC COURSE	3
MUSI 286	Music History	3
MUSI 287	Elementary Conducting	2
MUSI 373	Opera Workshop	1
MUSI 317	Seminar	0
MUSI 385	Art Song	2
MUSI 380		2
MUSA 312	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**19**
Senior Year		
1st Semester		
Unrestricted Elective		3
MUSI 290	Music History	3
MUSI 373	Opera Workshop	1
MUSI 481	Dramatic Music	2
MUSI 483	Pedagogy	2
MUSI 317	Seminar	0
MUSA 312	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**14**
2nd Semester		
GE Literature Electives (p. 147)		3
GE Global Studies Electives (p. 146)		3
Unrestricted Elective		3
Restricted Elective	MUSIC COURSE	3
MUSI 373	Opera Workshop	1
MUSI 317	Seminar	0
MUSI 480	Senior Recital	0
MUSA 312	Applied Voice	2
MUSE 111	Concert Choir	1
	Credit Hours	**16**
	Total Credit Hours	**121**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 155	Technology for Musicians	2
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
or MUSI 203	Musicianship for Keybrd Maj I	
MUSI 206	Class Piano IV	1
or MUSI 204	Musicianship for Keybrd Maj II	
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSIC HISTORY COURSES	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	

MUSI 287	Elementary Conducting	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level))	0
MUSI 280	Sophomore Recital	0
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives	9 credit hours of Music Courses; 9 credit hours of General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music Major, Bachelor of Music in Vocal/Choral Music with a Minor in Secondary Education PreK-12 (B.M)

Freshman Year

1st Semester		Credit Hours
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
Restricted Elective	MUSIC COURSE	2
MUSI 105	Class Piano	1
MUSI 117	Seminar	0
MUSI 155	Technology for Musicians	2
MUSI 171		1
MUSI 181	Basic Theory	3
MUSI 183	Sight Sing & Ear Train	1
	Credit Hours	**16**
2nd Semester		
ENGL 111	Composition II	3
IDST 200	Digital Media Teacher Educatio	3
Restricted Elective	MUSIC COURSE	2
MUSI 106	Class Piano	1
MUSI 113	Applied Voice Major	3
MUSI 118		0
MUSI 171		1
MUSI 182	Chromatic Harmony	3
MUSI 184	Sight Sing & Ear Train	1
	Credit Hours	**17**

Sophomore Year

1st Semester		
EDUC 201	Seminar in Education	3
Restricted Elective	MUSIC COURSE	2
MUSI 191	Strings	1
MUSI 205	Class Piano	1
MUSI 217		0
MUSI 258	Vocal Diction	1
MUSI 271		1
MUSI 281	Form And Analysis	3
MUSI 285	Music History	3
	Credit Hours	**15**
2nd Semester		
EDUC 202	Foundations of Education	3
Restricted Elective	MUSIC COURSE	2
MUSI 192	Percussion	1
MUSI 206	Class Piano	1
MUSI 218		0
MUSI 259	Vocal Diction	1
MUSI 272		1
MUSI 282	20 Century Music Theory	3
MUSI 286	Music History	3
PSYC 212	Human Growth & Development	3
	Credit Hours	**18**

Junior Year

1st Semester		
EDUC 315	Data Driven Instructional Desi	3
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
GE Wellness/Health Electives (p. 147)		2
Restricted Elective	MUSIC COURSE	2
MUSI 290	Music History	3
MUSI 295	Wood Winds	1
MUSI 317	Seminar	0
MUSI 371		1
	Credit Hours	**15**
2nd Semester		
Restricted Elective	MUSIC COURSE	2
MUSI 287	Elementary Conducting	2
MUSI 296	Brass Winds	1
MUSI 318		0
MUSI 372		1
MUSI 393	Music Elementary Specialist	3
GE Science Electives (p. 147)		4
SPED 403	Classroom Mgmt Ed Setting (FE)	3
	Credit Hours	**16**

Senior Year

1st Semester		
EDUC 424	Culturally Responsive Pedagogy	2
GE Literature Electives (p. 147)		3
MUSI 389	Advanced Choral Conducting	2
MUSI 417		0
EDUC 427	Reading In The Subject Area	3
MUSI 471		1
MUSI 493	Music Secondary Specialist	3
MUSI 499	Senior Recital	1
	Credit Hours	**15**
2nd Semester		
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9

MUSI 478	Student Teaching in Music	3
	Credit Hours	**15**
	Total Credit Hours	**127**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 155	Technology for Musicians	2
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
or MUSI 203	Musicianship for Keybrd Maj I	
MUSI 206	Class Piano IV	1
or MUSI 204	Musicianship for Keybrd Maj II	
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSIC HISTORY COURSES	Choose 2 courses from the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 287	Elementary Conducting	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	
MUSE (ENSEMBLE) Courses	(Min. 4 semesters major ensemble, 2 semesters small ensemble)	
MUSI 117	Seminar (MUSI 317 (Upper Level))	0
MUSI 280	Sophomore Recital	0
Minor Requirements		7
Total Credit Hours		**25**

Code	Title	Credit Hours
Restricted Electives	9 Music Courses and 9 General Education Courses	18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Minor Requirements		7
Electives		42
Total Credit Hours		**127**

Music, Bachelor of Music with a Concentration in Sound Recording Technology, (B.M.)

Course	Title	Credit Hours
Freshman Year		
1st Semester		
ENGL 110	Composition I	3
MATH 112	Basic Mathematics I	3
MUSI 105	Class Piano I	1
MUSI 181	Music Theory I	3
MUSI 183	Aural Skills I	1
MUSI 292	Introd to the Music Industry	2
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
	Credit Hours	**16**
2nd Semester		
MUSE 1xx Course	ENSEMBLE	1
MUSA 1xx Course	APPLIED STUDY	2
ENGL 111	Composition II	3
MATH 113	Basic Mathematics II	3
MUSI 106	Class Piano II	1
MUSI 184	Aural Skills II	1
MUSI 182	Music Theory II	3
MUSI 294	Introd to the Recording Studio	3
MUSI 294L	Introd to the Recording Studio	1
MUSI 117	Seminar	0
	Credit Hours	**18**
Sophomore Year		
1st Semester		
COMM 333	Pro Tools I User	3

MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
MUSI 117	Seminar	0
MUSI 285	Music History I	3
MUSI 281	Music Theory III	3
GE Science Electives (p. 147)		4
	Credit Hours	**16**
2nd Semester		
MUSA 1xx Course	APPLIED STUDY	2
MUSE 1xx Course	ENSEMBLE	1
MUSI 117	Seminar	0
MUSI 282	Music Theory IV	3
MUSI 286	Music History II	3
MUSI 357	Electronic Music	3
COMM 332	Introduction to Live Sound	3
COMM 231	Critical Listening	3
	Credit Hours	**18**
Junior Year		
1st Semester		
COMM 334	Pro Tools II Music	3
COMM 432	Applied Studio Techniques	1
COMM 432L	Applied Studio Techniques Lab	2
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
MUSI 317	Seminar	0
MUSI 390	Sample Based Production	3
MUSI 390L	Sample Based Production Lab	1
GE Social Science Electives (p. 147)		3
	Credit Hours	**16**
2nd Semester		
MUSA 3xx Course	APPLIED STUDY	2
MUSE 3xx Course	ENSEMBLE	1
MUSI 317	Seminar	0
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
MUSI 425	Advanced Mixing	3
MUSI 425L	Advanced Mixing Lab	1
COMM 338	Fundamentals of Post	1
COMM 338L	Fundamentals of Post Lab	2
MUSI 485	Orchestration	2
	Credit Hours	**15**
Senior Year		
1st Semester		
COMM 433	Advanced Audio Post	3
GE Literature Electives (p. 147)		3
Restricted Elective	Music History (397, 398, or 399)	3
MUSI 200	Blacks in American Music	3
MUSI 426	Advanced Music Production	3
	Credit Hours	**15**
2nd Semester		
MUSI 415	Music Business	3
MUSI 426	Advanced Music Production	3
MUSI 428	Music Industry Internship	3
Restricted Elective	GE COURSE	3
	Credit Hours	**12**
	Total Credit Hours	**126**

Applied Music numbers vary depending upon the choice of performing medium and semester of study. All of the appropriate numbers are listed in the current University catalogue and will be assigned to the student's faculty advisor. Choice of Ensemble throughout curriculum: The choice here can be made from the many instrumental or vocal ensembles offered in the department.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
MUSI 105	Class Piano I	1
or MUSI 115	Voice Class I	
MUSI 106	Class Piano II	1
or MUSI 116	Voice Class II	
MUSI 155	Technology for Musicians	2
MUSI 181	Music Theory I	3
MUSI 182	Music Theory II	3
MUSI 183	Aural Skills I	1
MUSI 184	Aural Skills II	1
MUSI 205	Class Piano III	1
or MUSI 203	Musicianship for Keybrd Maj I	
MUSI 206	Class Piano IV	1
or MUSI 204	Musicianship for Keybrd Maj II	
MUSI 210	Piano Proficiency	0
MUSI 281	Music Theory III	3
MUSI 283	Aural Skills III	1
MUSI 284	Aural Skills IV	1
MUSIC HISTORY COURSES	Choose 2 courses of the following:	6
MUSI 285	Music History I	
MUSI 286	Music History II	
MUSI 290	Music History III	
MUSI 287	Elementary Conducting	2
Total Credit Hours		**27**

Code	Title	Credit Hours
Performance Requirements		18
MUSA (APPLIED STUDY) Courses	(2 credit hours, 6 semesters)	

MUSE (ENSEMBLE) Courses (Min. 4 semesters major ensemble, 2 semesters small ensemble)		
MUSI 117	Seminar (MUSI 317 (Upper Level))	0
MUSI 280	Sophomore Recital	0
Total Credit Hours		**18**

Code	Title	Credit Hours
Restricted Electives (9 credit hours of Music Courses; 9 credit hours of General Education)		18
Unrestricted Electives		24
Total Credit Hours		**42**

Code	Title	Credit Hours
General Education		33
Core Requirements		27
Major/Concentration Requirements		18
Electives		42
Total Credit Hours		**120**

Music, Minor in Music

Students at VSU may obtain a Minor in Music by completing a total of 18 credit hours following the approved minor in music curriculum, which includes a balance of academic and applied music courses. A music minor must also be accepted by audition and demonstrate music reading ability to begin the minor curriculum. All students are required to take a jury examination each semester of applied study.

Keyboard Performers

Code	Title	Credit Hours
MUSI	Ensemble	1
MUSI 115	Voice Class	1
MUSI 116	Voice Class	1
MUSI 141	Applied Minor Instrument	1
MUSI 142	Applied Minor Instrument	1
MUSI 181	Basic Theory	3
MUSI 182	Chromatic Harmony	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 184	Sight Sing & Ear Train	1
MUSI 241	Applied Minor Instrument	1
MUSI 199	Music Appreciation	3
MUSI 242	Applied Minor Instrument	1
Total Credit Hours		**18**

For Voice, Band/Orchestral Performers

Code	Title	Credit Hours
MUSI	Ensemble	1
MUSI 106	Class Piano	1
MUSI 105	Class Piano	1
MUSI 141	Applied Minor Instrument	1
MUSI 142	Applied Minor Instrument	1
MUSI 181	Basic Theory	3
MUSI 182	Chromatic Harmony	3
MUSI 183	Sight Sing & Ear Train	1
MUSI 184	Sight Sing & Ear Train	1
MUSI 199	Music Appreciation	3
MUSI 241	Applied Minor Instrument	1
MUSI 242	Applied Minor Instrument	1
Total Credit Hours		**18**

The choice here can be made from a variety or vocal ensembles offered in the department.

Music, Minor in Music Production Technology

Code	Title	Credit Hours
MUSI 292	Introd to the Music Industry	2
MUSI 294	Introd to the Recording Studio	3
MUSI 305	Introduction to Live Sound	3
MUSI 315	Pro Tools 101	3
Select 6 credit hours from the following:		**6**
MUSI 316	Pro Tools 110	
MUSI 325	Applied Studio Techniques	
MUSI 357	Electronic Music	
MUSI 360	Fund of Sound Des for Film&Vid	
MUSI 378	Music Comp for Film & Video Ga	
MUSI 390	Sample Based Production	
MUSI 405	Advanced Media Sound Design	
MUSI 415	Music Business	
MUSI 425	Advanced Mixing	
Total Credit Hours		**17**

Department of Political Science and Public Administration

Chairperson: Dr. Sheren G. Sanders
Location: Alfred W. Harris Academic Commons Building, 3rd Floor
Contact Information: 804-524-5037 | ssanders@vsu.edu (http://catalog.vsu.edu/undergraduate/college-humanities-social-sciences/department-political-science-public-administration/ssanders@vsu.edu)

Department Overview

The Department of Political Science and Public Administration was established in 1966, and continues to exist as an integral component of the College of Humanities and Social Sciences. The Department offers a political science education that emphasizes scholarship, the pursuit of knowledge through research and instruction, and the development of a critical understanding of government - locally, nationally and internationally. The Department of Political Science offers a program of study leading to the **Bachelor of Arts (B.A.) in Political Science**.

Mission Statement

The mission of the Department is to offer a political science education with a solid foundation of knowledge, skills, and abilities, and to produce graduates who have the intellectual, critical and analytical skills that are necessary to understand how political systems function, how to affect politics through participation, and how to make rational choices about government policies and those who govern.

Student Organizations

• **Pi Sigma Alpha, Kappa Psi Chapter** – The national political science Honor Society is open to undergraduate students in political science who have achieved the required level of academic excellence.

• **The Association of Political Science (TAPS)** – The premier student organization in the Department. TAPS is open to all political sciences majors and students from other majors who are enrolled in the political science minor program.

Department Goals

The Objectives of the Department of Political Science and Public Administration are:

- To help develop the critical and analytical skills to understand how political systems function, and how to make rational decisions about government policies and those who govern.
- To provide a foundation of theory and knowledge, values and skills for students who are interested in pursuing advanced study in graduate or professional school.
- To prepare students for careers in the public and private sectors by incorporating marketable skills into the general curriculum.
- To develop the critical and analytical skills which enable students to understand policy and program formulation, implementation and evaluation, decision-making, and problem solving.
- To provide opportunities for students to develop and test empirical hypotheses. Make assumptions, and draw inferences, using analytics, and various statistical research methods.

Program Listings

The Minor Program in Political Science

The Minor Program in political science is specifically designed to give the non-political science major an opportunity to complement his or her course work with a focused and structured program of study. The program will broaden your understanding of national and international issues, and increase the range of your career and professional options. The Minor Program is especially recommended for majors in Management, Economics, History, International Studies, Sociology, and Education. The program consists of eighteen (18) credit hours; twelve (12) credit hours in core courses, and six (6) credit hours in political science electives at the 300 level or above.

The Minor Program in Public Administration

The Minor Program in Public Administration is designed to give the non-political science major the opportunity to complement his or her major course of study. Students who decide to minor in public administration will be able to broaden their knowledge and understanding of the day-to-day workings of government at all levels. The PA minor program is especially recommended for, but not limited to, majors in the sciences, social sciences, technology, business administration, and psychology.

The Pre-Law Advisement

The Department of Political Science also offers to students across the University the opportunity to participate in Pre-Law Advisement. The program is designed to help the student develop the cognitive, analytical, and logical reasoning skills necessary to cope with the challenges of a law school environment. The advisement program offers assistance in helping the student understand the law school application process, including applying for the Law School Admissions Test, contacting law school admissions Deans, developing a personal statements, and arranging for law schools visits.

Assessment in the Major

The Comprehensive Assessment Examination is a major component of the Department's continuing commitment to academic excellence and intellectual development in the discipline. All political science majors, in their junior year of study, are required to take the Comprehensive Assessment Examination. The examination assesses a students' basic knowledge of political science concepts, principles, and facts in the areas of United States Government, State and Local Government, and Comparative Government.

Major(s)

- Political Science, Bachelor of Arts (B.A.) (p. 345)

POLI (p. 343), PADM (p. 344)

Political Science (POLI)

POLI 102. State And Local Government. (3 Credits)
A study of the structure, operations, and functions of the state and local institutions of government.

POLI 150. United States Government. (3 Credits)
An introductory course in the study of the American political system.

POLI 201. Political Philosophy. (3 Credits)
A study of the development of political thought from the Greek period through the Middle Ages.

POLI 202. Contemporary Political Thought. (3 Credits)
A study of political thought from the end of the Middle Ages to the present.

POLI 203. Govt & Politics In Russia. (3 Credits)
A study of the theory, organization, and administrative processes in the Russian political system.

POLI 204. Modern Africa. (3 Credits)
A political and historical analysis of the problems of nation-states on the African continent, from 1945 to the present.

POLI 205. Govt & Politics Develop Countr. (3 Credits)
A study of the political and economic problems of underdeveloped countries in the Third World.

POLI 206. Govt & Politics In China. (3 Credits)
A study of the political ideologies, institutions, and decision-making processes in the People's Republic of China.

POLI 207. International Relations. (3 Credits)
A study of the political, social, and economic dynamics of the present international system.

POLI 208. International Law. (3 Credits)
A study of the origin, character, and principles of law that determine the duties and rights of nations in their relations.

POLI 209. Public Administration. (3 Credits)
A study of the principles of public administration; structure, organization, and management in modern government with emphasis on the bureaucratic role in public policy formation.

POLI 210. Comparative Government. (3 Credits)
A comparative analysis of nation-states within the contemporary international system.

POLI 211. Introduction to Social Justice. (3 Credits)
An introductory course that examines the historic, ideological, and cultural patterns of social justice practice. Special emphasis is on contemporary justice realities in order to understand the dynamics of oppression, linking competing theories of social justice to hierarchies of power grounded in race, ethnicity, nationality, gender identities and class to strategies for social transformation and change.

POLI 301. The Scope & Methods Of Poli Sc. (3 Credits)
Inquiry into the methodology, epistemology, and techniques of the discipline of political science.

POLI 302. The Techniques Political Analy. (3 Credits)
A study of the research methodologies and techniques used in the study of political problems. Prerequisite: POLI 301.

POLI 303. Political Parties & Pressure G. (3 Credits)
A study of political parties and interest groups and their impact on public policy.

POLI 304. American Constitutional Law. (3 Credits)
A study of judicial interpretation, the nature of judicial review, selected leading decisions of the United States Supreme Court and their impact on the basic principles of government.

POLI 305. Seminar In Black Politics. (3 Credits)
A study of the political impact of African-Americans in local, state, and national policy issues.

POLI 306. Seminar In Urban Problems. (3 Credits)
A study of the political, social, and economic problems affecting metropolitan communities.

POLI 307. American Foreign Policy. (3 Credits)
A study of the formation, implementation, and implications of American foreign policy.

POLI 308. Polimetrics I. (3 Credits)
A study of statistical approaches in political science research, with emphasis on survey research and data analysis using the SPSS statistical analysis program. Prerequisites: GEMA 112 Basic Mathematics; GEMA 113 Basic Mathematics; STAT 210 Elementary Statistics I.

POLI 309. Polimetrics II. (3 Credits)
A study of statistical approaches in political science research. Advance data analysis techniques, including univariate, bivariate, and multivariate analysis, and the testing of hypotheses. Prerequisites: POLI 308 Polimetrics I.

POLI 310. Political Science Internship. (6 Credits)
Students provided with the opportunity to experience the workings of government, through placement in internships with various legislators, and public and private agencies. Prerequisite: Minimum sophomore status, or approval of Department Chairperson.

POLI 311. Theoretical App in Soc Justice. (3 Credits)
This course will present a wide array of theoretical approaches to social justice. These theoretical foundations will encompass historic theory, social psychology, sociological theory, liberation, theology, and philosophical foundations of metaphysics and epistemology. Pre-requisite: POLI 211.

POLI 315. The Civil Rights Movement. (3 Credits)
A study of the political, social, and economic dimensions of the civil rights movement from 1954 to the present.

POLI 400. Seminar In Local Politics. (3 Credits)
A study of the dynamics of local politics. Seminar format that would include assigned readings, field research, lecture, and discussion.

POLI 403. Senior Thesis. (3 Credits)
Execution of senior thesis research design, computer-based data analysis, and production of first draft of the senior thesis. Prerequisites: POLI 301 The Scope and Methods of Political Science; POLI 302 The Techniques of Political Analysis.

POLI 404. Senior Seminar. (3 Credits)
Production of final draft of senior thesis complete with faculty suggested revisions. Presentation and defense of thesis must be concluded by deadline date for submission of senior grades. Prerequisite: POLI 403 Senior Thesis.

POLI 408. Independent Study. (3 Credits)
Opportunity to work on community issues, policy issues, or independent research. Work is supervised by assigned faculty member. Prerequisite: Approval of Department Chairperson.

POLI 409. Constitutional & Civil Liberti. (3 Credits)
A study of the role of the Constitution and the function of the courts in defining and safeguarding civil rights and civil liberties.

POLI 410. Presidential Policy-Making. (3 Credits)
A study of the President's role in formulating public policy through interaction with domestic and foreign political actors.

POLI 412. Political Economy Southen Afri. (3 Credits)
A study of the political and economic forces which shape the politics of nation-states in southern Africa.

POLI 413. Politics Multina'L Corp 3rd Wr. (3 Credits)
A study of the impact of multinational corporations on the politics of nation-states in the Third World.

POLI 414. Marxist Political Philosopy. (3 Credits)
A study of the nature of the state, politics, social development, and class struggle from the writings of Karl Marx and Frederick Engels.

Public Administration (PADM)

PADM 410. Grants Management. (3 Credits)
Comprehensive and thorough study of the techniques used in managing federal and state grant-in-aid programs. Emphasis will be placed upon the contracts and grants management, procurement practices under federal and state law, accounting requirements, reporting requirements, program control, and fiscal performance.

Political Science Major, Bachelor of Arts (B.A.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
ENGL 111	Composition II	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
POLI 150	United States Government	3
POLI 102	State And Local Government	3
GE Wellness/Health Electives (p. 147)		2
GE Science Electives (p. 147)		4
	Credit Hours	**30**
Sophomore Year		
PHIL 140	Philosophy	3
PSYC 101	Introduction to Psychology	3
ENGL 202	Intro African American Lit	3
POLI 202	Contemporary Political Thought	3
Unrestricted Elective		3
POLI 210	Comparative Government	3
STAT 210	Elementary Statistics I	3
GE Humanities Electives (p. 146)		3
Restricted Elective	POLI Course	3
Restricted Elective	Technology Course	3
	Credit Hours	**30**
Junior Year		
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
POLI 308	Polimetrics I	3
POLI 309	Polimetrics II	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
POLI 301	The Scope & Methods Of Poli Sc	3
POLI 306	Seminar In Urban Problems	3
POLI 302	The Techniques Political Analy	3
	Credit Hours	**30**
Senior Year		
POLI 403	Senior Thesis	3
POLI 404	Senior Seminar	3
Restricted Elective	POLI Course	3
Restricted Elective	POLI Course	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
POLI 150	United States Government	3
POLI 102	State And Local Government	3
POLI 202	Contemporary Political Thought	3
POLI 210	Comparative Government	3
POLI 301	The Scope & Methods Of Poli Sc	3
POLI 302	The Techniques Political Analy	3
POLI 306	Seminar In Urban Problems	3
POLI 308	Polimetrics I	3
POLI 309	Polimetrics II	3
POLI 403	Senior Thesis	3
POLI 404	Senior Seminar	3
Total Credit Hours		**33**

Code	Title	Credit Hours
ECON 210	Principles Of Microeconomics	3
ECON 211	Principles Of Macroeconomics	3
STAT 210	Elementary Statistics I	3
CISY 201	Microcomputer Concepts	3
Total Credit Hours		**12**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		30
Total Credit Hours		**42**

Summary of Graduation Requirements

Code	Title	Credit Hours
General Education		33
Core Requirements		33
Major/Concentration Requirements		12
Electives		42
Total Credit Hours		**120**

Department of Social Work

Chairperson: Dr. Jimmie Fedrick
Location: Johnella Jackson Hall, Room 201
Contact Information: (804) 524-6276 | jfedrick@vsu.edu (%20jfedrick@vsu.edu)

Department Overview

The Department of Social Work offers the **Bachelor of Social Work (B.S.W.)** degree. Building on a generalist model of social work practice and the firm liberal arts foundation, students are specifically prepared for beginning generalist professional social work practice with individuals, groups, families, organizations and communities. The Department is committed to collaborating and partnering with the community to assist in implementing the following requests made by the community residents and stakeholders in the Central and Southern Virginia regions:

Community Needs

- Help with the analysis of community issues
- Develop a service for the assessment of community needs
- Provide organizational training and assistance
- Assist community groups and others with grant writing, especially the evaluation component
- Implement research on community issues
- Actively assist with the revitalization/advancement of communities in crisis
- Promote interaction, communication and faculty involvement with the local community

Community Development

- Convene various agencies (local, state and federal) and community groups for the dissemination and collection of information and coordination of activities.
- Implementation of a community development project through coursework or an academic program.

Mission Statement

The mission of the Department is to prepare traditional and non-traditional students for professional entry-level generalist social work practice who are committed to social, economic and environmental justice throughout the surrounding urban, suburban, rural and military base communities in Central and Southern Virginia.

As entry-level practitioners, students are capable of delivering social services in a manner that is consistent with the values (social justice, the dignity and worth of the person, the importance of human relationships, integrity, competence, human rights, and scientific inquiry) and ethics of the social work profession. Ultimately, students recognize their responsibility to continue their professional growth and development in research and the incorporation of the latest technologies in their practice.

Building on a strong liberal arts base, the program provides quality professional educational experiences in partnerships with a wide variety of community agencies and organizations. The Department is committed to serving culturally and economically diverse students, including first-generation as well as those coming to the university from their first two years in the community colleges in the region, and from four-year institutions as well.

The mission, purpose and philosophy of the Social Work Department at Virginia State University are consistent with the overall institutional mission. The institutional mission is “to graduate lifelong learners who are well equipped to serve their communities as informed citizens, globally competitive leaders, and highly effective, ethical professionals”.

Student Organizations

Students may participate and assume leadership positions in the following departmental organizations sponsored by the department:

- **Phi Alpha - Theta Beta Chapter** - National Social Work Honor Society
- **BSW Social Work Club**
- **National Association of Black Social Workers**

Degree Highlight Information

Upon graduation, BSW graduates may be immediately considered for employment in social service agencies, health and governmental agencies, schools, hospitals, corrections, private community service agencies and other organizations. They work with individuals of all ages from infancy through the end of life in areas such as child welfare, developmental disabilities, health, mental health, policy and planning, domestic violence, and gerontology. No other degree provides greater diversity in jobs than a Bachelor of Social Work.

Upon completion of the social work major, students will be able to:

1. Demonstrate ethical and professional behavior
2. Advance human rights and social, racial, economic, and environmental justice
3. Engage anti-racism, diversity, equity, and inclusion (ADEI) in practice
4. Engage in practice-informed research and research-informed practice
5. Engage in policy practice
6. Engage with individuals, families, groups, organizations, and communities
7. Assess individuals, families, groups, organizations, and communities
8. Intervene with individuals, families, groups, organizations, and communities

9. Evaluate practice with individuals, families, groups, organizations, and communities

Accreditation Information

The VSU Bachelor of Social Work (BSW) Program is fully accredited through the Council on Social Work Education (CSWE), and it is consistent with the university's mission and institutional goals, and the Educational Policy and Accreditation Standards of the Council on Social Work Education (CSWE).

Department Goals

Based on our mission statement, the goals of the Social Work Program are to produce**:**

1. Excellent practitioners prepared as liberal arts based baccalaureate level generalist social workers;
2. Culturally aware and knowledgeable generalist social work professionals with a demonstrated commitment to social, economic and environmental justice in an ever-changing global society, especially in the central and southern Virginia region;
3. Professionals who are imbued to facilitate and provide community advocacy and service to diverse populations-at-risk in urban, suburban and rural settings, including surrounding military base communities;
4. Critical thinkers who are able to integrate social work knowledge, values, practice skills, social policy and the research process to ethical social work practice with an emphasis on addressing the needs of central and southern Virginia residents;
5. Leaders dedicated to a commitment of life-long learning by pursuing graduate education, training opportunities and leadership roles.

Program Core Competencies

Competency – based education is an outcome performance approach to curriculum design. Each competency describes the knowledge, values, skills, and cognitive and affective processes that comprise the competency at the generalist level of practice. The goal of the outcome approach is to demonstrate the integration and application of the competencies in practice with individuals, families, groups, organizations and communities. VSU BSW Social Work Program competencies (CSWE 2022) are consistent with our Program Mission and Goals.

Program Listings

Bachelor of Social Work

Social work majors must be formally admitted to the BSW program before enrolling into social work courses (300 level and higher). Application to the BSW program is separate from the application to the University and students are not eligible to apply until the end of their sophomore year. Detailed criteria and procedures for admission to the BSW program are outlined in the BSW Student Handbook.

Continuation in the Social Work major - A student must demonstrate readiness to enter and continue in the professional or upper level courses (300 level or higher) in the baccalaureate social work program of study. This requires:

1. Academic achievement (maintain a cumulative GPA of 2.5 and a 2.5 GPA in the required courses for social work);
2. Student must successfully complete 600 hours of field practicum and seminar;
3. Personal and professional behavior consistent with the NASW Code of Ethics;
4. Effective work with client systems as demonstrated through practice laboratory and field courses;
5. Capacity to master the necessary non-academic areas for continuance in the major.

The following further defines the non-academic conditions for continuance in the major:

1. Ethics – in addition to academic expectations, social work students are expected to demonstrate professional behavior which reflects a commitment to the ethics of the social work profession. Compliance with the National Association of Social Workers (NASW) Code of Ethics is expected. Behavior contrary to these ethics will be cause for review of the student's continuance in accepted status as a social work major. Examples of behavior which will warrant review of accepted standing in the major include but are not limited to: derogatory oral and written statements towards other students, faculty, and/or persons from populations reflecting racial, ethnic, disabled status, religious, socioeconomic, gender, and sexual orientation differences; disregard of the principles of confidentiality, etc.
2. Behavior – Since the role of a social worker involves helping people from a variety of backgrounds and with a range of problems, it is important that the social work student not permit personal issues to interfere with this role and that he/she has the emotional and psychological resources to render effective assistance to those in need. In instances where students demonstrate behaviors which suggest that their own difficulties are not sufficiently resolved to be able to help and support others, students may be asked to withdraw from the program.

Articulation Agreement with Brightpoint Community College

VSU and Brightpoint Community College have partnered together to facilitate the transfer of credits earned by students with an Associate of Applied Science (A.A.S) degree in Human Services - Pre- Social Work at BCC into the BSW program at VSU. This partnership is intended to provide students enrolled in the Human Services – Pre-Social Work A.A.S program at BCC admission in the BSW program.

Field Education

Field education assists students in synthesizing and practicing learned foundational material as generalist social work practitioners. The primary goal of the field sequence is to prepare students for generalist social work practice with individuals, families, groups, and communities. To achieve this end, the field education curriculum is designed to facilitate integration of knowledge, values and skills of the BSW program

through practice in an agency setting and a concurrent weekly field instruction seminar at the university.

Field education is a distinguishing feature of the BSW program and is the 'signature pedagogy' of the department. This is an essential component of social work education and is anchored in our program's mission, goals and core competencies.

A student is eligible to apply for admission to the field practicum after having completed all prerequisite courses in addition to the following:

- Junior/Senior status
- Accepted as a Social Work Major
- Overall GPA of 2.5 in 300 level courses and an overall 2.5 in the required junior level social work courses.
- A positive endorsement for practice from the Generalist Practice course instructor.
- Completed Application Form with personal statement and references.
- The student must possess the basic skills and emotional maturity necessary for working with clients and staff in an internship site.

Major(s)

- Social Work Major, BSW (p. 351)

Minor(s)

- Social Work Minor (p. 351)
- Homefront Readjustment for the Armed Forces Minor/Certificate (p. 352)

COURSE DESCRIPTIONS

SOCIAL WORK

SOWK 210 INTRODUCTION TO GENERALIST SOCIAL WORK PRACTICE – 3 semester hours

This course introduces students to the profession of social work and the settings in which it is practiced. Emphasis is focused on describing the social work profession and its history, including

the educational requirements, values, the National Association of Social Work Code of Ethics, multi-sized systems of practice, career opportunities, licensure requirements, the generalist social work perspective, human diversity, the generalist planned change model and many other major concepts used throughout the curriculum. This course includes 25 hours of volunteer experience that occurs independently of class hours.

SOWK 211 HONORABLE FITNESS: MILITARY CODE OF CONDUCT VS SELF MORALITY - 3 semester hours

Students learn how a service member or veteran may struggle to maintain a positive religious or spiritual mindset, after negative active duty service experiences. Students explore how challenging beliefs can hinder the emotional and behavioral stability of a person. Students learn skills for intervening in a variety of practice settings to assist service members and veterans with spiritual fitness.

Prerequisites: SOWK Major or Permission of the Department Chair

SOWK 212 FROM BOOTCAMP TO HOME: EXPLORING VETERAN BENEFITS - 3 semester hours

Students are introduced to an assortment of veteran education, medical and employment benefits. A transitioning veteran may not know the benefits that they are capable of receiving. Students learn how to inform and guide a veteran to assist with the veteran's new future life planning.

Prerequisites: SOWK 211 or with permission of the Department Chair

SOWK 260 HISTORY OF SOCIAL WELFARE POLICY-1600 to PRESENT - 3 semester hours

The development of social welfare systems in Western society and diverse cultures is analyzed, with emphasis on issues of economic oppression, social oppression, human rights, and restorative justice.

SOWK 313 HONORING GRIEF LOSS, MOURNING AND RESPECT FOR LIFE VARIETY - 3 semester hours

Students are introduced to a variety of exposures of grief. The significant daily and life altering impact of a veteran's grief from traumatic experiences are examined. Students learn beginning skills for interceding in diverse practice settings with the veteran grieving population.

Prerequisites: SOWK 211, SOWK 212 or with permission of the Department Chair

SOWK 314 FAMILY VOW: ACKNOWLEDGING FAMILY STRESSORS - 3 semester hours

Students are introduced to the marital and family stressors of a service member or veteran. The diminished family structure expanding from poor stress management to physical violence are

examined. Students learn the initial skills for intervening in an array of direct practice settings with service members and veterans.

Prerequisites: SOWK 211, SOWK 212, SOWK 313 or with permission of the Department Chair

SOWK 315 SOCIAL WORK RESEARCH I - 3 semester hours

This course is designed to provide social work students with a basic understanding of social work research and the connection between research, theory, and practice. Students are introduced to the basic research concepts and research process; including research design, sampling, instrument construction, data collection and qualitative/ quantitative analysis, and report writing.

Prerequisites: SOWK 210, SOWK 260 and STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major

Co-requisites: SOWK 318, SOWK 320, SOWK 330 and SOWK 370

SOWK 318 - WRITING FOR THE SOCIAL WORK PROFESSION - 3 semester hours

This course students to the study of various forms of written and verbal communication pertinent to social work practice. It is designed as a discipline-specific junior writing course. This course offers students opportunities to practice and master skills in various types of writing, to

peer critique the writing of colleagues and to revise their own writing after peer and faculty review.

Prerequisites: Junior or senior standing. (Sophomore standing with permission of Department Chair)

Co-requisites: SOWK 315, SOWK 320, SOWK 330 and SOWK 370

SOWK 320 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I - 3 semester hours

This course takes a social systems approach to presenting, unifying, and integrating concepts and knowledge from a bio-psychosocial-spiritual perspective about human behavior. This course

explores development from pregnancy and infancy through early childhood with attention on how individuals, families, organizations, and communities are shaped by life events. This course

includes applications to professional practice from the social work literature and to service-learning experiences in a social service setting.

Prerequisites: SOWK 210, SOWK 260 and STAT 210 with a minimum grade of C or better; majors only and junior standing; or permission of the Department Chair; acceptance as

social work major

Co-requisites: SOWK 315, SOWK 318, SOWK 330 and SOWK 370.

SOWK 321 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II - 3 semester hours

This course takes a social systems approach to presenting, unifying, and integrating concepts and knowledge from a bio-psychosocial-spiritual perspective about human behavior. This course

explores development from middle childhood through late adulthood with attention on how individuals, families, organizations, and communities are shaped by life events. This course

includes applications to professional practice from the social work literature and to service-learning experiences in a social service setting.

Prerequisites: SOWK 320 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major

Co-requisites: SOWK 340, SOWK 375 and SOWK 399

SOWK 330 DIVERSITY AND CULTURAL COMPETENCE IN SOCIAL WORK PRACTICE - 3 semester hours

This course is designed to present concepts and theories for generalist practitioners to assess clients from cultural-general and cultural-specific perspectives, and it provides students with a positive perception of cultural diversity. The most important elements of cultural diversity, understanding and awareness is addressed and examined. The overall goal is to examine the challenges and benefits of diversity and strengthen the possibilities of living and working together in a multicultural society.

Prerequisites: SOWK 210 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major

Co-requisites: SOWK 315, SOWK 318, SOWK 320 and SOWK 370

SOWK 340 (WI) SOCIAL WELFARE POLICY AND SERVICES - 3 semester hours

This course introduces students to a framework for the analysis of social problems and services, and focuses upon the variables that shape human service delivery systems. Application of analytical skills to a social policy is a required component of the course. This course is writing intensive.
Prerequisites: SOWK 210, SOWK 260 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major
Co-requisites: SOWK 321, SOWK 375 and SOWK 399

SOWK 370 GENERALIST PRACTICE (MICRO) I: INDIVIDUALS - 3 semester hours
This course is designed to develop beginning professional social work skills, knowledge, and values. Provides an introduction to the generalist approach, systems theory, and planned change process as utilized in work with individuals, families, groups, organizations, and communities. Students acquire skills in: use of self in the helping role; interviewing techniques; client assessments, intervention strategies, evaluation of outcomes; and integration of these skills with knowledge of diverse lifestyles and racial, ethnic, and cultural patterns. This course stresses work
with individuals and includes a minimum of two (2) hours a week practicing fundamental interpersonal skills required for effective social work practice, which includes use of video equipment, role-playing exercises, various methods of practicing culturally sensitive generalist social work.
Prerequisites: SOWK 210 & STAT 210 with a minimum grade of C or better; majors only and junior standing; acceptance as social work major
Co-requisites: SOWK 315, SOWK 318, SOWK 320 and SOWK 330

SOWK 375 GENERALIST PRACTICE (MEZZO) II: FAMILIES & GROUPS - 3 semester hours
This course continues the development of knowledge, skills, and values for beginning generalist social work practice. Work with groups and families are stressed as well as integration of experiences from concurrent junior field placement.
Prerequisites: SOWK 370 with a minimum grade of C or better; majors only and juniors standing; acceptance as social work major
Co-requisites: SOWK 321, SOWK 340, and SOWK 399

SOWK 395 SOCIAL WORK SPECIAL TOPICS - 3 semester hours
Selected special topics in social work, which may include controversial issues; domestic violence, spirituality and social work; child welfare, health and mental health issues; substance abuse; social work and the law; gerontology. The topics will reflect current trends in the field of social work.
The content may be repeated for credit with different topics with the consent of the department.
Prerequisites: Majors only and juniors standing; acceptance as social work major

SOWK 399 FIELD INSTRUCTION I AND SEMINAR - 3 semester hours
In the junior field experience the student is introduced to the realm of social work practice by allowing him/her to shadow a social worker in a variety of practice roles and by participating in various activities that are planned to meet the learning objectives. Through this experience, students
learn how to integrate practice behavior with social work knowledge, values and skills. Upon successful completion of the junior year, the student will have attained a beginning understanding of, and

integration with the Council of Social Work Education (Educational Policy Accreditation
Standards – EPAS) core competencies. Junior year students are in field work two days a week (160 clock hours) during their second semester. This course also includes a weekly seminar to integrate theory to generalist social work practice.
Prerequisites: SOWK 315, SOWK 318, SOWK 320, SOWK 330 & SOWK 370 with a minimum of grade of C or better, majors only and junior standing; acceptance as social work major
Co-requisites: SOWK 321, SOWK 340 and SOWK 375

SOWK 415 BOOTS ON THE GROUND MENTAL HEALTH; LEARNING, DISCUSSING AND RECLAIMING MENTAL STABILITY - 3 semester hours
Students are introduced to an assortment of mental health traumas of service members and veterans. The mental health stability of a service member or veteran can be compromised due to exposure of singular or multiple traumatic events. Students learn strategies and resources to assist service
members and veterans to strengthen their mental health firmness.
Prerequisites: SOWK 211, SOWK 212, SOWK 313, SOWK 314 or with permission of the Department Chair

SOWK 416 RIGHT HAND RESILIENCE: TRAUMA AND COPING SKILLS - 3 semester hours
Students are introduced to a variety of traumas within the service member and veteran community. Students analyzes how the traumatic experiences are impactful with the service members, veterans and their families. Students commence to assist with learned resources and techniques of this
population.
Prerequisites: SOWK 211, SOWK 212, SOWK 313, SOWK 314, SOWK 415 or with permission of the Department Chair

SOWK 475 GENERALIST PRACTICE (MACRO) III: COMMUNITIES AND ORGANIZATIONS - 3 semester hours
This course focuses on social work methods for practice with diverse communities and organizations, with an emphasis on the advancement of social justice. The dominant theme of the course addresses how professional social workers practice within these systems and the strategies,
tactics, and methods they employ to advance social justice. Students explore basic content pertaining to the values and ethics of macro social work practice, the roles and methods practitioners use in various situations in which organizational practice and community practice and where social action occurs. Students will complete the course with an expanded awareness of organizational practice and community practice and social action and they will establish an initial framework for themselves that will ground their work in generalist practice. This course integrates
concurrent field experience, all areas of the social work curriculum, and continued professional growth.
Prerequisites: SOWK 375 with a minimum grade of C or better, majors only and senior standing. Social Work Major, completion of all required courses (general education and the professional foundation curriculum) and a cumulative 2.5 grade point average
Co-requisites: SOWK 490

SOWK 490 PROFESSIONAL FIELD PRACTICUM I AND SEMINAR - 3 semester hours
This course provides a 240 clock-hour (minimum) advanced supervised field practicum in selected social work and human service agencies. In addition to the hours spent in the agency, a weekly seminar is held for the purpose of integrating theoretical and experiential information, processing
personal experiences, providing assignments relevant to agency work, discussing the nature of agency services, and reviewing student's goals and competencies/practice behaviors. Social Work majors must earn a grade of C or higher.
Prerequisites: Social Work Major, completion of all required courses (general education and the professional foundation curriculum) and a cumulative 2.5 grade point average
Co-requisite: SOWK 475

SOWK 495 ADVANCED SOCIAL WORK ELECTIVE (Selected Topic in Social Work) - 3 semester hours
This course focuses on selected topics in controversial issues and social work practices that reflect current trends in the field of social work. This course may also provide an interdisciplinary study abroad experience for students to better understand social service planning and delivery in other
countries. Students will learn about the cultural, historical and political aspects of the host country through lectures, field trips and student centered activities. The course may be repeated for credit with different topics with the consent of the department.
Prerequisites: Majors only and senior standing
Co-requisites: SOWK 498, SOWK 499

SOWK 498 (WI) SOCIAL WORK SENIOR SEMINAR - 3 semester hours
This capstone course is the final required course in the social work program curriculum, which emphasizes professional writing skills, ethics, and legal dilemmas for professional generalist social work practice. It is designed as an opportunity for integration of previous learning and assimilation
of this learning in a way which is meaningful for each student. This course utilizes a discussion format, with inclusion of minimal lecture, student-facilitated groups, and experiential activities. As a means of individualizing the contents of this course, student will assist in the transaction of this
syllabus. This course is writing intensive.
Prerequisites: Majors only and senior standing
Co-requisites: SOWK 499

SOWK 499 PROFESSIONAL FIELD PRACTICUM II AND SEMINAR - 3 semester hours
This course is the final professional level field education course in the field education sequence, and it provides a 240 clock-hour advanced educational practicum for the students through supervised experience at an approved social service agency. In addition to the hours spent in the agency, a
weekly seminar is held for the purpose of integrating theoretical and experiential information, processing personal experiences, providing assignments relevant to agency work, discussing the nature of agency services, and reviewing student's goals and competencies/practice behaviors. The
goal of field placement experiences is designed to facilitate student's achieving the social work program competencies. Social Work major must earn a grade of C or higher.
Prerequisites: SOWK 490, Majors only and senior standing
Co-requisites: SOWK 498

Social Work Major, Bachelor of Social Work (B.S.W.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 112	Basic Mathematics I	3
MATH 113	Basic Mathematics II	3
GE History		3
GE Health/Wellness		2
Unrestricted Elective		3
PSYC 101 or PSYC 212	Introduction to Psychology or Human Growth & Development	3
BIOL 116	Biological Science	4
Unresticted Elective		3
	Credit Hours	**30**
Sophomore Year		
SOWK 210	Introd Generalist SOWK Practic	3
SOWK 260	Hist SOWK Policy-1600 Present	3
GE Literature		3
GE Global Studies (SPAN Preferred)		3
STAT 210	Elementary Statistics I	3
GE Humanities (PHIL Course)		3
SPEE 214	Introduction To Public Speakin	3
Unrestricted Elective		9
	Credit Hours	**30**
Junior Year		
SOWK 315	Social Work Research I	3
SOWK 318	Writing for SOWK Profession	3
SOWK 320	Human Behavior/Soc Environ I	3
SOWK 330	Diversity/Cultural Compet SOWK	3
SOWK 370	Generalist Practice (micro) I	3
SOWK 321	Human Behavior/Soc Environ II	3
SOWK 340	Social Welfare Policy/Services	3
SOWK 375	Generalist Practics (mezzo) II	3
SOWK 399	Field Instruction I & Seminar	3
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
SOWK 475	Generalist Prac (macro) III	3
SOWK 490	Prof Field Prac & Seminar	3
SOWK 495 or SOWK 476 or SOWK 477	Adv Topics in Social Work or Child Welfare & Socal Work Pra or Child Welfare and SOWK Policy	3
SOWK 498	Social Work Senior Seminar	3
SOWK 499	Prof Field Prac II & Seminar	3
Unrestricted Elective (300/400 Level)		15
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
SOWK 210	Introd Generalist SOWK Practic	3
SOWK 260	Hist SOWK Policy-1600 Present	3
SOWK 315	Social Work Research I	3
SOWK 318	Writing for SOWK Profession	3
SOWK 320	Human Behavior/Soc Environ I	3
SOWK 321	Human Behavior/Soc Environ II	3
SOWK 330	Diversity/Cultural Compet SOWK	3
SOWK 340	Social Welfare Policy/Services	3
SOWK 370	Generalist Practice (micro) I	3
SOWK 375	Generalist Practics (mezzo) II	3
SOWK 399	Field Instruction I & Seminar	3
SOWK 475	Generalist Prac (macro) III	3
SOWK 490	Prof Field Prac & Seminar	3
SOWK 495	Adv Topics in Social Work	3
SOWK 498	Social Work Senior Seminar	3
SOWK 499	Prof Field Prac II & Seminar	3
Total Credit Hours		**48**

Code	Title	Credit Hours
STAT 210	Elementary Statistics I	3
SPEE 214	Introduction To Public Speakin	3
Total Credit Hours		**6**

Code	Title	Credit Hours
Restricted Electives		0
Unrestricted Electives		33
Total Credit Hours		**33**

Social Work, Minor in Social Work

The Social Work Minor is an interdisciplinary program for undergraduate students who are interested in the field of social work or social services and want more in-depth study in this area. Students must complete all general education core requirements prior to enrollment in the required upper level social work minor courses. Faculty advisors in the Social Work Department or the Academic Center for Excellence are available to help students interested in adding a social work minor to their program of study.

A minimum of 18 semester hours of course work from the following courses are required for the minor.

Code	Title	Credit Hours
Required Courses (9 semester hours total)		
SOWK 210	Introd Generalist SOWK Practic	
SOWK 320	Human Behavior/Soc Environ I	
SOWK 340	Social Welfare Policy/Services	
Social Work Advanced Courses and/or Electives (9 semester hours total)		
SOWK 211	Honorable Fit:MIL Code Conduct	
SOWK 212	Fr Bootcamp to Home Expl Vet B	
SOWK 260	Hist SOWK Policy-1600 Present	
SOWK 313	Honor Grief:Loss Mourn Respt	
SOWK 314	Family Vow: Acknowl Fam Stress	
SOWK 315	Social Work Research I	
SOWK 318	Writing for SOWK Profession	
SOWK 321	Human Behavior/Soc Environ II	
SOWK 330	Diversity/Cultural Compet SOWK	
SOWK 375	Generalist Practics (mezzo) II	
SOWK 416	Right Hnd ResilenceTrau/Coping	
SOWK 417	Boots on Ground Mental Hlth	
SOWK 475	Generalist Prac (macro) III	
SOWK 476	Child Welfare & Socal Work Pra	
SOWK 477	Child Welfare and SOWK Policy	
SOWK 495	Adv Topics in Social Work	

Social Work, Minor/Certificate in Homefront Readjustment for the Armed Forces

This minor/certificate is designed for undergraduate students and professionals in interdisciplinary fields who wish to develop specific knowledge of military culture and communities, and acquire the skills to interact in community settings where the needs of veterans and their families are met. All students in this minor/certificate program are considered undergraduate.

Current matriculating students and non-matriculating students may enroll in the minor/certificate program:

- Matriculating students can complete the certificate in a minimum of 9 to 18 months.
- Non-matriculating students can complete the certificate in a minimum of 12 to 24 months.

Admission Requirements

Matriculating Students

- Completion of 60 credit hours and a cumulative GPA of 2.5 or better.
- Students must declare Homefront Readjustment for the Armed Forces as a minor by completing the Minor Request Form and submitting the completed paperwork to the Registrar's Office.

Non-Matriculating Students

- Students must apply for the Certificate Program through the Transfer Admissions Office.
- Completion of 60 credit hours and a cumulative GPA of 2.5 or better.
- Student's with a bachelor's degree from a regionally accredited institution must have achieved a cumulative GPA of 2.5 or better. Students with a bachelor's degree and a cumulative GPA above 2.3 may petition the Department Chair for a waiver of the cumulative 2.5 GPA requirement.
- Official transcripts from all colleges and universities attended. Applicants do not need to send in transcripts for courses taken at Virginia State University.
- Submit a carefully written 1,000 word goal statement outlining background and experience (academic and/or professional), and future career goals after the completion of the certificate. Applicants who do not hold a social work undergraduate degree must indicate how their academic and/or professional background has prepared them for admission to the certificate program.
- TOEFL scores are required for international applicants (minimums).

Curriculum Requirements

Students are required to take all of the courses listed below, a total of 18 credits.

Code	Title	Credit Hours
SOWK 211	Honorable Fit:MIL Code Conduct	3
SOWK 212	Fr Bootcamp to Home Expl Vet B	3
SOWK 313	Honor Grief:Loss Mourn Respt	3
SOWK 314	Family Vow: Acknowl Fam Stress	3
SOWK 416	Right Hnd ResilenceTrau/Coping	3
SOWK 417	Boots on Ground Mental Hlth	3
Total Credit Hours		**18**

Department of Sociology and Criminal Justice

Chairperson: Stephen Rockenbach (Interim)
Location: Colson Hall, Room 202
Contact Information: (804) 524-5910 | srockenbach@vsu.edu

Department Overview

The Department of Sociology and Criminal Justice offers two undergraduate degrees: a **Bachelor of Arts (B.A.) in Sociology** and a **Bachelor of Science (B.S.) in Criminal Justice**. These programs prepare students for a wide range of career options in the broad dimensions of teaching, practice, and research. Majors are educated for maximum flexibility, with emphasis on developing communications, data analysis skills, and the ability to think critically.

In an effort to address the University's mission to provide viable and complementary minors for students, the Department offer a **Minor in Sociology**. The courses in the minor are designed to serve as a complementary area of study that will enhance practice in most

disciplines and professions. All sociology majors are required to declare a minor.

Mission Statement

The mission of the Department is to provide students with a liberal arts education through which they acquire skill in abstract logical thinking, historical consciousness, knowledge and skills of science and scientific inquiry, knowledge of values and their relationship to a variety of life situations, knowledge of international and multicultural phenomena, and experience with in-depth study.

We endeavor to provide curricula and other types of educational experiences through which students will acquire increasingly complex knowledge, the abilities and the technological skills to apply that knowledge to a wide range of situations and conditions in careers, professions and in their personal lives.

Degree Highlight Information

Majors in sociology are prepared for graduate and professional schools and for direct entry into administrative positions in the major corporate and public sectors; positions in social research, social services, business, teaching, and the military.

A Criminal Justice major provides students with a comprehensive, broad-based liberal arts education and an exposure to seven major fields of criminal justice; juvenile justice, law enforcement, corrections, court procedures, criminal law, forensic investigation, and criminal justice research.

Beyond the classroom experience, students are encouraged to actively engage in student organizations including the Alpha Kappa Delta – International Sociology Honor Society, the Alpha Phi Sigma – National Criminal Justice Honor Society, the Lambda Alpha Epsilon – American Criminal Justice Association, the National Association of Blacks in Criminal Justice, and the National Association of Black Social Workers.

Department Goals

The objectives of the Department are:

- To provide a broad liberal arts education.
- To enhance the competence of students in writing skills, verbal communication, analytical ability, and research skills.
- To provide opportunities to apply contemporary technology to issues in the disciplines.
- To provide students with leadership opportunities through exposure to professional development activities and the availability of collegiate chapters of honors and professional organizations.
- To provide a required internship in Criminal Justice.
- To prepare majors for graduate, law, or other advanced professional education.
- To prepare students for entry level professional positions in their fields by exposing them to a broad selection of course work in the selected discipline.
- To provide general education service courses for majors from other disciplines.

Program Listings

Bachelor of Arts in Sociology

The Sociology program offers general education on different major aspects of sociological knowledge. Students whose objectives are law, ministry, business management, higher education, politics, government, and the military will be uniquely qualified for success in graduate and professional schools upon completion of this baccalaureate program.

Bachelor of Science in Criminal Justice

Criminal Justice is a discipline dedicated to studying how the criminal justice system (police, courts, and corrections) utilizes social control measures in dealing with criminal behavior. Three concentrations are offered in the Criminal Justice program: **Forensic Investigation**, **Juvenile Justice**, and **Policing**.

Forensic Investigation

The concentration of forensic investigation aims at preparing undergraduate students for careers or advanced studies in forensic investigation. Experts in forensic investigation may work at the local, state, or federal levels. The proposed concentration will prepare students for various fields or further training in crime investigation. Among others, students will be introduced to evaluations of ballistic evidence, fingerprinting, crime scene photography, and cybercrimes. In addition, students will acquire proficiency in documenting, processing, and the preservation of evidence. They will learn techniques of managing and coordinating crime scenes.

Juvenile Justice

This concentration focuses on training our students in juvenile justice system. Criminal justice majors who successfully complete this option of concentration may pursue advanced studies or careers in juvenile probation, juvenile corrections, and rehabilitation. Courses are designed to develop student familiarity with juvenile delinquency, the processes of juvenile justice, rehabilitation, workgroups of the juvenile courtroom, and community-based corrections. Our students will understand the relationship between the adult and the juvenile justice systems and be able to examine key issues and trends in juvenile corrections.

Policing

Policing majors will study mostly courses relating to the work of law enforcement officers. They will become familiar with the challenges facing law enforcement officers in contemporary America. They will learn other policing related courses such as criminal investigations, drug related crimes, and the police organization. Students who successfully complete the BS Degree in CJUS with a concentration in Policing may pursue careers in law enforcement, crime scene investigation, corrections, or probation.

Minor in Sociology

The department offers a minor in Sociology, available to students from other majors. All Sociology majors are required to complete a minor in another program.

Major(s)

- Sociology, Bachelor of Arts (B.A.) (p. 359)
- Criminal Justice, Bachelor of Science with a Concentration in Forensic Investigations (B.S.) (p. 360)
- Criminal Justice, Bachelor of Science with a Concentration in Juvenile Justice (B.S.)
- Criminal Justice, Bachelor of Science with a Concentration in Policing (B.S.)

Minor(s)

- Minor in Sociology (p. 363)

SOCI (p.), CJUS (p.)

COURSE DESCRIPTIONS SOCIOLOGY

SOCI 101 INTRODUCTION TO SOCIOLOGY - 3 semester hours
Students are taught the fundamental concepts and principles of sociology. Emphasis is on the empirical and theoretical bases of sociology, social structure, the variety of influences and pressures that help make individuals a part of society, the nature of social research, and the use of the sociological perspective in understanding social interaction. This course is required for all sociology majors.

SOCI 102 INTRODUCTION TO ANTHROPOLOGY - 3 semester hours

The study of evidence of human evolution, developing cultures, racial groupings and people in preliterate societies.

SOCI 201 SOCIAL PROBLEMS - 3 semester hours

A survey course that deals with the problems that characterize United States society. Focus is on understanding the social forces, movements, policies, and changes in identification of and response to social problems of the society, and the theories that attempt to explain these phenomena.

SOCI 208 SOCIOLOGY OF THE AFRICAN AMERICAN EXPERIENCE - 3 semester hours

An examination of African Americans in the United States as a social group. Focus is on the socio-historical developments and current trends in the experiences of African Americans with equal attention given to developmental experience on the continent of Africa prior to colonization, the transportation of Africans to the "New World," enslavement, and experiences up to the 21st century.

Prerequisite: SOCI 101

SOCI 214 SOCIAL PSYCHOLOGY - 3 semester hours

An introduction to the concepts and theories that attempt to explain the behavior of the individual in society. Major topics include culture and personality, social roles, leadership, prejudice and propaganda. Review and analysis of current concepts and experimentation in the field are also

included.

SOCI 220 BLACK SOCIAL THOUGHT - 3 semester hours

This course is an examination of the nontraditional intellectual ideas, thoughts and philosophies of black intellectuals throughout the African Diaspora as they relate to the wider venue of global sociological thinking.

Prerequisite: SOCI 101

SOCI 302 MARRIAGE AND FAMILY - 3 semester hours

This course focuses on the family as a social institution, its development, functions and change in the United States and other societies. Changing values, gender roles, marital choice, socialization, and the effects of contemporary social change on the family, as we know it is studied.

Prerequisite: SOCI 101

SOCI 304 RACE AND ETHNIC RELATIONS - 3 semester hours

A study of the status of the various racial, religious, and ethnic minority groups in American society. Focus is on the forces relevant to establishment and maintenance of patterns domination and subordination between racial and ethnic groups. Critical analysis is made of discrimination, segregation, exploitation, hostility, and feelings of cleavage. American race and ethnic relations will be compared with those in other major societies.

Prerequisite: SOCI 101

SOCI 311 SOCIAL MOVEMENTS AND SOCIAL CHANGE - 3 semester hours

The study of the effects of collective behavior on social structure. The factors and processes of social change are studied from the position of various theorists and theories of contemporary society.

Prerequisite: SOCI 101

SOCI 314 SOCIOLOGY OF RELIGION - 3 semester hours

The study of religion in terms of belief systems, practices, and its functioning as a social institution. Major theoretical perspectives on religion in its function as an agent of social change, in maintaining the social status quo, and in the lives of individuals and societies are emphasized. The major world religions are surveyed from sociological perspectives.

Prerequisite: SOCI 101

SOCI 317 METHODS OF SOCIAL RESEARCH - 3 semester hours

The logic, design and use of social research. Major emphasis is on social research techniques and procedures, the relationship between theory and research, and use of quantitative data analysis techniques. The structure and use of qualitative research techniques are also examined.

Prerequisite: SOCI 101

SOCI 318 SOCIOLOGICAL THEORY - 3 semester hours

The study of the works of major theorists whose works constitute the foundation of the discipline of sociology. The social impact of the major theoretical perspectives in contemporary sociology and the relationship of theory to research are included.

Prerequisites: SOCI 101 and 6 additional hours of sociology courses.

SOCI 325 SOCIOLOGY OF HEALTH AND ILLNESS - 3 semester hours

This course examines the social contexts of health, illness, and medical care. It gives prominence to the debates and contrasting perspectives which characterize the field of medical sociology. Topics include the social, environmental, and occupational factors in health and illness, the politics surrounding health care and the patient's perspectives on illness.

Prerequisite: SOCI 101

SOCI 333 SOCIOLOGY OF HIP HOP & THE MEDIA - 3 semester hours

This course is designed to analyze and critique the social, political, cultural, economic, and historic roots of the media industry from a sociological perspective. It frames the media as the business of disseminating information, ideas, and promoting forms of "entertainment" that ultimately shape

public perception and social interaction.

Prerequisite: SOCI 101

SOCI 344 RURAL SOCIOLOGY — 3 semester hours

This course introduces students to rural social structures and institutions in American society. It emphasizes the differences and the similarities in rural and urban communities, leisure and recreation, family life believe systems and social problems.

Prerequisite: SOCI 101

SOCI 352 URBAN ISSUES - 3 semester hours

The factors and forces that result in development and change of and within urban environments are studied. Emphasis is on critical analysis of the types and sources of issues that characterize urban life and urban areas in the United States. Policies and group efforts aimed at addressing these issues

will also be examined.

Prerequisite: SOCI 101

SOCI 356 POPULATION ISSUES - 3 semester hours

The determinants and consequences of trends in population size and composition, distribution through fertility, mortality, and migration are examined. Theoretical perspectives on population growth and change and the consequences for nations as well as for individuals are also studied.

Prerequisite: SOCI 101

SOCI 362 JUVENILE DELINQUENCY - 3 semester hours

Development and change of general values, attitudes, and social policy related to children. Parenting practices, the nature and extent of juvenile delinquency, theories of childhood, delinquency and the delinquent are studied, with special emphasis on the juvenile justice system in

the USA.

Prerequisite: SOCI 101

SOCI 365 SOCIOLOGY OF DEVELOPING SOCIETY - 3 semester hours

This course is an examination of the social institutional structure of developing societies in Africa, Asia, the Middle East and Latin America. It includes a discussion and analysis of systems and social life as well as the impact of western and other cultural influences on social change these societies.

Prerequisite: SOCI 101

SOCI 370 AFRICAN AMERICAN WOMEN IN SOCIETY - 3 semester hours

This course will examine the political, economic and social roles of African American women in the United States. Special emphasis is placed on such topics as the myths and realities of gender identity for African American women, family life and the challenges posed by black feminism,

work patterns, organizational activities, and cultural production. Through these means it will explore the interrelationship between race, ethnicity, class, and gender.

Prerequisite: SOCI 101

SOCI 411 COMPARATIVE SOCIAL INSTITUTIONS - 3 semester hours

The effects of industrialization, urbanization and population dynamics on the structure and functions of social institutions are studied. Major theories of social structure and the linkages between institutions are included. Special emphasis is placed on the economic, political and religious institutions and their ideologies as casual influences in the lives of individuals and in societies.

Prerequisites: Nine semester hours of sociology, including SOCI 318

SOCI 413 SOCIAL STRATIFICATION - 3 semester hours

The study of the development, maintenance and change of institutionalized patterns of differential access to wealth, status, and power within the United States. Major social theories that attempt to explain the existence, constancy, and change of social inequality are emphasized.

Prerequisite: Nine semester hours of sociology, including SOCI 318

SOCI 414 SOCIOLOGY OF WORK - 3 semester hours

A survey course that provides intensive study of the occupational structure, occupations, labor force composition and participation, and work settings. Attention will be given to the linkages between government, business, and employee organizations. Theories that attempt to account for the structure and change of and within the occupational structure and the effects of these phenomena for individuals and groups will also be examined.

Prerequisites: Nine semester hours of sociology

SOCI 419 APPLIED RESEARCH METHODS - 3 semester hours

An advanced-level research methods course that is designed to give students practical experience in applying core concepts acquired in SOCI 317 (Methods of Social Research) in order to execute

404 developed proposals and conduct social research.

Prerequisite: SOCI 317

SOCI 420 SENIOR SEMINAR - 3 semester hours

This course provides the experiences necessary for students to integrate and synthesize the knowledge and skills gained through successful completion of the sociology program of study. Readings, discussion, and

written papers incorporating both quantitative and qualitative research methods on selected problems and issues in sociology are required. Topics include the various subdivisions within sociology with particular emphasis on the relationship of theory and research, social structure and social change, and the work of African American sociologists.

SOCI 430 Independent Study - 1-6 semester hours (variable credit)

Provides the student an opportunity to explore "in-depth" an area which the student encountered in a previous course or an area which is not part of the curriculum in Sociology. May be repeated for credit.

Prerequisite: Approval of the Department Chair

SOCI 455 SPECIAL TOPICS IN SOCIOLOGY - 3 semester hours

This course is a Sociology Elective that will focus on a special topic and/or current specific interests, trends, ideological shifts, research, and publications that relate to the field and discipline of Sociology. May include Study Abroad.

Prerequisite: Junior or Senior Level

CRIMINAL JUSTICE

CJUS 116 INTRODUCTION TO CRIMINAL JUSTICE - 3 semester hours

Provides an overview of the criminal justice system. This overview includes the history of the system and the major processes that are carried out by the different agencies of the criminal justice system. It describes the process of arrest, adjudication, corrections and release.

CJUS 210 INTRODUCTORY STATISTICS FOR CRIMINAL JUSTICE - 3 semester hours

Introduces basic statistics needed to understand contemporary criminal justice research and to conduct descriptive and inferential statistical analysis. Also students will learn measures of associations. A prerequisite for CJUS 317 Research Methods for Criminal Justice.

Prerequisites: CJUS 116; MATH 112, MATH 113

CJUS 211 SPSS FOR CRIMINAL JUSTICE/LAB - 1 semester hour

Introduces basic principles of SPSS used in social science research. Must be taken in conjunction with CJUS 210 Introductory Statistics for Criminal Justice.

CJUS 212 AMERICAN LAW ENFORCEMENT SYSTEM AND PRACTICES - 3 semester hours

Introduces the local, national, and federal major law enforcement agencies of the country. It includes history, overview of the functioning, and an assessment of law enforcement agencies. It covers the process of recruitment, training, promotion, and other pertinent issues related to

community control and police brutality.

CJUS 215 INTRODUCTION TO FORENSIC INVESTIGATION - 3 semester hours

Introduces forensic investigation to the students. It includes a review of the application of different forensic techniques to the resolution of criminal issues. It reviews the different aspects of forensic science, including fingerprinting, casting, document examination, and photography. The laboratory complements the lecture portion of the course.

CJUS 217 INTRODUCTION TO THE JUVENILE JUSTICE SYSTEM - 3 semester hours

Surveys the development, structure and functioning of the juvenile justice system. Emphasis is on the procedures employed in the apprehension, detention and handling of juveniles by the police, the courts, and other agencies in the juvenile justice system. Review of recent developments in juvenile rehabilitation is included.

CJUS 228 JUVENILE JUSTICE PROCESS - 3 semester hours

This course presents an examination of procedural and substantive viewpoints as it relates to the juvenile justice. It incorporates a comprehensive study of decision-making centered on the police, the juvenile courts, probation and juvenile aftercare are also examined.

CJUS 230 CRIMINAL INVESTIGATION - 3 semester hours

Offers an introductory overview of major investigative procedures generally followed by the local, national, and federal agencies of the country. Students will know more about police detective work and FBI investigations.

CJUS 233 PRINCIPLES OF ETHICS FOR CRIMINAL JUSTICE - 3 semester hours

Covers major philosophical schools of ethics and reviews major components of the criminal justice system and their related ethical concerns. Furthermore, seeks to outline the relevance of studying ethics while examining its sources within the criminal justice system.

CJUS 235 COMMUNITY BASED CORRECTIONS - 3 semester hours

An in-depth analysis of community based correctional programs and practices, related to the rehabilitation of juvenile offenders is examined. A thorough working knowledge of community resources available to juvenile offenders is provided.

CJUS 250 COURT SYSTEM AND PRACTICES - 3 semester hours

Reviews the federal and state court systems including the history of the court systems. The procedures for the appointment of justices and judges, and the actual operations and practices of the courts will be examined. Other pertinent court related issues such as plea bargaining sentence

disparities and the future of the courts will be examined.

CJUS 255 INTRODUCTION TO CORRECTIONS - 3 semester hours

The course examines the origin and historical underpinnings of the modern correctional system. Students will explore the philosophies of retribution, incapacitation, deterrence, and rehabilitation. The course will also focus on issues facing correctional facilities today including issues of race, gender, gangs, aging inmates, and AIDS.

Prerequisites: CJUS 116

CJUS 260 DRUGS, CRIME AND THE CRIMINAL JUSTICE SYSTEM - 3 semester hours

Examines effects of illicit drug abuse in the country and examines its relationship to violence, crime, and the criminal justice system. It

provides an overview of drug abuse in an historical and social context primarily in the United States.

CJUS 295 SPECIAL TOPICS IN CJUS I - 3 semester hours

Variable content. Selected special topics in criminal justice, which may include controversial issues, gangs, ethics, or female offenders. The topics will reflect current trends in the field of criminal justice and the expertise of the faculty. This course may be repeated for credit with different topics with the consent of the department.

CJUS 310 CRIMINAL JUSTICE DATA MANAGEMENT - 3 semester hours

Emphasizes real world data sets and management including data analysis techniques.

CJUS 315 TERRORISM - 3 semester hours

Offers the background students need to understand major issues in terrorism and offers in-depth coverage of domestic and international terrorism. It also reviews the controversial aspects of counter-terrorist policies and actions.

CJUS 317 RESEARCH METHODS FOR CRIMINAL JUSTICE - 3 semester hours

Emphasis is on social research techniques and procedures, the relationship between theory and research, and the use of quantitative data analysis techniques. The structure and use of qualitative research techniques are also examined.

Prerequisites: CJUS 116, CJUS 210

CJUS 320 PRIVATE SECURITY SYSTEM AND PRACTICES - 3 semester hours

Introduces the ever-growing field of private and industrial security systems emerging in the country. It includes recruitment, training, operational and administrative' practices used by different security systems. It will examine physical security arrangements, and the pros and cons of in-house and contract security systems.

CJUS 330 CRIME SCENE INVESTIGATION - 3 semester hours

Introduces students to the importance of physical evidence in solving crimes, elements of fingerprinting, techniques of gunshot residue tests, evidence collection, and processing methods, and the use of forensic light source technology. Emphasis will be placed on the importance of documentation with notes, sketches, and photography, effective communication of results, and interpersonal skills.

CJUS 335 CONTEMPORARY PROBLEMS IN POLICING - 3 semester hours

Examines the social and political dynamics under which police personnel perform their duties. Discretionary decision-making and the legal, social and institutional contexts in which they work are also considered. Application of interpersonal theories and concepts to police problems and practices will be included.

CJUS 336 JUVENILE CORRECTIONS - 3 semester hours

Examines key issues and trends in juvenile corrections. Students will become familiar with the main goals of juvenile corrections, namely including treatment, corrections, and rehabilitation. Confinement. Restructuring of the juvenile justice system as well as challenges facing corrections within the juvenile corrections will further be outlined.

CJUS 339 BLACK WOMEN & RESISTANCE - 3 semester hours

This course will examine the ways in which Black women in particular have been victims and offenders in the criminal justice system. An overview of historical and contemporary constructions of resistance by Black girls and women in response to interpersonal and structural forms of violence will be investigated.

Prerequisites: CJUS 116. CJUS 360

CJUS 340 MINORITIES & CRIMINAL JUSTICE SYSTEM - 3 semester hours

Provides an in-depth look at the theory and practice of criminal justice on crime, race, ethnicity, and justice. It offers insight into minority criminality and criminal victimization while addressing the less than objective criminal justice system processing of minority defendants and felony crime arrestees. It will elucidate what is fact and myth in the system controversies that surround minority criminality, criminal victimization, criminal profiling, and the criminal justice system.

CJUS 341 DEVIANCE & SOCIAL CONTROL - 3 semester hours

This course offers a variety of explanations and types of deviant behavior, and theoretical explanations of deviant behavior. The impact of deviant behavior on the individual and the implications of sanctions are studied.

CJUS 345 CRIMINAL LAW AND EVIDENCE - 3 semester hours

Provides an introduction to the nature and dynamics of the criminal law of the country and also provides an understanding of the importance of evidence in a criminal case. Virginia substantive law will be discussed, including classification and analysis of selected offenses.

Prerequisites: CJUS 116, CJUS 250

CJUS 350 GANGS AND ADOLESCENT SUBCULTURES - 3 semester hours

Evaluating essential issues relevant to the investigation of why and how some juveniles join gangs. Possible strategies for gang prevention and intervention are investigated.

CJUS 360 CRIMINOLOGY AND THEORIES OF CRIME - 3 semester hours

Examines theories of crime, criminal behavior and the social, cultural and psychological factors in crime causation, control and treatment; includes an analysis of criminal behavior.

Prerequisites: CJUS 116, CJUS 212, CJUS 250, CJUS 255

CJUS 361 VICTIMOLOGY - 3 semester hours

Explores the scope of victim issues in American society. Reviews the programs and services provided for victims of crime. The expanding roles of the courts, police, battered women shelters, victim/witness assistance programs, crisis intervention units and legislation are highlighted.

CJUS 364 SOCIOLOGY OF CORRECTIONS - 3 semester hours

Evaluates the effectiveness of correctional institutions, their development, functioning and change. Theories that influenced the development of corrections programs and agencies are included with emphasis on current direction in law, policy, research and practice.

CJUS 365 POLICE ORGANIZATION AND MANAGEMENT - 3 semester hours

Examines major concepts of organization and management as these relate to law enforcement. Formulation of policies and procedures in the optimum utilization of personnel and financial resources is considered. It shows how to apply police research and contemporary management

principles to today's complex police organization.

Prerequisite: CJUS 116

CJUS 366 WOMEN AND THE PRISON SYSTEM - 3 semester hours

This course will serve as an in-depth overview of race, gender, and class, with an analysis of women in the prison system. The main foci is an advanced understanding of structural inequalities and disproportionate minority confinement. Historical and contemporary forms of punishment will be explored.

CJUS 370 FORENSIC SCIENCE AND THE LAW - 3 semester hours

Students will understand the relationship between forensic science and the courts. Examination of this relationship focuses on the influence of scientific proofs based on group data and courtroom testimonies in the application of forensic evidence in courts and the exonerations of persons wrongfully convicted of crimes. Other areas include the philosophy of science, the scientific method, the rules of evidence, and the conduct of trials.

Prerequisite: CJUS 215

CJUS 380 CRIMINAL PROCEDURES - 3 semester hours

Examines the court procedures generally followed in the country. It includes a survey of the exclusionary rule and probable cause; arrests, search and seizures; identification and interrogation; constitutional rights and rules during trial; and legal liabilities of law enforcement officers.

CJUS 385 ETHICS IN CRIMINAL JUSTICE - 3 semester hours

An analysis of contemporary ethical issues in crime and justice is presented. Ethical dilemmas in policing, racism, corrections, professionalism, the use of force, and decision-making are analyzed.

CJUS 416 ADVANCED FORENSIC INVESTIGATION - 3 semester hours

Builds upon knowledge acquired from the introduction to forensic investigations class. It is designed to prepare students for advanced studies or careers in forensic investigation. Students will pursue proficiency in documenting, processing, and the preservation of evidence. They will learn

techniques of managing and coordinating crime scenes.

Prerequisite: CJUS 215

CJUS 417 ETHICAL ISSUES IN JUVENILE JUSTICE - 3 semester hours

Focuses on how minors should be treated within the justice system. Challenges facing various participants within the juvenile justice system will be highlighted. They will include courtroom workgroup participants, experts of juvenile rehabilitation including psychologists and correction officers.

CJUS 420 SENIOR SEMINAR IN CRIMINAL JUSTICE - 3 semester hours

Provides an opportunity to integrate and synthesize the knowledge and skills gained through successful completion of the criminal justice program of study. Readings, discussions, and written papers incorporating both quantitative and qualitative research methods on selected problems and issues in criminal justice required. Students will be required to write a final paper and make a formal presentation. The paper will be reviewed and accepted by the departmental Senior Seminar Paper Review Committee.

Prerequisite: Senior standing

CJUS 425 COMPARATIVE CRIMINAL JUSTICE SYSTEMS - 3 semester hours

Provides a worldview of cultural and legal traditions that are related to crime. This course will also discuss philosophies, practices and institutions of selected countries.

CJUS 430 CRIMINAL JUSTICE PRE- INTERNSHIP - 2 semester hours

Provides students with career preparation and prepares students for field internships. Different agency representatives will visit the class and will give lectures about their respective agency activities, their expectations, and future career possibilities. During this semester students must

finalize their CJUS 432 Internship placement. Students will make applications and will complete background checks, if any, so that the following semester they can start their internship without any delay. Students will learn more about criminal justice careers and learn how to present themselves professionally to prospective employers.

Prerequisite: Junior standing

CJUS 431 VIOLENCE AND THE VIOLENT OFFENDER - 3 semester hours

Examines issues relating to violence in today's society as they impact the violent offender. Reviews myths about violence, victim-offender characteristics and relationships, and theories of violence. It also examines contemporary schools of thought on violence.

CJUS 432 CRIMINAL JUSTICE INTERNSHIP - 4 semester hours

Course requirements are two fold-class and agency participation. Supervised placement with one or more federal, state or local criminal justice organizations or facilities involved in the arrest, adjudication, correction or release of either juvenile or adult offenders. Enables students to gain meaningful field experience related to their future careers. Students will complete 200 hours of internship at the agency.

Prerequisite: Senior standing

CJUS 433 HIGH-TECH CRIME - 3 semester hours

Reviews the criminal issues related to the violation of Internet and web technology crimes where innocent users become victims.

CJUS 434 ORGANIZED CRIME - 3 semester hours

Reviews the past and present of organized crime. It includes topics such as the business of organized crime, hierarchy in organized crime, organized crime in labor and global connections. Also reviews political and law enforcement responses towards organized crime.

CJUS 436 WHITE COLLAR CRIME - 3 semester hours

Examines white-collar crimes, such as commercial fraud and embezzlement, as well as computer fraud and corporate piracy. Reviews applicable laws with special emphasis on practical aspects of investigation and prosecution of white collar crime.

CJUS 495 SPECIAL TOPICS IN CRIMINAL JUSTICE II - 3 semester hours

Variable content. Selected special topics in criminal justice, which may include controversial issues, gangs, ethics, or female offenders. The topics will reflect current trends in the field of criminal justice and the expertise of the faculty. This course may be repeated for credit with different topics with the consent of the department.

CJUS 449 INDEPENDENT STUDIES IN CRIMINAL JUSTICE - 3-6 semester hours

Requires completion of independent studies and research under faculty direction and supervision. Registration upon approval of the departmental chair.

Sociology Major, Bachelor of Arts (B.A.)

Freshman Year		Credit Hours
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GE Mathematics Electives (p. 147)		6
GE History Electives (p. 146)		3
GE Wellness/Health Electives (p. 147)		2
SOCI 101	Introduction To Sociology	3
Restricted Elective	SOCI Course (100/200 Level)	3
GE Social Science Electives (p. 147)		3
Unresticted Elective		3
	Credit Hours	**29**
Sophomore Year		
Language Elective		6
GE Humanities Electives (p. 146)		3
GE Global Studies Electives (p. 146)		3
GE Science Electives (p. 147)		4
SOCI 201	Social Problems	3
SOCI 208	Soci African Amer Exp	3
Restricted Elective	SOCI Course	3
GE Literature Electives (p. 147)		3
Minor Course		3
	Credit Hours	**31**
Junior Year		
SOCI 302	Marriage & Family	3
SOCI 304	Ethnic And Race Relations	3
SOCI 317	Methods Soc Research & Stat	3
SOCI 318	Sociological Theory	3
SOCI 356	Population Issues	3
Restricted Elective	SOCI Course	6
Minor Course		9
	Credit Hours	**30**
Senior Year		
SOCI 419	Applied Research Methods	3
SOCI 420	Senior Seminar	3
Unrestricted Elective		15
Minor Course		6
Restricted Elective	HIST/POLI/PSYC/ECON Course	3
	Credit Hours	**30**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
SOCI 101	Introduction To Sociology	3
SOCI 201	Social Problems	3
SOCI 208	Soci African Amer Exp	3
SOCI 302	Marriage & Family	3
SOCI 304	Ethnic And Race Relations	3
SOCI 317	Methods Soc Research & Stat	3
SOCI 318	Sociological Theory	3
SOCI 356	Population Issues	3
SOCI 419	Applied Research Methods	3
SOCI 420	Senior Seminar	3
Total Credit Hours		**30**

Code	Title	Credit Hours
Language Requirement (Students are required to complete 6 credit hours in foreign language)		6
Minor Requirements		18
Total Credit Hours		**24**

Code	Title	Credit Hours
Restricted Electives		15
Unrestricted Electives		18
Total Credit Hours		**33**

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		24

Electives	33
Total Credit Hours	**120**

Criminal Justice Major, Bachelor of Science (B.S.)

Freshman Year		**Credit Hours**
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GE Mathematics Electives (p. 147)		6
GE Wellness/Health Electives (p. 147)		2
CJUS 116	Intro To Criminal Justice	3
GE History Electives (p. 146)		3
CJUS 212	American Law Enforcement	3
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3
	Credit Hours	**30**
Sophomore Year		
CJUS 210	Intro Stats Criminal Justice	3
CJUS 250	Court System And Practices	3
GE Humanities Electives (p. 146)		3
GE Global Studies Electives (p. 146)		3
Unrestricted Electives		6
CJUS 255	Introduction to Corrections	3
Restricted Elective	CJUS Course	3
GE Literature Electives (p. 147)		3
Restricted Elective	Technology Course	3
	Credit Hours	**30**
Junior Year		
CJUS 317	Research Meths Crim Justic	3
CJUS 360	Crimnlogy & Theor Of Crime	3
Restricted Electives	CJUS Course	6
Unrestricted Electives		15
CJUS 430	Criminal Justice Pre-Internshp	2
	Credit Hours	**29**
Senior Year		
Unrestricted Electives		24
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 432	Criminal Justice Internship	4
	Credit Hours	**31**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CJUS 116	Intro To Criminal Justice	3
CJUS 210	Intro Stats Criminal Justice	3
CJUS 212	American Law Enforcement	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
CJUS 317	Research Meths Crim Justic	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 335	Contemp Problems In Policing	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 440	Minorities & Crim Justice Sy	3
Total Credit Hours		**45**

Code	Title	Credit Hours
Technology Course		3
Total Credit Hours		**3**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		36
Total Credit Hours		**39**

Code	Title	Credit Hours
General Education		33
Core Requirements		45
Major/Concentration Requirements		3
Electives		39
Total Credit Hours		**120**

Criminal Justice, Bachelor of Science with a Concentration in Forensic Investigation (B.S.)

Course	Title	Credit Hours
Freshman Year		
GE Wellness/Health Electives (p. 147)		2
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GE Mathematics Electives (p. 147)		6
CJUS 116	Intro To Criminal Justice	3

CJUS 212	American Law Enforcement	3
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3
GE History Electives (p. 146)		3
	Credit Hours	**30**
Sophomore Year		
CJUS 210	Intro Stats Criminal Justice	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
GE Literature Electives (p. 147)		3
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
Restricted Elective Technology Course		3
Unrestricted Electives		9
	Credit Hours	**30**
Junior Year		
CJUS 317	Research Meths Crim Justic	3
CJUS 335	Contemp Problems In Policing	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
Concentration Required Course CJUS Courses		9
Unrestricted Elective		3
	Credit Hours	**29**
Senior Year		
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 340	Minorities & Criminal Just Sys	3
Concentration Required Course CJUS Courses		9
Unrestricted Electives		9
	Credit Hours	**31**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CJUS 116	Intro To Criminal Justice	3
CJUS 210	Intro Stats Criminal Justice	3
CJUS 212	American Law Enforcement	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
CJUS 317	Research Meths Crim Justic	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 335	Contemp Problems In Policing	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 440	Minorities & Crim Justice Sy	3
Total Credit Hours		**45**

Code	Title	Credit Hours
CJUS 215	Introd Forensic Investigation	3
CJUS 370	Forensic Science & The Law	3
CJUS 416	Advanced Forensic Investigatio	3
Total Credit Hours		**9**

Must complete 9 credit hours from the following list of courses.

Code	Title	Credit Hours
CJUS 330	Crime Scene Investigation	3
CJUS 345	Criminal Law And Evidence	3
CJUS 361	Victimology	3
CJUS 431	Violence & Violent Offender	3
CJUS 434	Organized Crime	3
CJUS 436	White-Collar Crime	3
CJUS 417	Ethical Issues Juvenile Justic	3
Total Credit Hours		**21**

Criminal Justice, Bachelor of Science with a Concentration in Juvenile Justice (B.S.)

Course	Title	Credit Hours
Freshman Year		
GE Wellness/Health Electives (p. 147)		2
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GE Mathematics Electives (p. 147)		6
CJUS 116	Intro To Criminal Justice	3
CJUS 212	American Law Enforcement	3
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3
GE History Electives (p. 146)		3
	Credit Hours	**30**

Sophomore Year		
CJUS 210	Intro Stats Criminal Justice	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
GE Literature Electives (p. 147)		3
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
Required Course [Technology Course]		3
Unrestricted Electives		9
	Credit Hours	**30**
Junior Year		
CJUS 317	Research Meths Crim Justic	3
CJUS 335	Contemp Problems In Policing	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 217	Juvenile Justice	3
CJUS 228	Juvenile Justice Process	3
CJUS 336	Juvenile Corrections	3
Unrestricted Elective		3
	Credit Hours	**29**
Senior Year		
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 340	Minorities & Criminal Just Sys	3
Juvenile Justice Concentration Courses (must complete 9 credit hours from the following list of courses):		9
CJUS 350, CJUS 235, CJUS 341, and SOCI 362		
Unrestricted Electives		9
	Credit Hours	**31**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CJUS 116	Intro To Criminal Justice	3
CJUS 210	Intro Stats Criminal Justice	3
CJUS 212	American Law Enforcement	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
CJUS 317	Research Meths Crim Justic	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 335	Contemp Problems In Policing	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 440	Minorities & Crim Justice Sy	3
Total Credit Hours		**45**

Code	Title	Credit Hours
CJUS 217	Juvenile Justice	3
CJUS 228	Juvenile Justice Process	3
CJUS 336	Juvenile Corrections	3
Total Credit Hours		**9**

Code	Title	Credit Hours
Restricted Electives		3
Unrestricted Electives		30
Total Credit Hours		**33**

Code	Title	Credit Hours
General Education		33
Core Requirements		45
Major/Concentration Requirements		9
Electives		33
Total Credit Hours		**120**

Criminal Justice, Bachelor of Science with a Concentration in Policing (B.S.)

Course	Title	Credit Hours
Freshman Year		
GE Wellness/Health Electives (p. 147)		2
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GE Mathematics Electives (p. 147)		6
CJUS 116	Intro To Criminal Justice	3
CJUS 212	American Law Enforcement	3
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3

GE History Electives (p. 146)		3
	Credit Hours	**30**
Sophomore Year		
CJUS 210	Intro Stats Criminal Justice	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
GE Literature Electives (p. 147)		3
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
Required Course [Technology Course]		3
Unrestricted Electives		9
	Credit Hours	**30**
Junior Year		
CJUS 317	Research Meths Crim Justic	3
CJUS 335	Contemp Problems In Policing	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 365	Police Organization & Mgmt	3
CJUS 260	Drugs Crime & Crim Justc Sys	3
CJUS 230	Criminal Investigation	3
Unrestricted Elective		3
	Credit Hours	**29**
Senior Year		
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 340	Minorities & Criminal Just Sys	3
Policing Concentration Courses (must complete 9 credit hours from the following list of courses):		9
CJUS 330, CJUS 361, CJUS 417, CJUS 320, CJUS 315, CJUS 495, CJUS 215, CJUS 295		
Unrestricted Electives		9
	Credit Hours	**31**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CJUS 116	Intro To Criminal Justice	3
CJUS 210	Intro Stats Criminal Justice	3
CJUS 212	American Law Enforcement	3
CJUS 250	Court System And Practices	3
CJUS 255	Introduction to Corrections	3
CJUS 317	Research Meths Crim Justic	3
CJUS 360	Crimnlogy & Theor Of Crime	3
CJUS 335	Contemp Problems In Policing	3
CJUS 380	Criminal Procedures	3
CJUS 310	Criminal Justice Data Mgmt	3
CJUS 430	Criminal Justice Pre-Internshp	2
CJUS 420	Sr Seminar Criminal Justice	3
CJUS 425	Compara Crimnal Justice Sys	3
CJUS 432	Criminal Justice Internship	4
CJUS 440	Minorities & Crim Justice Sy	3
Total Credit Hours		**45**

Code	Title	Credit Hours
CJUS 365	Police Organization & Mgmt	3
CJUS 260	Drugs Crime & Crim Justc Sys	3
CJUS 230	Criminal Investigation	3
Total Credit Hours		**9**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		21
Total Credit Hours		**33**

Code	Title	Credit Hours
General Education		33
Core Requirements		45
Major/Concentration Requirements		9
Electives		33
Total Credit Hours		**120**

Sociology, Minor in Sociology

The Sociology Minor will require six (6) courses – Eighteen (18) semester credits

Code	Title	Credit Hours
Prerequistes (6 semester hours)		
SOCI 101	Introduction To Sociology	3
SOCI 201	Social Problems	3
Required Upper-Division Courses (6 semester hours)		
SOCI 317	Methods Soc Research & Stat	3
SOCI 318	Sociological Theory	3
Electives		

Select 6 semester hours from any 300-400 level Sociology courses	6
Total Credit Hours	**18**

College of Natural and Health Sciences

Dean
Dr. Jessica Brooks (Interim)
Location
Hunter McDaniel Building, 30Nd
Contact Information
804-524-5077 | jbbrooks@vsu.edu

Overview of the College of Natural and Health Sciences

The College of Natural and Health Sciences is committed to providing a dynamic and stimulating learning environment where a combination of classroom instruction and laboratory work prepares students for the global nature of the biological, chemical, psychological, and health professions. The College houses undergraduate programs that educate students to become professionals who are able to adapt to societal change, to communicate effectively and to be highly trainable. Whether students major in Biology, Chemistry, Psychology or Minor in Secondary Education they benefit from a curriculum that features in-depth major courses and substantial training in mathematics, physical sciences, social sciences and the humanities.

Mission of the College

The mission of the College of Natural and Health Sciences is to provide quality undergraduate and graduate education in the natural and health sciences; and to produce graduates who are well prepared to practice in their field of study and/or to pursue advanced education.

Objectives of the College

The primary objectives of the school are:

- To maintain and continually strive to improve the quality of instruction in all academic areas.
- To prepare students to enter professional careers in the public and private sectors or to continue their education beyond the baccalaureate level in professional or graduate school.

The College of Natural and Health Sciences is comprised of the following departments:

- Biology
- Chemistry
- Nursing
- Psychology

Department of Biology

Chairperson: Dr. Kathryn H. Shows (Interim)
Location: Owens Hall, Room 102A
Contact Information: (804) 524-5025 | kshows@vsu.edu

Department Overview

The Department of Biology at Virginia State University offers a comprehensive program leading to the **Bachelor of Science (B.S.) in Biology** degree. This program is designed to provide students with the theoretical knowledge and practical application skills necessary for future careers in education, research, industry, medicine, dentistry, pharmacy, podiatry, optometry, physical therapy, and veterinary science. Courses are taught by experienced faculty with diverse academic backgrounds and research expertise. The department prioritizes mentoring, both faculty-to-student and peer-to-peer, and actively supports student clubs and organizations such as the ***Minority Association of Pre-professional Students (MAPS)***, ***Biology Club***, ***Beta Beta Beta Biological Honor Society (Tri-Beta)***, and ***VSU Beta Kappa Chi.***

Students may also pursue advanced study through the **Master of Science (M.S.) in Biology** or the accelerated **3+1 Bachelor to Master of Science** program. (For details, refer to the Graduate Academic Catalog.)

Mission Statement

The mission of the Department of Biology is to educate students to be knowledgeable about the organization and function of biological systems, to be proficient in the best practices of science, and to be aware of the prominent role of science in discussions of the environment and society. The department provides opportunities and guidance to help students consistently achieve excellence, with the goal of preparing them to become future leaders in their fields.

Degree Highlight Information

Biology: The Study of Life

Biology is a broad and evolving discipline encompassing numerous subspecialties, including microbiology, genetics, ecology, plant and animal biology, and conservation biology. The Bachelor of Science in Biology provides a strong generalist foundation, preparing students for internship opportunities, graduate study, and careers in diverse biological fields. Through coursework and laboratory experiences, students develop skills in scientific investigation across lab, field, and computational settings.

Department Goals

Educating Future Researchers

The goals of the Department of Biology Bachelor of Science program are to prepare graduates to:

- Apply core principles, concepts, and theories of biological science to conduct independent research and present findings in written and oral formats.
- Utilize technology to conduct and communicate scientific research.
- Apply critical thinking skills to examine biological principles and evaluate scientific data using contemporary best practices.

- Evaluate the role of biological science in global environmental and societal contexts, becoming engaged citizen-scientists.

Program Listings

Bachelor of Science (B.S.) in Biology

The **Bachelor of Science in Biology** degree provides students with a strong foundation in core biological concepts and laboratory techniques. Students engage in both theoretical and applied science through a robust curriculum that includes cellular biology, genetics, anatomy and physiology, ecology, microbiology, and specialized electives. Emphasis is placed on scientific communication, research methodology, and real-world applications through coursework and independent research opportunities.

Course Requirements for the Bachelor of Science in Biology:
Students must earn a grade of "C" or higher in all major courses.

Major(s)

- Biology, Bachelor of Science (B.S.) (p. 370)
- Biology, Bachelor of Science with a Concentration in Secondary Education (B.S (p. 371).)

Minor

- Minor in Biology (p. 373)

BIOLOGY
Course Descriptions

BIOL 116 BIOLOGICAL SCIENCE - 4 semester hours
Covers fundamental biological concepts and processes of living organisms. Designed to familiarize the student with relevance of science in their everyday lives. Topics stressed will include: scientific inquiry, chemistry and cells, reproduction, development, genetics, evolution and adaptation, and ecology. Course integrates science processing (laboratory) skills with lecture.
This course does not serve as a prerequisite for any other biology course.

BIOL 120 PRINCIPLES OF BIOLOGY I - 3 semester hours
Presents the latest developments and advances in the field of biology and prepares students for the major course sequence in the biology/ pre-med and endorsement curriculums. Emphasis will be placed on chemistry, cell biology, cell division, genetics, and biotechnology.
This course is a pre-requisite for all other Biology courses.
Co-requisite: BIOL 120 Principles of Biology I Laboratory

BIOL 120 PRINCIPLES OF BIOLOGY I LABORATORY - 1 semester hour
A laboratory course required to be taken in conjunction with BIOL 120 Principles of Biology I lecture
course. This course will involve hands on laboratory exercises related to selected lecture topics.
Co-requisite: BIOL 120 Principles of Biology I Lecture

BIOL 121 PRINCIPLES OF BIOLOGY II - 3 semester hours
Presents the latest developments and advances in the field of biology with emphasis on evolution, ecology, diversity of life, and classification of plants and animals. This course is required of all biology majors.
Prerequisite: BIOL 120 Principles of Biology I.
Co-requisite: BIOL 121 Principles of Biology II laboratory

BIOL 121 PRINCIPLES OF BIOLOGY II LABORATORY - 1 semester hour
A laboratory course required to be taken in conjunction with BIOL 121 Principles of Biology II lecture course. This course will involve hands on laboratory exercises related to selected lecture topics.
Co-requisite: BIOL 121 Principles of Biology II

BIOL 122 Biological Investigations Lab I - 2 semester hours

A laboratory course introducing principles of biological research through hands-on experimental work. Students will complete directed experiments in areas of interest under the direction of faculty.

Prerequisite: Permission of instructor

BIOL 123 Biological Investigations Lab II – 2 semester hours

A laboratory course focusing on the analysis and presentation of data generated through earlier work or from sources determined by the instructor. An emphasis on application of analytical methods and scientific reporting will be made.

Prerequisite: Permission of instructor

BIOL 130 PROFESSIONAL PRACTICES IN BIOLOGY - 2 semester hour
A course designed to familiarize students with the requirements and expectations of professional careers in biology and related disciplines including obtaining relevant research or career experiences, preparing personal statements, obtaining letters of reference, preparing successful applications and ethics in science.
This course is for Biology majors only.

BIOL 200 TECHNICAL WRITING IN BIOLOGY - 3 semester hours
A study of the content, structure and presentation of written communication in Biology (e.g. reports, abstracts, posters, journal articles etc.). The course includes study of previously prepared and published materials, as well as original written work prepared by students.
Prerequisite: BIOL 121 Principles of Biology II

BIOL 201 CELL AND MOLECULAR BIOLOGY - 3 semester hours

A study of the principles of eukaryotic cellular and molecular biology. This course is designed to provide students planning to attend a graduate or medical program with an understanding of the structure and function of eukaryotic cells, with emphasis on multicellular organisms.
Prerequisite: BIOL 121 Principles of Biology II.
Co-requisite: BIOL 201 Cell and Molecular Biology laboratory

BIOL 201 CELL AND MOLECULAR BIOLOGY LABORATORY - 1 semester hour

A laboratory course required to be taken in conjunction with BIOL 201 Cell and Molecular Biology. This course will give students a laboratory experience to complement their lecture material. The laboratory will

expose students to the eukaryotic cell structure and function, and molecular biology techniques.
Co-requisite: BIOL 201 Cell and Molecular Biology lecture

BIOL202 TERMINOLOGY FOR THE HEALTH SCIENCES - 3 semester hours
This course will introduce the learners to common terms essential for professionals working in a health career. The course is an introductory course to the world of terminology with an emphasis on health terms. This course will provide an overview of terminology with an emphasis on prefixes, suffixes, and rootwords. The course will highlight major anatomy and physiology of the human body. The course will identify major diagnostic tests and therapeutic interventions. Finally the course will provide an introduction to pharmacological terms and major drug classifications. This is an elective course open to all currently enrolled students. This course may not serve as a Biology restricted elective for Biology majors.

BIOL 205 INTEGRATIVE ORGANISMAL BIOLOGY - 3 semester hours

An integrative course examining how organisms cope with environmental challenges by investigating the requirements for life at the level of individual cells and multi-cellular organisms, the anatomical and physiological properties of cells, tissues and organ systems, and how these properties allow organisms to interact successfully with their environment. Emphasis will be placed on the study of eukaryotic groups particularly plants and animals.
Prerequisite: BIOL121 Principles of Biology II.
Co-requisite: BIOL205 Integrative Organismal Biology laboratory

BIOL 205 INTEGRATIVE ORGANISMAL BIOLOGY LABORATORY - 1 semester hour
A laboratory examining living organisms at various organizational levels.
Co-requisite: BIOL 205 Integrative Organismal Biology Lecture

BIOL 241 INTRODUCTION TO MICROBIOLOGY - 3 semester hours
The study of fundamental principles of microbiology. Emphasis will be placed on medical, environmental, agricultural, and industrial microbiology. Concurrent enrollment in the laboratory is required.
Prerequisite: BIOL 120 Principles of Biology I or consent of instructor.
Co-requisite: BIOL 241 Introduction to Microbiology laboratory

BIOL 241 INTRODUCTION TO MICROBIOLOGY LABORATORY - 1 semester hour
A laboratory course to be taken in conjunction with BIOL 241 Introduction to Microbiology lecture course. The laboratory will consist of selected exercises that illustrate and clarify basic concepts in microbiology. Attention to basic microbiological laboratory techniques will be stressed.
Co-requisite: BIOL 241 Introduction to Microbiology lecture

BIOL 310 PLANT MORPHOLOGY AND DEVELOPMENT - 3 semester hours

A study of the development, function and evolution of plant structures, including life histories and specific adaptations to native habitats. Concurrent enrollment in the laboratory is required.
Prerequisite: BIOL 121 Principles of Biology II or PLSC 140 Principles of Plant Science or consent of instructor.
Co-requisite: BIOL 310 Plant Morphology laboratory

BIOL 310 PLANT MORPHOLOGY AND DEVELOPMENT LABORATORY - 1 semester hour
A laboratory course required to be taken in conjunction with BIOL 310 Plant Morphology laboratory course. This laboratory experience will contribute to an understanding of the function of various morphological characteristics across plant groups.
Co-requisite: BIOL 310 Plant Morphology lecture

BIOL 311 COMPARATIVE VERTEBRATE ANATOMY - 3 semester hours
A course detailing the comparative morphology of vertebrate systems at both the gross and microscopic levels of organization. The application of comparative anatomy to the study of the development and ancestry of the classes of vertebrates is included. Concurrent enrollment in the laboratory is required.
Prerequisite: BIOL 205 Integrative Organismal Biology. Co-requisite: BIOL 311 Comparative Vertebrate Anatomy laboratory

BIOL 311 COMPARATIVE VERTEBRATE ANATOMY LABORATORY - 1 semester hour
Dissection of vertebrate types found in the five basic classes of vertebrates in comparative purposes.
Co-requisite: BIOL 311 Comparative Vertebrate Anatomy lecture

BIOL 313 GENERAL ZOOLOGY - 3 semester hours
An upper division course designed to provide the student with an in-depth examination of the structures, functions, adaptations, and evolutionary relationships among animal phyla. The evolutionary development of major systems and characteristics of the major groups will also be covered. Attention is given to the evolutionary and ecological interaction of animals and their environment. Concurrent enrollment in the laboratory is required.
Prerequisite: BIOL 205 Integrative Organismal Biology.
Co-requisite: BIOL 313 General Zoology laboratory

BIOL 313 GENERAL ZOOLOGY LABORATORY - 1 semester hour
A laboratory course required to be taken in conjunction with BIOL 313 General Zoology lecture course. The students will examine representative organisms, structures and organ systems to illustrate the evolutionary development of the animal kingdom.
Co-requisite: BIOL 313 General Zoology lecture

BIOL 316 HUMAN PHYSIOLOGY - 3 semester hours
A non-laboratory introductory study of the human system at work and the ways and means by which various functions are integrated into a living unit.
Prerequisite: BIOL 120 Principles of Biology I or consent of instructor

BIOL 318 HUMAN ANATOMY & PHYSIOLOGY I - 3 semester hours

An introduction to the structure and function of the human body through lecture and laboratory experience. Emphasis is placed on understanding the relationships between structure and function at each level of organization, from molecules to organs to organ systems.
Prerequisites: BIOL 120 Principles of Biology I or consent of instructor

BIOL 318 HUMAN ANATOMY AND PHYSIOLOGY I LABORATORY - 1 semester hour
A laboratory to accompany BIOL 318 lecture.
Co-requisite: BIOL 318 Human Anatomy and Physiology I

BIOL 319 HUMAN ANATOMY & PHYSIOLOGY II - 3 semester hours
The second half of a two-semester course (with lab) describing the structure and function of the human body through lecture and laboratory experience.
Prerequisite: BIOL318 Human Anatomy and Physiology I

BIOL 319 HUMAN ANATOMY AND PHYSIOLOGY II LABORATORY - 1 semester hour
A laboratory to accompany BIOL 319 lecture.
Co-requisite: BIOL 319 Human Anatomy and Physiology II

BIOL 320 PRINCIPLES OF GENETICS - 3 semester hours

An extensive study of the general fundamental principles of genetics, including special emphasis on the application of recombinant DNA technology in the study of DNA, RNA, and the mechanisms of gene expression. Laboratory will involve modern techniques of genetic experimentation.
Prerequisites: BIOL 241 Introduction to Microbiology, CHEM 151 General Chemistry I, CHEM 153
General Chemistry Laboratory, or consent of instructor

BIOL 320 PRINCIPLES OF GENETICS LABORATORY - 1 semester hour
The laboratory experience will confirm and expand on what is covered in the lecture and textbook. It will also provide the opportunity to function as a geneticist.
Co-requisite: BIOL 320 Principles of Genetics

BIOL 324 ECOLOGY - 3 semester hours
This course will cover the basic principles of ecology. Ecology is a diverse subject in terms of topics and will be related to other disciplines of science. This course will provide the opportunities to understand the relationships among various areas of ecological sciences. The course will deal with the fundamental factual knowledge of natural ecosystems, distribution, abundance of organisms, and vegetation types, and the factors that influence the presence of flora and fauna at various locations. Emphasis is to be given on the understanding of the process of science that will augment the discovery and sharpen the abilities, skills, and knowledge through the study of ecology. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology.

Co-requisite: BIOL 324 Ecology laboratory

BIOL 324 ECOLOGY LABORATORY - 1 semester hour
A field study of the relationships of organisms to their environment.
Co-requisite: BIOL 324 Ecology

BIOL 352 INTRODUCTION TO MATHEMATICAL BIOLOGY - 3 semester hours Sp even years This course is designed to develop mathematical models in biology and study the behavior of such models using numerical techniques and review the mathematical concepts behind many important biological principles. Topics will be drawn from conservation biology, genetics, and physiology. Mathematics and computational methods to be reviewed include functions in biology, difference and continuous models, exponential and logarithmic functions, probability, numerical matrix algebra and curve fitting software. Students can receive credit for either MATH 352 OR BIOL 352 but not for both.
Prerequisite: BIOL 121 Principles of Biology II, MATH 121 College Algebra and Trigonometry II, STAT 210 Elementary Statistics, or consent of instructor

BIOL 402 STUDENT TEACHING IN BIOLOGY - 3 semester hours

This course is designed to provide supervision in the content area for pre-service secondary biology candidates. Prerequisite: Consent of instructor
Co-requisite: EDUC 402 Student Teaching

BIOL 405 ANIMAL BEHAVIOR - 3 semester hours
A course in the study of animal behavior in the field. Topics include: natural selection and evolution of behavior, behavioral genetics, neural and physiological mechanisms of behavior, communication, aggression, sexual reproduction, and mating systems. The course is an upper-level biology restrictive elective appropriate for junior and senior biology majors and others interested in zoology, animal science, entomology and experimental psychology. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology.
Co-requisite: BIOL 405 Animal Behavior laboratory

BIOL 405 ANIMAL BEHAVIOR LABORATORY - 1 semester hours

The study of animal behavior in the field - to be taken as a co-requisite with BIOL 405 Animal Behavior lecture course. This course will emphasize methodology for collecting and analyzing animal behavior data. We will cover collection, statistical analysis, interpretation and written and oral presentation of behavioral data.
Co-requisite: BIOL 405 Animal Behavior lecture

BIOL 410 SYSTEMATIC BOTANY - 3 semester hours
A laboratory field and lecture course devoted to classifying seed plants, ferns, and mosses found in Virginia. Numerous field trips. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology.
Co-requisite: BIOL 410 Systematic Botany laboratory

BIOL410 SYSTEMATIC BOTANY LABORATORY - 1 semester hour

A laboratory field course devoted to classifying seed plants, ferns and mosses found in Virginia.
Co-requisite: BIOL 410 Systematic Botany lecture

BIOL 412 INVERTEBRATE ZOOLOGY - 3 semester hours
A comprehensive consideration of the biology of the invertebrates inclusive of the more important parasites particular to man. A balanced presentation of taxonomical, morphological, physiological and ecological treatment of the invertebrates is presented. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology.
Co-requisite: BIOL 412 Invertebrate Zoology laboratory

BIOL 412 INVERTEBRATE ZOOLOGY LABORATORY - 1 semester hour

A systematic and morphological study of the invertebrates.
Co-requisite: BIOL 412 Invertebrate Zoology lecture

BIOL 413 VERTEBRATE BIOLOGY - 3 semester hours

A study of various vertebrate groups emphasizing their origin, comparative morphology, taxonomy, life histories, habitats, distribution and economic importance. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology
Co-requisite: BIOL 413 Vertebrate Biology laboratory

BIOL 413 VERTEBRATE BIOLOGY LABORATORY - 1 semester hour
A systematic and morphological study of the vertebrates.
Co-requisite: BIOL 413 Vertebrate Biology lecture

BIOL 414 TECHNIQUES OF MOLECULAR BIOLOGY - 3 semester hours
A course designed to acquaint students with the latest techniques in molecular biology. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 320 Principles of Genetics or consent of instructor.
Co-requisite: BIOL 414 Techniques of Molecular Biology laboratory

BIOL 414 TECHNIQUES OF MOLECULAR BIOLOGY LABORATORY - 1 semester hour
A laboratory course to accompany and allow hands-on application of techniques discussed in BIOL 414 lecture.
Co-requisite: BIOL 414 Techniques of Molecular Biology lecture

BIOL 415 VERTEBRATE HISTOLOGY - 3 semester hours
An intensive study of the cell and the cellular organization of the various tissues of the body, with an introduction to microslide preparation.
Prerequisites: BIOL 201 Cell and Molecular Biology or consent of Instructor

BIOL 415 VERTEBRATE HISTOLOGY LABORATORY - 1 semester hour
A study of the identifying characteristics of animal tissues.
Co-requisite: BIOL 415 Vertebrate Histology lecture

BIOL 416 QUANTITATIVE BIOLOGY - 3 semester hours
In practice, the course will illustrate in a clear and useful way, the application and adaptation of general quantitative methods in the approach to specific biological problems and in the treatment of biological data. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 320 Principles of Genetics.
Co-requisite: BIOL 416 Quantitative Biology laboratory

BIOL 416 QUANTITATIVE BIOLOGY LABORATORY - 1 semester hour
A laboratory course required to be taken in conjunction with BIOL 416 Quantitative Biology lecture course.
This course will involve exercises related to selected lecture topics.
Co-requisite: BIOL 416 Quantitative Biology lecture

BIOL 417 GENERAL PHYSIOLOGY - 3 semester hours
A study of the integration of body function in higher animals with emphasis on the irritable tissues, nerves and muscles. Attention is given to nerve excitability impulse conduction, information processing, chemical transmission, receptor mechanisms and muscle bio-chemistry. Muscle irritability and contractibility are also considered, as well as humoral integration, nutrition, respiration and circulation.
Prerequisites: BIOL 201 Cell and Molecular Biology, BIOL 205 Integrative Organismal Biology, BIOL 320 Principles of Genetics, CHEM 305 Organic Chemistry I

BIOL 417 GENERAL PHYSIOLOGY LABORATORY - 1 semester hour
A demonstration of the various body functions.
Co-requisite: BIOL 417 General Physiology lecture

BIOL 418 PLANT PHYSIOLOGY - 3 semester hours
A course involving studies of the internal and external factors affecting water relations, mineral nutrition, respiration, photosynthesis, growth and differentiation of plants, with an emphasis on plant metabolism. Concurrent enrollment in the laboratory is required.
Prerequisite: BIOL 205 Integrative Organismal Biology.
Co-requisite: BIOL 418 Plant Physiology laboratory

BIOL 418 PLANT PHYSIOLOGY LABORATORY - 1 semester hour

A laboratory to accompany plant physiology lecture, with an emphasis on plant metabolism.
Co-requisite: BIOL 418 Plant Physiology lecture

BIOL 419 CELL PHYSIOLOGY - 3 semester hours
Designed to give the student a deeper understanding of cellular structure and function, this course emphasizes the application of basic principles of biology, chemistry, and physics to the evaluation and extension of the current state of knowledge of the cell.
Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics

BIOL 419 CELL PHYSIOLOGY LABORATORY - 1 semester hour
The study of the structure and function of cellular organelles.
Co-requisites: BIOL 419 Cell Physiology lecture

BIOL422 EVOLUTIONARY BIOLOGY - 3 semester hours
Introduces students to the modern synthetic theory of evolution, beginning with Charles Darwin's seminal work (Origin of Species) and finishing with contemporary issues as laid out in the primary scientific literature. This course will cover theoretical and empirical studies of evolutionary processes, with emphasison the latter. Concurrent enrollment in the laboratory is required.
Prerequisites: BIOL 205 Integrative Organismal Biology, BIOL 320 Principles of Genetics, BIOL 324 Ecology
Co-requisite: BIOL 422 Evolutionary Biology laboratory

BIOL 422 EVOLUTIONARY BIOLOGY LABORATORY - 1 semester hour
A demonstration of evolutionary processes.
Prerequisites: BIOL 201 Cell and Molecular Biology, BIOL 320 Principles of Genetics
Co-requisite: BIOL 422 Evolutionary Biology lecture

BIOL 423 CONSERVATION BIOLOGY - 3 semester hours
This course introduces the principles of conservation biology with an emphasis on ecological processes operating at population, community and ecosystem levels of organization. Threats to biological diversity, ranging from species introduction to habitat destruction and conservation solutions such as the design of protected areas and conservation legislation will be covered.
Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 324 Ecology

BIOL 425 EMBRYOLOGY - 3 semester hours

A study of the fundamental developmental stages of echinoids, fish and selected vertebrates with some consideration being given to mammals. The developmental processes of these organisms will be described and analyzed through early stages.
Prerequisites: BIOL 205 Integrative Organismal Biology and BIOL 320 Principles of Genetics

BIOL 425 EMBRYOLOGY LABORATORY - 1 semester hour
A descriptive study of the early developmental sequences of the vertebrate animals.
Co-requisite: BIOL 425 Embryology lecture

BIOL 427 SCIENCE PROCESS SKILLS - 3 semester hours
Designed to foster the development and understanding of principles and major concepts and processes of science as they relate to the elementary and or middle grades. The course will emphasize content and develop competency in the application and performance of specific basic and integrated skills in science.
Prerequisite: Restricted to pre-service K-6 candidates.
Co-requisite: BIOL 427 Science Process Skills laboratory

BIOL 427 SCIENCE PROCESS SKILLS LABORATORY - 1 semester hour
Practical experiences in conducting elementary science investigations.
Co-requisite: BIOL 427 Science Process Skills lecture

BIOL 428 TEACHING SCIENCE IN SECONDARY SCHOOLS - 3 semester hours
The course is designed to foster the development and understanding of principles and major concepts of science as they relate to middle and secondary school teaching. It also incorporates current theories and practices in science teaching. Emphasis will be placed on teaching the concepts of science as inquiry, developing research skills, and applying research findings to the teaching and learning of science. Safety in the classroom and legal issues will be discussed. Students will discuss and analyze various classroom management techniques. Students will develop lesson and unit plans incorporating technological approaches to meet the diverse needs of learners, as well as, gifted and talented students. Students will be knowledgeable of Virginia's SOLs and design instruction reflective of the SOLs. Also, students will participate in a series of organized practicum experiences in a public school secondary science classroom.
Prerequisite: Restricted to secondary education candidates.

BIOL 440 VIROLOGY - 3 semester hours
A study of the basic characteristics of plant, animal and bacterial viruses. The composition, morphology, multiplication, cultivation, and the control of viruses are included.
Prerequisite: BIOL 201 Cell and Molecular Biology, BIOL 241 Introduction to Microbiology

BIOL 440 VIROLOGY LABORATORY - 1 semester hour
Multiplication, cultivation, and control of viruses are demonstrated.
Co-requisite: BIOL 440 Virology lecture

BIOL 443 IMMUNOLOGY AND SEROLOGY - 3 semester hours
The study of host-parasite relationships with emphasis on the response of vertebrates to antigens and the nature of the immune response. Among the topics included are antigens and antibody speciicities, hypersensitivity, immunological tolerance, autoimmunization, tumor and transplant immunology, and monoclonal antibodies.
Prerequisite: BIOL 201 Cell and Molecular Biology, BIOL 241 Introduction to Microbiology

BIOL 443 IMMUNOLOGY AND SEROLOGY LABORATORY - 1 semester hours
Experiments conducted that illustrate both innate and acquired immunity. Included are the preparation of various vaccines, the immunization of laboratory animals, the demonstration of hypersensitivity, the performance of serological tests of diagnostic and medico-legal importance, the performance of immunochemical methods of antigenic analysis.
Co-requisite: BIOL 443 Immunology and Serology lecture

BIOL 445 PATHOGENIC AND DIAGNOSTIC MICROBIOLOGY - 3 semester hours
The study of the morphological and cultural characteristics and the pathogenic properties of micro-organisms. Emphasis is placed on the biological properties, isolation, identification and the control of pathogenic bacteria.
Prerequisite: BIOL 201 Cell and Molecular Biology and BIOL 241 Introduction to Microbiology

BIOL 445 PATHOGENIC AND DIAGNOSTIC MICROBIOLOGY LABORATORY -1 semester hour

The identification, isolation and control of pathogenic bacteria.
Co-requisite: BIOL 445 Pathogenic and Diagnostic Microbiology lecture

BIOL 446 INVESTIGATIONS AND RESEARCH – 3 semester hours
Independent research course designed for the application of biological and chemical techniques under the guidance of a member of the biology faculty.
Prerequisites: BIOL 320 Principles of Genetics, BIOL 324 Ecology, CHEM 305 & 307 Organic Chemistry, or consent of instructor

BIOL 447 SEMINAR IN BIOLOGY - 1 semester hours
A survey of current biological literature; the student prepares and presents reports on assigned projects.
Prerequisite: BIOL 446 Investigations and Research

BIOL 450 INTRODUCTION TO BIOINFORMATICS - 3 semester hours
The study of how computers are used for processing, storing and analyzing biological data. Special emphasis is placed on current problems in genomics research and the common bioinformatics tools and resources used to resolve them.
Prerequisites: BIOL 320 Genetics or consent of instructor

B**IOL 489 INDEPENDENT STUDY IN BIOLOGY - 1 to 4 semester hours**
An independent investigation in the biological sciences conducted under the direction of a faculty member. This course is arranged on an individual basis and must be approved before the semester it is to be taken.
Prerequisite: Consent of instructor

BIOL 490 TOPICS IN BIOLOGY - 3 to 4 semester hours
An in-depth exploration of recent developments in a field of biology based on faculty interest and expertise. Courses that include a laboratory experience will be 4 semester hours.

Prerequisite: BIOL 320 Principles of Genetics and BIOL 324 Ecology or permission of instructor.

Biology Major, Bachelor of Science (B.S.)

Freshman Year		Credit Hours
BIOL 120	Principles Of Biology I	3
BIOL 120	Principles Of Biology I (LAB)	1
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
MATH 120	College Algebra	3
ENGL 110	Composition I	3
BIOL 130	Professional Practices Biology	2
BIOL 121	Principles Of Biology II	4
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
MATH 121	Trigonometry	3
ENGL 111	Composition II	3
GE Wellness/Health Electives (p. 147)		1
	Credit Hours	**31**
Sophomore Year		
BIOL 205	Integrative Organismal Biology	3
BIOL 205	Integrative Organismal Biology (LAB)	1
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
PSYC 101	Introduction to Psychology	3
GE Literature Electives (p. 147)		3
GE Wellness/Health Electives (p. 147)		1
BIOL 201	Cell And Molecular Biology	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
GE History Electives (p. 146)		3
	Credit Hours	**32**
Junior Year		
BIOL 241	Introduction To Microbiology	4
BIOL 324	Ecology	3
BIOL 324	Ecology (LAB)	1
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I (LAB)	1
STAT 210	Elementary Statistics I	3
BIOL 320	Principles Of Genetics	4
Restricted Elective	BIOL Course and Lab	4
PHYS 106	Introduction to Physics II	3
PHYS 106	Introduction to Physics II (LAB)	1
Unrestricted Elective		3
	Credit Hours	**30**
Senior Year		
Restricted Elective	BIOL Course and Lab	4
Restricted Elective	BIOL Course and Lab	4
Restricted Elective	BIOL Course	3
BIOL 446	Investigations and Research	3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
Unrestricted Elective		3
BIOL 447	Seminar In Biology	1
	Credit Hours	**27**
	Total Credit Hours	**120**

[1] Additional BIOL course at 300 or 400-level lab may be required depending upon chosen elective. See catalog for course requirements.

GPA Requirements

All Biology majors must pass BIOL 120, BIOL 121, BIOL 201, BIOL 205, BIOL 241, BIOL 320, and BIOL 324 (the **BIOLOGY CORE COURSES**) with a grade of C or better in order to graduate. All Biology majors must pass BIOL 120, BIOL 121, and BIOL 205 with a grade of C or better in order to advance beyond the **BIOLOGY CORE COURSES**. All Biology majors must have at least a 2.0 overall GPA and a 2.5 Science and Math GPA (Biology, Chemistry, Math (including statistics), and Physics) in order to graduate.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
BIOL 130	Professional Practices Biology	2
BIOL 121	Principles Of Biology II	4
BIOL 201	Cell And Molecular Biology	4
BIOL 205	Integrative Organismal Biology	3
BIOL 205 Lab		1
BIOL 241	Introduction To Microbiology	4
BIOL 320	Principles Of Genetics	3
BIOL 320 Lab		1
BIOL 324	Ecology	3
BIOL 324 Lab		1
BIOL 446	Investigations and Research	3
BIOL 447	Seminar In Biology	1
Total Credit Hours		**30**

Code	Title	Credit Hours
STAT 210	Elementary Statistics I	3
PHYS 105	Introduction to Physics I	3
PHYS 105 Lab		1

PHYS 106	Introduction to Physics II	3
PHYS 106 Lab		1
CHEM 151	General Chemistry I	3
CHEM 151 Recitation		0
CHEM 153	General Chemistry I Laboratory	1
CHEM 152	General Chemistry II	3
CHEM 152 Recitation		0
CHEM 154	General Chemistry II Laborator	1
CHEM 305	Organic Chemistry I	3
CHEM 307	Organic Chemistry Lab I	1
CHEM 306	Organic Chemistry II	3
CHEM 308	Organic Chemistry Lab II	1
Total Credit Hours		**27**

Unrestricted Electives

Code	Title	Credit Hours
Students may choose any course in the catalog that they have pre-requisites necessary for enrollment and that does not satisfy another requirement in the major.		15

Restricted Electives

Students may choose any Biology Course at the 300-level and 400-level that does not satisfy another requirement.

At least three courses with labs (4 credit hours each) are required. The final three credits do not require a lab, unless the course lists the lab as a co-requisite.

Code	Title	Credit Hours
BIOL 310	Plant Morphology	3
BIOL 310 Lab		1
BIOL 311 & 311	Comparative Veterbrate Anatomy and Comparative Veterbrate Anatomy (Lab)	4
BIOL 311 Lab		1
BIOL 313	General Zoology	3
BIOL 313 Lab		1
BIOL 316	Human Physiology	3
BIOL 333	Biological Illustration	3
BIOL 352	Intro to Mathematical Biology	3
BIOL 360	Genomics	4
BIOL 401	Intro to Computational Biology	3
BIOL 402	Student Teaching In Biology	3
BIOL 405	Animal Behavior	3
BIOL 405 Lab		1
BIOL 410	Systematic Botany	4
BIOL 412	Invertebrate Zoology	4
BIOL 413	Vertebrate Biology	4
BIOL 414	Techn Of Molecular Biology	3
BIOL 414 Lab		1
BIOL 415	Vertebrate Histology	3
BIOL 415 Lab		1
BIOL 416	Quantitative Biology	4
BIOL 417	General Physiology	3
BIOL 417 Lab		1
BIOL 418	Plant Physiology	4
BIOL 419	Cell Physiology	4
BIOL 422	Evolutionary Biology	4
BIOL 423	Conservation Biology Lab	3
BIOL 425	Embryology	3
BIOL 425 Lab		1
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 440	Virology	3
BIOL 440 Lab		1
BIOL 443	Immunology & Serology	4
BIOL 445	Pathogenic & Diagn Microbio	4
BIOL 450	Intro To Bioinformatics	3
BIOL 454	Programming for Bioinformatics	3
BIOL 489	Independent Study in Biology	1-4
BIOL 490	Topics in Biology	3

Summary, Biology Curriculum

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		27
Electives		30
Restricted Electives [15]		
Unrestricted Electives [15]		
Total Credit Hours		**120**

Biology, Bachelor of Science with a Concentration in Secondary Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
MATH 121	Trigonometry	3
CHEM 151 & CHEM 153	General Chemistry I and General Chemistry I Laboratory	4
BIOL 120	Principles Of Biology I	4
GE Wellness/Health Electives (p. 147)		1
ENGL 111	Composition II	3
STAT 210	Elementary Statistics I	3
CHEM 152 & CHEM 154	General Chemistry II and General Chemistry II Laborator	4
BIOL 121	Principles Of Biology II	4
GE History Electives (p. 146)		3
	Credit Hours	**32**
Sophomore Year		
EDUC 201	Seminar in Education	3
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
BIOL 201	Cell And Molecular Biology	4
BIOL 241	Introduction To Microbiology	4
GE Humanities Electives (p. 146)		3
EDUC 202	Foundations of Education	3

IDST 200	Digital Media Teacher Educatio	3
ENGL 202	Intro African American Lit	3
BIOL 205	Integrative Organismal Biology	3
BIOL 205	Integrative Organismal Biology	1
GE Global Studies Electives (p. 146)		3
	Credit Hours	**34**
Junior Year		
EDUC 315	Data Driven Instructional Desi	3
BIOL 320	Principles Of Genetics	4
PHYS 105	Introduction to Physics I	3
PHYS 105	Introduction to Physics I	1
BIOL 310	Plant Morphology	3
BIOL 310	Plant Morphology	1
PSYC 212	Human Growth & Development	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
BIOL 324	Ecology	3
BIOL 324	Ecology	1
GE Wellness/Health Electives (p. 147)		1
AGRI 100	General Earth Science	4
	Credit Hours	**30**
Senior Year		
EDUC 424	Culturally Responsive Pedagogy	2
Restricted Elective	BIOL Course and Lab	4
BIOL 447	Seminar In Biology	1
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 446	Investigations and Research	3
EDUC 427	Reading In The Subject Area	3
BIOL 402	Student Teaching In Biology	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**31**
	Total Credit Hours	**127**

[1] Students not ready for MATH 121 in their Freshman Year may take MATH 120. However, the credits do not count toward the total number of semester hours needed to complete the degree requirements.

Additional Requirements for B.S. in Biology with a Minor in Secondary Education

Freshman Year

- Take and pass Praxis I Assessment

sophomore YEAR

- Students must complete admission to Teacher Education Professional Program.

Senior YEAR

- Students must take and pass Praxis II in Biology prior to student teaching.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
BIOL 130	Professional Practices Biology	2
BIOL 121	Principles Of Biology II	4
BIOL 201	Cell And Molecular Biology	4
BIOL 205	Integrative Organismal Biology	3
BIOL 205	Integrative Organismal Biology	1
BIOL 241	Introduction To Microbiology	4
BIOL 320	Principles Of Genetics	4
BIOL 324	Ecology	3
BIOL 324	Ecology	1
BIOL 446	Investigations and Research	3
BIOL 447	Seminar In Biology	1
Total Credit Hours		**30**

Code	Title	Credit Hours
EDUC 201	Seminar in Education	3
EDUC 202	Foundations of Education	3
IDST 200	Digital Media Teacher Educatio	3
EDUC 315	Data Driven Instructional Desi	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
CHEM 152	General Chemistry II	3
CHEM 154	General Chemistry II Laborator	1
CHEM 305	Organic Chemistry I	3
CHEM 307	Organic Chemistry Lab I	1
BIOL 428	Teaching Sci In Secdary Sch	3
BIOL 402	Student Teaching In Biology	3
BIOL 310	Plant Morphology	3
BIOL 310	Plant Morphology	1
AGRI 100	General Earth Science	4
Total Credit Hours		**54**

Code	Title	Credit Hours
Restricted Electives [BIOL Course and Lab]		4
Total Credit Hours		**4**

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		54
Electives		4
Total Credit Hours		**121**

Biology, Minor in Biology

Code	Title	Credit Hours
BIOL 120	Principles Of Biology I	
BIOL 121	Principles Of Biology II	
BIOL 201	Cell And Molecular Biology	4
or BIOL 241	Introduction To Microbiology	
BIOL 205	Integrative Organismal Biology	3
BIOL 205	Integrative Organismal Biology [LAB]	1
BIOL 320	Principles Of Genetics	4
BIOL 324	Ecology	3
BIOL 324	Ecology [LAB]	1
Students must take at least one Biology restricted elective course at the 300- or 400-level. Prerequisite courses for individual electives must be met [See advisor for list of approved electives]		3-4
Total Credit Hours		**19-20**

Department of Chemistry

Chairperson: Dr. Karl Jackson
Location: Hunter-McDaniel Building, Room 239N
Contact Information: 804-524-5448 | kjackson@vsu.edu

Department Overview

The Department of Chemistry at VSU prepares students for careers in industry, admission to professional schools (e.g., medicine, dentistry, pharmacy), and graduate studies in chemistry, forensic science, and related fields. To support these goals, the Department offers a structured curriculum leading to a **Bachelor of Science (B.S.) in Chemistry**, with six academic concentrations:

1. **B.S. in Chemistry – General Chemistry Concentration**
2. **B.S. in Chemistry – Biochemistry Concentration**
3. **B.S. in Chemistry – Forensic Chemistry Concentration**
4. **B.S. in Chemistry – Secondary Education Endorsement**
5. **3+4 Dual Degree: B.S. in Chemistry and PharmD (Doctor of Pharmacy)**
6. **3+2 Dual Degree: B.S. in Chemistry and Chemical Engineering**

Each program is designed to equip students with the skills needed for careers in science, healthcare, and academia. Students are encouraged to engage in research as early as their freshman year, either during the academic year or through summer internships. Many students choose and are assisted in pursuing a **minor in another discipline** to broaden their skill sets and improve their competitiveness in the job market. In addition to the concentrations, we also offer a minor in Chemistry.

Mission Statement

The Department of Chemistry at Virginia State University is committed to delivering high-quality, rigorous academic programs that serve a diverse student population. Its mission is to prepare students to compete successfully in both national and global job markets and to support their admission into graduate and professional schools. To address a broad range of academic and career goals, the Department emphasizes the advancement of chemical knowledge through well-structured coursework, hands-on research experiences, and training with state-of-the-art, research-grade instrumentation.

The Chemistry Program consistently produces scholars who go on to earn terminal professional degrees, positioning them for leadership roles in government, academia, and the chemical and health industries.

Student Organizations

American Chemical Society – Student Affiliate
Chemistry Club

Department Goals

The overall departmental goal is to contribute toward the development of future scientists and professionals, and specifically to:

- Produce graduates who are strongly grounded in the fundamental principles of the discipline for success in graduate or professional programs and competitive for gainful employment in industry;
- Produce graduates possessing highly developed problem-solving and critical thinking skills;
- Promote research and engage students in research activities to advance knowledge.
- Develop graduates who, as future leaders, can confidently communicate scientific information and research findings to their peers and the scientific community

Program Listings

Bachelor of Science (B.S.) in Chemistry

General Chemistry Concentration - The most flexible and is recommended for students interested in industrial positions or considering graduate school in chemistry. Students working under this option should select

both restricted and unrestricted electives that are appropriate for their intended focus area.

> **Course Requirements:** All chemistry core courses and supporting science and math courses must be completed with a C or better grade. B.S. Chemistry Checklist for Core Courses.

Biochemistry Concentration - Students in this program receive a deeper education in biological sciences, which helps prepare them for health-related professions such as: entry into medical, pharmacy, dentistry, and nursing schools, as well as entry into graduate schools in the life sciences or direct employment in biotechnology.

> **Course Requirements:** All chemistry core courses and supporting science and math courses must be completed with a C or better grade.

Forensic Chemistry Concentration - Prepares students for employment in the forensic sciences and careers in crime labs and graduate programs. Students in this program take criminal justice courses and complete internships with regional partners to gain experience in the field.

Course Requirements: All chemistry core courses and supporting science and math courses must be completed with a C or better grade.

B.S. in Chemistry Secondary Education Endorsement - Suitable for students who strive to teach Chemistry in secondary schools. Students who choose this option are licensed and fully prepared to work in the classroom by the time they graduate. Some scholarship funds are available for qualified students in this program.

> **Course Requirements:** All chemistry core courses, supporting science and math courses and education courses must be completed with a C or better grade.

3+4 PharmD Concentration - A joint program whereby students obtain a B.S. in Chemistry degree from Virginia State University and a PharmD degree from Howard University School of Pharmacy in 7 years. Students pursuing this concentration enter the PharmD program upon successfully completing 3 years in the undergraduate chemistry program at Virginia State University, with a cumulative GPA of 3.0.

> **Course Requirements:** All chemistry core courses and supporting science and math courses must be completed with a C or better grade.

3+2 Chemical Engineering Concentration - The 3 + 2 Bachelor of Science degree in Chemistry (VSU) and the Bachelor of Science degree in Chemical Engineering, concentration (VCU). This unique agreement allows students to obtain two B.S. degrees in a minimum of five years. The degree allows students to enter the workforce in areas of chemical engineering or to seek a M.S. or Ph.D. in chemical engineering.

The objectives are to prepare diverse professionals in the values, knowledge, and skills of two fields to provide an integrated base of competency that is valuable for service to the Commonwealth of Virginia and the Nation as a whole. The Program is an accelerated, fully-accredited program in Engineering. Students in the Program will receive VCU transfer credit for coursework based on their prior work at the Home Institution (VSU). The Program is meant to be completed in five years, but more time may be required depending on circumstances.

> **Course Requirements:** Students in this concentration must maintain a 3.0 cumulative GPA at both institutions, completing all chemistry, math, physics, engineering, and computer science courses with a B or better grade:
>
> The average grade for all attempted engineering and computer science courses, regardless of where they are taken, must be at least 3.0. All grade averages mentioned herein are computed from all coursework attempted at Home Institution (VSU), VCU, and other institutions. For repeated coursework, grades for all attempts will be averaged.

Minor in Chemistry - The Chemistry minor requires 19 credit hours to include a restricted Chemistry elective and Organic Chemistry I & II and Analytical Chemistry I & II, along with the labs for each course. Students must earn a grade of "C" in all courses for the minor.

Major(s)

- Chemistry, Bachelor of Science (B.S.) (p. 377)
- Chemistry, Bachelor of Science with a Concentration in Biochemistry (B.S.) (p. 379)
- Chemistry, Bachelor of Science with a Concentration in Forensics (B.S.) (p. 380)
- Chemistry, Bachelor of Science with a Concentration in PharmD (B.S.) (p. 382)
- Chemistry, Bachelor of Science with a Concentration in Secondary Education (B.S.) (p. 382)

Minor(s)

- Minor in Chemistry (p. 384)

"If a student withdraws from the lecture portion of a chemistry course they MUST withdraw from the laboratory course."
"In order for a student majoring in a chemistry program to advance to the next course the program pre-requisites must be fulfilled with a grade of C or better."

CHEM 100 CHEMISTRY AND SOCIETY- 3 semester hours

A development of the fundamental principles of chemistry and their applications: Chemical nomenclature,
stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties,
solution calculations, gas laws and properties of solid and liquids among the topics discussed.

CHEM 100 CHEMISTRY AND SOCIETY LABORATORY - 1 semester hour

An introductory course to the principle techniques of experimental chemistry with emphasis on formula
investigations, equations, elementary laboratory statistics, and chemical reactivity.
Co-requisite: CHEM 100 Chemistry and Society

CHEM 105 INTRODUCTORY CHEMISTRY - 3 semester hours

A development of the fundamental basis for the further study of chemistry designed for students lacking the
pre-requisites for General Chemistry (CHEM151). Emphasis will be placed on problem solving techniques.
Topics will include: international system of units, dimensional analysis, properties of atoms and molecules,

atomic structure and the periodic table, common chemical reactions, and stoichiometry calculations. The
course and associated laboratory can be counted towards the general education science requirement.

CHEM 105 INTRODUCTORY CHEMISTRY LABORATORY - 1 semester hour

Accompanying laboratory exercises for CHEM105 are designed to emphasize basic techniques in laboratory
including measurements, basic graphical presentation and interpretation, basis data interpretation, laboratory
statistics and laboratory safety practices. The laboratory can be counted towards the general education science
requirement.
Co-requisite: CHEM 105 Introductory Chemistry

CHEM 151 GENERAL CHEMISTRY I - 3 semester hours
A development of the fundamental principles of chemistry and their applications. Chemical nomenclature,
stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties, solution calculations, gas
laws and the properties of solids and liquids are among the topics discussed.
Pre-requisite: Successful completion of the VSU math placement test with a score that meets the criteria for placement in, at a minimum, MATH120 at the time of enrollment or completion of CHEM105 with a C or better.

CHEM 152 GENERAL CHEMISTRY II - 3 semester hours
A continuation of the study of the principles of chemistry and their applications. The topics include solution
properties, acids and bases, ionic equations, oxidation-reduction, equilibrium, kinetics, descriptive chemistry of the
elements, nuclear chemistry and an introduction to organic chemistry.
Pre-requisite: CHEM 151 General Chemistry I or CHEM 161 Chemistry I

CHEM 153 GENERAL CHEMISTRY LABORATORY I - 1 semester hour
An introduction to the principles and techniques of experimental chemistry with emphasis upon formula
investigations, equations, elementary laboratory statistics, and chemical reactivity.
Co-requisite: CHEM 151 General Chemistry I

CHEM 154 GENERAL CHEMISTRY LABORATORY II - 1 semester hour
A continuation of CHEM 153 with emphasis upon solution properties, kinetics, equilibrium, acids and bases,
and qualitative analysis.
Pre-requisite: CHEM 153 General Chemistry Laboratory I or CHEM 163 Chemistry Laboratory I
Co-requisite: CHEM 152 General Chemistry II

CHEM 161 CHEMISTRY I - 3 semester hours
A development of the fundamental principles of chemistry and their application. Chemical nomenclature,
stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties, solution calculations, gas
laws and the properties of solids and liquids are among the topics discussed in depth. Emphasis will be placed on
problem solving skills to better prepare students for careers in chemistry and related life science fields.
Pre-requisite: Chemistry Majors or Permission from the Department Chair

CHEM 162 CHEMISTRY II - 3 semester hours
A continuation of development of the fundamental principles of chemistry and their application. The topics that
will be covered in depth include solution properties, acids and bases, ionic equations, oxidation reduction,
equilibrium, kinetics descriptive chemistry of the elements, nuclear chemistry and an introduction to organic
chemistry. Emphasis will be placed on problem solving skills to better prepare students for careers in chemistry
and related life science fields.
Pre-requisite: CHEM 151 General Chemistry I or CHEM 161 Chemistry I with a C or better

CHEM 163 CHEMISTRY LABORATORY I - 1 semester hour
An introduction to the principles and techniques of experimental chemistry with emphasis upon the application
of course material to problem solving in the laboratory.
Co-requisite: CHEM 161 Chemistry I

CHEM 164 CHEMISTRY LABORATORY II - 1 semester hour
A continuation of CHEM 163 with emphasis upon problem solving and presenting professional graphical
data while exploring, solution properties, kinetics, equilibrium acids and bases, and qualitative analysis.
Pre-requisite: CHEM 153 General Chemistry I Laboratory, CHEM 163 Chemistry Laboratory I
Co-requisite: CHEM 162 Chemistry II

CHEM 210 HISTORY OF CHEMISTRY - 1 semester hour
A thorough assessment of the groundbreaking work of the pioneers responsible for the current practice
of the science of chemistry and biochemistry.
Pre-requisites: CHEM 151 GENERAL CHEMISTRY I or CHEM161 CHEMISTRY I

CHEM 214 INORGANIC CHEMISTRY - 3 semester hours
A detailed study of the representative elements and their compounds, involving both theoretical and
descriptive approaches. Topics greatly expand upon the subject material in the Freshman level chemistry
course and include atomic and molecular structure, descriptive chemistry of the elements, d metal complexes,
molecular shape and symmetry, group theory, the structure of solids, acids/bases, oxidation/reduction and an
introduction to ligand and crystal field theories.
Pre-requisite: CHEM152 General Chemistry II or CHEM 162 Chemistry II with a C or better

CHEM 215 INORGANIC CHEMISTRY LABORATORY - 1 semester hour

Experiments designed to complement inorganic chemistry lecture by introducing synthetic and instrumental
methodology used in the study of inorganic compounds.
Co-requisite: CHEM 214 Inorganic Chemistry

CHEM 218 ANALYTICAL CHEMISTRY I - 3 semester hours
A survey of the methods of inorganic quantitative analysis, including the methods of gravimetric and volumetric
analysis with the use of simple instrumental methods included.
Pre-requisites: CHEM 152/154 General Chemistry II or 162/164 Chemistry II

CHEM 219 ANALYTICAL CHEMISTRY LABORATORY I - 1 semester hour
Laboratory experiences involving the qualitative and quantitative analysis of chemical compounds including
gravimetric, volumetric and spectrophotometric methods.
Pre-requisites: CHEM 154 General Chemistry Laboratory II or CHEM 164 Chemistry Laboratory II
Co-requisite: CHEM 218 Analytical Chemistry I

CHEM 232 PROFESSIONAL PRACTICES IN CHEMISTRY - 1 semester hour
A course designed to foster ethical practices and safety in chemistry and related fields.
Pre-requisite: CHEM 162 Chemistry II and CHEM 164 Chemistry II Laboratory

CHEM 305 ORGANIC CHEMISTRY I - 3 semester hours
A survey of the chemistry of carbon compounds, their nomenclature, physical properties, structure and reactions
with an introduction to reaction mechanisms and instrumental analysis.
Pre-requisite: CHEM 152 General Chemistry II or CHEM 162 Chemistry II

CHEM 306 ORGANIC CHEMISTRY II - 3 semester hours
A continuation of CHEM 305.
Pre-requisite: CHEM 305 Organic Chemistry I

CHEM 307 ORGANIC CHEMISTRY LABORATORY I - 1 semester hour
An examination of fundamentals of and practice in organic synthesis, separation, purification and the
identification of organic compounds.
Pre-requisites: CHEM 154 General Chemistry Laboratory II or CHEM 164 Chemistry Laboratory II
Co-requisite: CHEM 305 Organic Chemistry I

CHEM 308 ORGANIC CHEMISTRY LABORATORY II - 1 semester hour
A continuation of the fundamentals of and practice in organic synthesis, separation, purification and the
identification of organic compounds.
Pre-requisite: CHEM 307 Organic Chemistry Laboratory I
Co-requisite: CHEM 306 Organic Chemistry II

CHEM 318 ANALYTICAL CHEMISTRY II - 3 semester hours
An advanced course with emphasis on general principles and applications of analytical instrumental analysis.
Pre-requisites: CHEM 218 Analytical Chemistry I; CHEM 219 Analytical Chemistry Laboratory I

CHEM 319 ANALYTICAL CHEMISTRY LABORATORY II- 1 semester hour
Experiments in Instrumental Analysis
Co-requisite: CHEM 318 Analytical Chemistry II

CHEM 320 ORGANIC REACTION MECHANISMS & MODERN INSTRUMENTAL ANALYTICAL TECHNIQUES - 3 semester hours
A course designed for a more in depth treatment of reaction mechanisms in organic chemistry and
instrumental analytical techniques for structure determination of organic compounds, to include:
Infraredspectroscopy; Ultraviolet-Visible spectroscopy; Mass spectrometry; and Nuclear Magnetic Resonance
spectroscopy.
Pre-requisite: CHEM 306 Organic Chemistry II

CHEM 330 INTRODUCTION TO THE CHEMICAL RESEARCH - 2 semester hours
An aid to the student in making efficient use of chemical literature both online and in the printed form, with an
emphasis upon obtaining the appropriate sources for a research project in the field of chemistry or
biochemistry.
Pre-requisite: CHEM 306, 308 Organic Chemistry & Laboratory II

CHEM 340 FORENSICS CHEMISTRY - 3 semester hours

A course designed to give the forensics student the necessary background in specialized chemical methods
and concepts as they apply to the field of forensics.
Pre-requisite: CHEM 306, 308 Organic Chemistry & Laboratory II

CHEM 341 FORENSICS CHEMISTRY LABORATORY - 1 semester hour
A laboratory course designed to give the forensics student the necessary practical experience in specialized
chemical methods as they apply to the field of forensics.
Co-requisite: CHEM 340 Forensics Chemistry

CHEM 400 SPECIAL TOPICS IN CHEMISTRY - 3 semester hours
An advanced course for chemistry majors designed to promote interest and experience in specialized areas
of chemistry. Topics in the area of organic, physical, analytical, inorganic and biochemistry are based on
the expertise of the faculty and current trends within these disciplines in chemistry.
Pre-requisite: Permission of instructor.

CHEM 401 PHYSICAL CHEMISTRY I - 3 semester hours
A non-laboratory treatment of physical chemistry with emphasis on chemical thermodynamics, phase
equilibria, kinetic theory and chemical kinetics.
Pre-requisites: CHEM 152 General Chemistry II or CHEM 162 Chemistry II; MATH 261 Calculus II
or consent of instructor

CHEM 402 PHYSICAL CHEMISTRY II - 3 semester hours

A continuation of CHEM 401 with emphasis on the condensed states of matter, atomic and molecular
structure, spectroscopy, statistical mechanics and electrochemistry.
Pre-requisite: CHEM 401 Physical Chemistry I

CHEM 404 EXPERIMENTAL PHYSICAL CHEMISTRY - 1 semester hour
An introduction to the advanced techniques of physiochemical measurements and their application to
chemistry.
Pre-requisite: CHEM 401 Physical Chemistry I

CHEM 414 ADVANCED INORGANIC CHEMISTRY - 3 semester hours
Advanced study of the representative elements and their compounds, involving both theoretical and
descriptive approaches. Review of ligand field and crystal field theories, reaction mechanisms of d-
block complexes, electronic spectra of transition metal complexes, characterization methods in
inorganic chemistry, organometallic chemistry, catalysis and bioinorganic chemistry are among the
topics discussed.
Pre-requisite: CHEM 214, 215 Inorganic Chemistry & Laboratory

CHEM 415 ADVANCED INORGANIC CHEMISTRY LABORATORY - 1 semester hour
Laboratory experiments in inorganic synthesis and spectroscopic methods in inorganic chemistry.
Co-requisite: CHEM 414 Advanced Inorganic Chemistry

CHEM 420 SEMINAR IN CHEMISTRY - 1 semester hour
A presentation and discussion of topics of current interest and an introduction to the preparation of technical
presentations and presentation methods.
Pre-requisite: 15 semester hours of chemistry courses

CHEM 422 BIOCHEMISTRY I - 3 semester hours
An introduction to the chemistry of life processes, the composition of living matter and the changes
associated with biological processes
Pre-requisites: CHEM 306, 308 Organic Chemistry II & Laboratory

CHEM 423 BIOCHEMISTRY I LABORATORY - 1 semester hour
A laboratory course in which the properties of biochemical molecules are explored and common biochemical
reactions are examined.
Co-requisite: CHEM 422 Biochemistry I

CHEM 424 BIOCHEMISTRY II - 3 semester hours
A continuation of the chemistry of life processes, the composition of living matter, and the changes
associated with biological processes.
Pre-requisite: CHEM 422 Biochemistry I

CHEM 425 BIOCHEMISTRY LABORATORY II - 1 semester hour
A continuation laboratory course in which the properties of biochemical molecules are explored and common
biochemical reactions are examined.
Pre-requisite: CHEM 422, 423 Biochemistry I & Laboratory
Co-requisite: CHEM 424 Biochemistry II

CHEM 441 RESEARCH LABORATORY I - 2 semester hours
The first part of a capstone research experience. Students are expected to spend a minimum of 6 hours per week
on an independent and original research project designed in consult with their research advisor.
Pre-requisites: CHEM 320 Organic Reaction Mechanisms & Modern Instrumental Analysis
Techniques; CHEM 318 Analytical Chemistry II, CHEM 319 Analytical Chemistry II Laboratory,
CHEM330 Introduction to Chemical Research

CHEM 442 RESEARCH LABORATORY II - 2 semester hours
A continuation of CHEM 441 with an emphasis upon the independent development of a research project. A
written report of the research and an oral presentation of the results are required.
Pre-requisite: CHEM 441 Research Laboratory I

CHEM 443 ADVANCED FORENSICS LABORATORY I - 2 semester hours
This laboratory-based course is designed to give the advanced student crime laboratory experience in
examining, analyzing and identifying evidence. In several simulated court presentations, students sharpen
their skill in presenting evidence as a scientific expert. The areas covered are: hairs, fibers and polymers,
glass, soil, gunshot residue, fire and bomb debris, and drugs.
Pre-requisites: CHEM 318 Analytical Chemistry II and CHEM 319 Analytical Chemistry II
Laboratory, CHEM 330 Introduction to Chemical Research, CHEM 340 Forensics Chemistry,
`and CHEM 341 Forensics Chemistry Laboratory.

CHEM 444 ADVANCED FORENSICS LABORATORY II - 2 semester hours
A continuation of CHEM 443.
Pre-requisites: CHEM 443 Advanced Forensics Laboratory I

CHEM 445 Internship in CRIMINALISTICS - 3 semester hours
This on/off-campus internship is designed to give the student an opportunity to expand and apply their
classroom knowledge through workplace gained experience in forensic chemistry. It is a lecture/laboratory
course. The site supervisor and faculty supervisor will develop the internship criteria and then evaluate the
student's performance.
Pre-requisites: CHEM 444 Advanced Forensics Laboratory II and Permission of Department Chair

Chemistry Major, Bachelor of Science (B.S.)

Freshman Year		Credit Hours
CHEM 161 & CHEM 163	Chemistry I and Chemistry Laboratory I	4
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4

ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 260	Calculus I	4
MATH 261	Calculus II	4
PHYS 105 & PHYS 112	Introduction to Physics I and General Physics I	4
PHYS 106 & PHYS 113	Introduction to Physics II and General Physics II	4
CHEM 132	Professional Practices in CHEM	1
	Credit Hours	**31**
Sophomore Year		
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
CHEM 214 & CHEM 215	Inorganic Chemistry and Inorganic Chemistry Laboratory	4
GE Literature		3
CHEM 210	Hist of Blk & Underrep Chemist	1
GE Humanities		3
BIOL 120	Principles Of Biology I	4
	Credit Hours	**31**
Junior Year		
CHEM 401	Physical Chemistry I	3
CHEM 402	Physical Chemistry II	3
Restricted Elective		6
CHEM 320	Org Reaction Mech/Mod Inst	3
MATH/STAT (Restricted MATH Elective)		3
GE Health & Wellness		2
CHEM 330	Intro Chemical Research	2
CHEM 404	Experimental Physical Chem	1
GE History		3
GE Global Studies		3
	Credit Hours	**29**
Senior Year		
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
CHEM 424 & CHEM 425	Biochemistry II and Biochemistry Laboratory II	4
CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
Unrestricted Electives		9
CHEM 420	Seminar In Chemistry	1
GE Social Science		3
CHEM 414 & CHEM 415	Advanced Inorganic Chemistry and Adv Inorganic Chemistry Lab	4
	Credit Hours	**29**
	Total Credit Hours	**120**

Students not ready for Calculus I and II in their freshman year may take MATH 150; however, the credits do not count toward the total number of semester hours needed to meet the degree requirements. Restricted electives can be selected from upper level math or statistics courses such as MATH 360, MATH 350, or STAT 330 . Upper level (200 level or above) chemistry, biology, mathematics or computer science courses may also be used to satisfy restricted electives.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CHEM 132	Professional Practices in CHEM	2
CHEM 161	Chemistry I	3
CHEM 162	Chemistry II	3
CHEM 163	Chemistry Laboratory I	1
CHEM 164	Chemistry Laboratory II	1
CHEM 214	Inorganic Chemistry	3
CHEM 215	Inorganic Chemistry Laboratory	1
CHEM 218	Analytical Chemistry I	3
CHEM 219	Analytical Chemistry Lab I	1
CHEM 305	Organic Chemistry I	3
CHEM 306	Organic Chemistry II	3
CHEM 307	Organic Chemistry Lab I	1
CHEM 308	Organic Chemistry Lab II	1
CHEM 318	Analytical Chemistry II	3
CHEM 319	Analytical CHEM Laboratory II	1
CHEM 401	Physical Chemistry I	3
CHEM 418	Advanced Organic Chemistry	3
CHEM 422	Biochemistry I	3
CHEM 423	Biochemistry Laboratory I	1
Total Credit Hours		**40**

Code	Title	Credit Hours
CHEM 132	Professional Practices in CHEM	2
CHEM 330	Intro Chemical Research	2
CHEM 402	Physical Chemistry II	3
CHEM 404	Experimental Physical Chem	1
CHEM 414	Advanced Inorganic Chemistry	3
CHEM 415	Adv Inorganic Chemistry Lab	1
CHEM 420	Seminar In Chemistry	1

CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	3
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	1
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	3
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	1
BIOL 120	Principles Of Biology I	3
BIOL 120	Principles Of Biology I	1
Total Credit Hours		**29**

Code	Title	Credit Hours
Restricted Electives		6
Unrestricted Electives		10
Total Credit Hours		**16**

Code	Title	Credit Hours
General Education		35
Core Requirements		40
Major/Concentration Requirements		29
Electives		16
Total Credit Hours		**120**

Chemistry, Bachelor of Science with a Concentration in Biochemistry (B.S.)

Freshman Year		Credit Hours
CHEM 161 & CHEM 163	Chemistry I and Chemistry Laboratory I	4
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 260	Calculus I	4
MATH 261	Calculus II	4
CHEM 132	Professional Practices in CHEM	1
BIOL 121	Principles Of Biology II	4
BIOL 120	Principles Of Biology I	4
	Credit Hours	**31**
Sophomore Year		
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
CHEM 214 & CHEM 215	Inorganic Chemistry and Inorganic Chemistry Laboratory	4
GE Wellness/Health Electives (p. 147)		2
CHEM 210	Hist of Blk & Underrep Chemist	1
BIOL 241	Introduction To Microbiology	4
GE Literature Electives (p. 147)		3
	Credit Hours	**30**
Junior Year		
PHYS 105 & PHYS 112	Introduction to Physics I and General Physics I	4
PHYS 106 & PHYS 113	Introduction to Physics II and General Physics II	4
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
CHEM 424 & CHEM 425	Biochemistry II and Biochemistry Laboratory II	4
BIOL 201	Cell And Molecular Biology	4
CHEM 401	Physical Chemistry I	3
CHEM 330	Intro Chemical Research	2
BIOL 320	Principles Of Genetics	4
GE History Electives (p. 146)		3
	Credit Hours	**32**
Senior Year		
CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
CHEM 320	Org Reaction Mech/Mod Inst	3
Restricted Elective	MATH/STAT Course	3
CHEM 420	Seminar In Chemistry	1
GE Global Studies Electives (p. 146)		3
GE Humanities Electives (p. 146)		3
GE Social Science Electives (p. 147)		3
*BIOL XXX (Upper Level BIOL Course w/Lab)		8
	Credit Hours	**28**
	Total Credit Hours	**121**

2 *Biology senior electives are selected in consultation with the student's advisor and based on the student's area of interest and availability of courses.*

3 *Students planning to take the MCAT exam are strongly encouraged to take Introduction to Sociology* SOCI 101 or equivalent.

1 *Students not ready for Calculus I and II in their freshman year may take* MATH 150*, however, the credits do not count toward the total number of semester hours needed to meet the degree requirements. To meet the degree requirements, all supporting science and mathematics courses must be passed with a grade of "C" or better.*

Students interested in Medical School, Dentistry, Physical Therapy, Pharmacy or any other healthcare field, will have a sufficiently strong background after their third year of study to apply to these programs providing they meet the entrance requirements at the institution of choice.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		

GE Wellness/Health Electives (p. 147)	
GE Mathematics Electives (p. 147)	

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CHEM 132	Professional Practices in CHEM	2
CHEM 161	Chemistry I	3
CHEM 162	Chemistry II	3
CHEM 163	Chemistry Laboratory I	1
CHEM 164	Chemistry Laboratory II	1
CHEM 214	Inorganic Chemistry	3
CHEM 215	Inorganic Chemistry Laboratory	1
CHEM 218	Analytical Chemistry I	3
CHEM 219	Analytical Chemistry Lab I	1
CHEM 305	Organic Chemistry I	3
CHEM 306	Organic Chemistry II	3
CHEM 307	Organic Chemistry Lab I	1
CHEM 308	Organic Chemistry Lab II	1
CHEM 318	Analytical Chemistry II	3
CHEM 319	Analytical CHEM Laboratory II	1
CHEM 401	Physical Chemistry I	3
CHEM 418	Advanced Organic Chemistry	3
CHEM 422	Biochemistry I	3
CHEM 423	Biochemistry Laboratory I	1
Total Credit Hours		**40**

Code	Title	Credit Hours
CHEM 330	Intro Chemical Research	2
CHEM 420	Seminar In Chemistry	1
CHEM 424	Biochemistry II	3
CHEM 425	Biochemistry Laboratory II	1
CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	3
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	1
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	3
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	1
BIOL 120	Principles Of Biology I AND LAB	4
BIOL 121	Principles Of Biology II AND LAB	4
BIOL 201	Cell And Molecular Biology AND LAB	4
BIOL 241	Introduction To Microbiology AND LAB	4
BIOL 320	Principles Of Genetics AND LAB	4
Total Credit Hours		**39**

Code	Title	Credit Hours
Restricted Electives	Upper Level BIOL Courses	6
Total Credit Hours		**6**

No electives are required for this curriculum.

Code	Title	Credit Hours
General Education		35
Core Requirements		40
Major/Concentration Requirements		39
Electives		6
Total Credit Hours		**120**

Chemistry, Bachelor of Science with a Concentration in Forensics (B.S.)

Freshman Year		Credit Hours
CHEM 161 & CHEM 163	Chemistry I and Chemistry Laboratory I	4
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 260	Calculus I	4
MATH 261	Calculus II	4
CJUS 116	Intro To Criminal Justice	3
CHEM 132	Professional Practices in CHEM	1
Restricted Elective	CJUS 200 Level Course	3
GE History Electives (p. 146)		3
	Credit Hours	**32**
Sophomore Year		
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
BIOL 120	Principles Of Biology I	4
GE Literature Electives (p. 147)		3
CHEM 210	Hist of Blk & Underrep Chemist	1
BIOL 121	Principles Of Biology II	4
Restricted Elective	CJUS 300 Level Course	3
	Credit Hours	**31**
Junior Year		
PHYS 105 & PHYS 112	Introduction to Physics I and General Physics I	4
PHYS 106 & PHYS 113	Introduction to Physics II and General Physics II	4
CHEM 401	Physical Chemistry I	3
BIOL 241	Introduction To Microbiology	4
CHEM 214 & CHEM 215	Inorganic Chemistry and Inorganic Chemistry Laboratory	4
CHEM 330	Intro Chemical Research	2
CHEM 340	Forensics Chemistry	3

CHEM 341	Forensics Chemistry Laboratory	1
GE Wellness/Health Electives (p. 147)		2
GE Humanities Electives (p. 146)		3
	Credit Hours	**30**
Senior Year		
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
CHEM 424 & CHEM 425	Biochemistry II and Biochemistry Laboratory II	4
CHEM 443	Advanced Forensics Lab I	2
CHEM 444	Advanced Forensics Lab II	2
CHEM 320	Org Reaction Mech/Mod Inst	3
CHEM 420	Seminar In Chemistry	1
BIOL 320	Principles Of Genetics	4
BIOL 201	Cell And Molecular Biology	4
GE Global Studies Electives (p. 146)		3
	Credit Hours	**27**
	Total Credit Hours	**120**

[1] *Criminal Justice Courses are selected in consultation with the student's advisor and based on the student's area of interest.*

[2] *Students not ready for Calculus I and II in their freshman year may take MATH 150, however, the credits do not count toward the total number of semester hours needed to meet the degree requirements. To meet the degree requirements, all supporting science, mathematics, and criminal justice courses must be passed with a grade of "C" or better.*

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CHEM 132	Professional Practices in CHEM	2
CHEM 161	Chemistry I	3
CHEM 162	Chemistry II	3
CHEM 163	Chemistry Laboratory I	1
CHEM 164	Chemistry Laboratory II	1
CHEM 214	Inorganic Chemistry	3
CHEM 215	Inorganic Chemistry Laboratory	1
CHEM 218	Analytical Chemistry I	3
CHEM 219	Analytical Chemistry Lab I	1
CHEM 305	Organic Chemistry I	3
CHEM 306	Organic Chemistry II	3
CHEM 307	Organic Chemistry Lab I	1
CHEM 308	Organic Chemistry Lab II	1
CHEM 318	Analytical Chemistry II	3
CHEM 319	Analytical CHEM Laboratory II	1
CHEM 401	Physical Chemistry I	3
CHEM 418	Advanced Organic Chemistry	3
CHEM 422	Biochemistry I	3
CHEM 423	Biochemistry Laboratory I	1
Total Credit Hours		**40**

Code	Title	Credit Hours
CHEM 330	Intro Chemical Research	2
CHEM 420	Seminar In Chemistry	1
CHEM 424	Biochemistry II	3
CHEM 425	Biochemistry Laboratory II	1
CHEM 443	Advanced Forensics Lab I	2
CHEM 444	Advanced Forensics Lab II	2
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	3
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	1
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	3
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	1
BIOL 120	Principles Of Biology I AND LAB	4
BIOL 121	Principles Of Biology II AND LAB	4
BIOL 201	Cell And Molecular Biology AND LAB	4
BIOL 241	Introduction To Microbiology AND LAB	4
BIOL 320	Principles Of Genetics AND LAB	4
Total Credit Hours		**39**

Code	Title	Credit Hours
CJUS 2XX	200 Level CJUS Course	3
CJUS 3XX	300 Level CJUS Course	3
Total Credit Hours		**6**

Code	Title	Credit Hours
General Education		35
Core Requirements		40
Major/Concentration Requirements		39
Electives		6
Total Credit Hours		**120**

Chemistry, Bachelor of Science with a Concentration in PharmD (B.S.)

Course	Title	Credit Hours
Freshman Year		
CHEM 161 & CHEM 163	Chemistry I and Chemistry Laboratory I	4
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 260	Calculus I	4
MATH 261	Calculus II	4
CHEM 132	Professional Practices in CHEM	2
STAT 210	Elementary Statistics I	3
GE History Electives (p. 146)		3
	Credit Hours	**30**
Sophomore Year		
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
BIOL 120	Principles Of Biology I	4
GE Literature Electives (p. 147)		3
CHEM 214	Inorganic Chemistry	3
BIOL 121	Principles Of Biology II	4
BIOL 202	Terminology for the Health Sci	3
BIOL 318	Hum Anatmy/Physiol (Nurs) AND LAB	4
	Credit Hours	**33**
Junior Year		
PHYS 105 or PHYS 112	Introduction to Physics I or General Physics I	3
PHYS 105 or PHYS 112	Introduction to Physics I or General Physics I	1
PHYS 106 or PHYS 113	Introduction to Physics II or General Physics II	3
PHYS 106 or PHYS 113	Introduction to Physics II or General Physics II	1
CHEM 401	Physical Chemistry I	3
CHEM 214 & CHEM 215	Inorganic Chemistry and Inorganic Chemistry Laboratory	4
CHEM 418	Advanced Organic Chemistry	3
GE Wellness/Health Electives (p. 147)		2
GE Social Science Electives (p. 147)		3
PHIL 275	Ethics	3
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
	Credit Hours	**30**
Senior Year		
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
CHEM 424 & CHEM 425	Biochemistry II and Biochemistry Laboratory II	4
SPEE 214	Introduction To Public Speakin	3
BIOL 241	Introduction To Microbiology AND LAB	4
Unrestricted Elective	Transferred from Howard University	4
Restricted Elective	Transferred from Howard University	3
CHEM 330	Intro Chemical Research	2
GE Global Studies Electives (p. 146)		3
	Credit Hours	**27**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Chemistry, Bachelor of Science with a Concentration in Secondary Education (B.S.)

Course	Title	Credit Hours
Freshman Year		
FRST 101	Freshman Studies	0
CHEM 161 & CHEM 163	Chemistry I and Chemistry Laboratory I	4
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4
ENGL 110	Composition I	3
ENGL 111	Composition II	3
MATH 260	Calculus I	4
MATH 261	Calculus II	4
CHEM 132	Professional Practices in CHEM	2
BIOL 120	Principles Of Biology I	3
BIOL 120	Principles Of Biology I (LAB)	1
GE Social Science Electives (p. 147)		3
GE Wellness/Health Electives (p. 147)		2
	Credit Hours	**33**
Sophomore Year		
CHEM 214	Inorganic Chemistry	3
CHEM 215	Inorganic Chemistry Laboratory	1
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
EDUC 201	Seminar in Education	3

IDST 200	Digital Media Teacher Educatio	3
PHYS 105 or PHYS 112	Introduction to Physics I or General Physics I	3
GE History Electives (p. 146)		3
	Credit Hours	**32**
Junior Year		
PHYS 116	General College Physics I	4
PHYS 117	General Physics II	4
CHEM 330	Intro Chemical Research	2
CHEM 401	Physical Chemistry I	3
CHEM 402	Physical Chemistry II	3
GE Humanities Electives (p. 146)		3
CHEM 404	Experimental Physical Chem	1
GE Global Studies Electives (p. 146)		3
GE Literature Electives (p. 147)		3
EDUC 315	Data Driven Instructional Desi	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
	Credit Hours	**32**
Senior Year		
CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
CHEM 420	Seminar In Chemistry	1
CHEM 422	Biochemistry I	3
CHEM 423	Biochemistry Laboratory I	1
CHED 473		3
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
	Credit Hours	**29**
	Total Credit Hours	**126**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
CHEM 132	Professional Practices in CHEM	2
CHEM 162 & CHEM 164	Chemistry II and Chemistry Laboratory II	4
CHEM 214 & CHEM 215	Inorganic Chemistry and Inorganic Chemistry Laboratory	4
CHEM 218 & CHEM 219	Analytical Chemistry I and Analytical Chemistry Lab I	4
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM 401	Physical Chemistry I	3
CHEM 418	Advanced Organic Chemistry	3
CHEM 422 & CHEM 423	Biochemistry I and Biochemistry Laboratory I	4
Total Credit Hours		**36**

Code	Title	Credit Hours
CHEM 330	Intro Chemical Research	2
CHEM 402	Physical Chemistry II	3
CHEM 404	Experimental Physical Chem	1
CHEM 420	Seminar In Chemistry	1
CHEM 441	Research Laboratory I	2
CHEM 442	Research Laboratory II	2
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	3
PHYS 105 or PHYS 112	Introduction to Physics I General Physics I	1
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	3
PHYS 106 or PHYS 113	Introduction to Physics II General Physics II	1
BIOL 120	Principles Of Biology I AND LAB	4
EDUC 201	Seminar in Education	3
IDST 200	Digital Media Teacher Educatio	3
EDUC 315	Data Driven Instructional Desi	3
SPED 403	Classroom Mgmt Ed Setting (FE)	3
EDUC 424	Culturally Responsive Pedagogy	2
EDUC 427	Reading In The Subject Area	3
EDUC 401	Student Teaching Seminar	3
EDUC 402	Student Teaching FE	9
Total Credit Hours		**52**

No Electives Required for this program.

Code	Title	Credit Hours
General Education		35
Core Requirements		36
Major/Concentration Requirements		52
Electives		0
Total Credit Hours		**123**

Chemistry, Bachelor of Science with a Concentration in Chemical Engineering

Chemistry, Minor in Chemistry

Code	Title	Credit Hours
Sophomore Year		
CHEM 305 & CHEM 307	Organic Chemistry I and Organic Chemistry Lab I	4
CHEM 306 & CHEM 308	Organic Chemistry II and Organic Chemistry Lab II	4
Junior Year		
CHEM 218 & CHEM 319	Analytical Chemistry I and Analytical CHEM Laboratory II	4
Senior Year		
CHEM 318 & CHEM 319	Analytical Chemistry II and Analytical CHEM Laboratory II	4
CHEM XXX Chemistry Elective (see below)		3
Electives (3 credits from the following):		
CHEM 214	Inorganic Chemistry	3
CHEM 320	Org Reaction Mech/Mod Inst	3
CHEM 401	Physical Chemistry I	3
CHEM 422	Biochemistry I	3

Department of Nursing

Chairperson: Dr. Sibena Samuel-Harris
Location: Hunter McDaniel Building, Room 140N, Suite C
Contact Information: 804-524-5327 | ssamuel-harris@vsu.edu

Department Overview

The Department of Nursing at Virginia State University is committed to cultivating an optimal learning environment that promotes shared governance, leadership, scholarship, continuous discovery, and service. Our mission is to prepare graduate professional nurses to deliver culturally competent, high-quality care that addresses the unique health needs of rural communities and the broader global society.

The **post-licensure Bachelor of Science in Nursing (B.S.N.) program** is an upper level 30 credit hour program which must be completed at VSU. This program is specifically designed for registered nurses who hold an associate degree or hospital diploma and are seeking to advance their education. Offered in a flexible, part-time format, the RN to BSN program is delivered entirely online, allowing working professionals to balance their academic and professional responsibilities.

Graduates of the online baccalaureate program are prepared as generalist nurses equipped to provide comprehensive care to diverse populations across the lifespan. The curriculum emphasizes current trends in healthcare, financial management of healthcare systems, and professional development. It also lays a strong foundation for those pursuing graduate studies in nursing.

Mission Statement

The mission of the Department of Nursing is to deliver a liberal education that includes a foundation in the arts, science, humanities, and nursing for professional nursing practice. In alignment with fulfilling the mission of VSU, the program will prepare informed citizens, globally competitive leaders, and highly effective ethical professionals through evidence-based patient centered experiences in rural and urban settings. These settings will prepare diverse graduates with the foundation for lifelong learning as a member of an inter-professional health care delivery team."

Degree Highlight Information

We are the only professional program of study at VSU with a career-focused department. All of our students have found employment in diverse nursing settings, such as the corporate sector, local government, federal government, as well as, in the non-profit sector.

Accreditation Information

The Department of Nursing's baccalaureate program at Virginia State University has full approval by the Virginia Board of Nursing (https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dhp.virginia.gov%2FBoards%2FNursing%2F&data=05%7C02%7Csellis%40vsu.edu%7Cb4c764e2fa8c43bd2b0e08dda2d3bc23%7Cabca6162bfa745269826e7fb30c1fc%7C0%7C0%7C638845752481182444%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXa%3D%3D%7C0%7C%7C%7C%7C&sdata=sqLI36W9Ami5iD6KqRiMkRzt1DdAsQzGN2GEAT5A%2FNQ%3D&reserved=0). Our program is fully accredited by the Commission on Collegiate Nursing Education (CCNE), and approved by the Virginia State Board of Nursing, the State Council of Higher Education for Virginia (SCHEV), and the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). This department is also an agency member of the National League for Nursing, and the American Association of Colleges of Nursing.

Department Goals

The goal of the Department of Nursing is to prepare professional nurses to provide fiscally responsible, technologically competent, and patient-centered care across the lifespan, with a particular emphasis on rural health. The department is guided by four core values:

- **Integrity** - developing a workforce that demonstrates ethical behavior in all settings.
- **Collaboration** - by developing partnerships with a variety of healthcare settings and disciplines whose purpose is patient and community care.

- **Diversity** - working with a variety of cultures to deliver equitable health care.
- **Inclusion** - including all segments of the population.

Program Listings

Bachelor of Science in Nursing (B.S.N.)

Ten new courses have been developed for the upper level, 30-credit hour program. This course will incorporate ten key domains with the *Essentials* to outline the educational framework: The program is in alignment with *The Essentials: Core Competencies for Professional Nursing Education and Quality Safety and Effective Nursing Competencies (QSEN)* published by the American Association of Colleges of Nursing (2021). The key domains include:

- Knowledge for Nursing Practice
- Person-Centered Care
- Population Health
- Scholarship for the Nursing Discipline
- Quality and Safety
- Inter-professional Partnerships
- Systems-Based Practice
- Informatics and Healthcare Technologies
- Professionalism
- Personal, Professional, and Leadership Development

QSEN Competencies include the following:

- Recognize the patient or designee as the source of control and full partner in providing compassionate and coordinated patient-centered care based on respect for patient's preferences, values, and needs.
- Function effectively within nursing and inter-professional teams, fostering teamwork and collaboration through open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Integrate evidence-best practice through best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
- Use data to monitor the outcomes of care processes and use quality improvement methods to design and test changes to continuously improve the quality and safety of health care systems.
- Promote safety to minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Through informatics, use information and technology to communicate, manage knowledge, mitigate error, and support decision making.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
NURS 320	Transition to Prof NURS Practi	3
NURS 321	Integrated Health Assessment	3
NURS 322	Theoretical Foundations	3
NURS 323	Healthcare Trends & Policy	3
NURS 324	Evidence-based Practice	3
NURS 420	Alterations in Health	3
NURS 421	Nursing Informatics	3
NURS 422	Population & Global Health	3
NURS 423	Leadership & Healthcare Mgmt	3
NURS 424	Fin Mgmt & Health Delivery Sys	3
Total Credit Hours		**30**

Code	Title	Credit Hours
Nursing Preparation Pre-Requisites (The following list of co-requisites can be taken with the core curriculum courses if needed.)		**21**
BIOL 318	Hum Anatmy/PhysioI (Nurs)	
BIOL 319	Hum Anatmy/Physio II i(Nurs) AND LAB	
BIOL 241	Introduction To Microbiology AND LAB	
PSYC 216	Developmental Psychology	
COBU 155	Information Systems & Tech I	
STAT 210	Elementary Statistics I	
Total Credit Hours		**21**

No electives are required for this program.

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		57
Electives		0
Total Credit Hours		**120**

Nursing, Bachelor of Science in Nursing (B.S.N.)

First Semester

Code	Title	Credit Hours
NURS 320	Transition to Prof NURS Practi	3
NURS 321	Integrated Health Assessment	3
Total Credit Hours		**6**

Second Semester

Code	Title	Credit Hours
NURS 322	Theoretical Foundations	3
NURS 323	Healthcare Trends & Policy	3
Total Credit Hours		**6**

Third Semester

Code	Title	Credit Hours
NURS 324	Evidence-based Practice	3
NURS 420	Alterations in Health	3
Total Credit Hours		**6**

Fourth Semester

Code	Title	Credit Hours
NURS 421	Nursing Informatics	3
NURS 422	Population & Global Health	3
Total Credit Hours		**6**

Code	Title	Credit Hours
Nursing Preparation (RN)*		36

Nursing Preparation courses will be transfer courses.

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
Anatomy and Physiology		8
Microbiology		4
Growth and Development (Lifespan)		3
Information Systems		3
Statistics		3
Total Credit Hours		**21**

Pre-requisites will be transfer courses.

Code	Title	Credit Hours
NURS 320	Transition to Prof NURS Practi	3
NURS 321	Integrated Health Assessment	3
NURS 322	Theoretical Foundations	3
NURS 323	Healthcare Trends & Policy	3
NURS 324	Evidence-based Practice	3
NURS 420	Alterations in Health	3
NURS 421	Nursing Informatics	3
NURS 422	Population & Global Health	3
NURS 423	Leadership & Healthcare Mgmt	3
NURS 424	Fin Mgmt & Health Delivery Sys	3
Total Credit Hours		**30**

Code	Title	Credit Hours
General Education		33
Nursing Preparation (RN)		36
Pre-Requisites		21
Core Requirements		30
Total Credit Hours		**120**

Department of Psychology

Chairperson: Dr. Shedrick McCall
Location: Hunter-McDaniel Bldg, Room 102Sa
Contact Information: 804-524-5095 | smccall@vsu.edu (http://catalog.vsu.edu/undergraduate/college-natural-health-sciences/department-psychology/smccall@vsu.edu)

Department Overview

The Department offers a program of general psychology on the undergraduate level. The Psychology Department also offers a Master's program in Psychology and a Doctoral program in Health Psychology (see the Graduate Catalog for more information).

The department has several active research laboratories including a Cardiovascular Health laboratory, a Cognitive Behavioral laboratory, a Human Clinical laboratory, a Developmental Psychology laboratory, a Psychoneuroimmunology of Risk and Disease a Psychosocial Stress laboratory and a Behavioral and Community Health Laboratory. The Psychology Department faculty engages its students in research and

prepare them to present at national, regional, and local conferences/ symposia.

Through a departmental advisory system, the faculty aids the major to identify and pursue his or her area of greatest interest. Students who plan to prepare for school psychology, psychiatric or medical social work, guidance and counseling, vocational rehabilitation, clinical psychology, child development, law, criminal justice, medicine, religion, public service, or college teaching and research will identify the psychology offerings to be fundamental to their goals.

The Department hosts a chapter of Psi Chi, the National Honor Society in Psychology, which encourages and promotes high scholastic attainment. In addition, the Department sponsors a Psychology Club where membership is open to all psychology majors.

Mission Statement

The mission of the Psychology Department is to teach a diverse student population to adopt a scientific approach to the acquisition of knowledge in the major areas of psychology and to prepare them for global leadership, graduate study, and service in culturally diverse communities.

Department Goals

The Department seeks to achieve its mission through the following objectives:

- Provide fundamental training in the science of psychology, thus preparing psychology majors for advanced study in the field
- Contribute to the education of a diverse student population by providing an understanding of the scientific approach to the study of human behavior
- Offer instruction in the principles and applications of psychology to diverse students and other departments that require psychology in their programs.

Program Listings

Bachelor of Science (B.S.) in Psychology

The undergraduate psychology program emphasizes general psychology which gives students a basic understanding of all areas of psychology and provides a foundation of pre-professional education for a variety of vocations. Students will have the opportunity to work with highly qualified faculty and doctoral students to do research in Health Psychology. Research topics include but are not limited to substance use epidemiology, cognitive health, HIV, cardiovascular disorders, diabetes, and hypertension as well as effective health promotion education and planning.

Minor in Psychology

The Minor in Psychology provides students with a foundational understanding of human behavior and mental processes, enhancing any major field of study. It develops critical thinking, research skills, and interpersonal awareness applicable to careers in health, education, business, and social services. The minor requires a minimum of 18 credit hours in psychology coursework, selected in consultation with an academic advisor.

Major

- Psychology, Bachelor of Science (B.S.) (p. 390)

Minor

- Minor in Psychology (p. 391)

PSYCHOLOGY
Course Descriptions

PSYC 101 DISCOVERING PSYCHOLOGY - 3 semester hours

A general education course designed to give students an understanding of the scientific approach to the study
of human behavior and to develop an appreciation for the breadth and variety of psychological approaches.

PSYC 110 INTRODUCTION TO PSYCHOLOGY - 3 semester hours
A basic course in psychology for majors, serving as the foundation for subsequent courses. The course is
designed to give students an understanding of the scientific approach to the study of human behavior and
to help students develop an appreciation for the breadth and variety of psychological theories. Required of
all psychology majors.

PSYC 111 GENERAL PSYCHOLOGY - 3 semester hours

A basic course in psychology, serving as the foundation for subsequent courses on specialized topics.
Required of all psychology majors.

PSYC 117 THE PSYCHOLOGY OF EARLY CHILDHOOD - 3 semester hours
A course designed to emphasize personality development of young children at the pre-school and primary
levels.
Prerequisite: Psychology 212

PSYC 210 ADOLESCENT PSYCHOLOGY - 3 semester hours
Characteristics of behavior during the adolescent phase of development; personal social adjustments of the
individual between childhood and adulthood.

PSYC 212 HUMAN GROWTH AND DEVELOPMENT - 3 semester hours
A course designed primarily for students preparing to teach in elementary and secondary schools. It aids
students in developing fundamental understanding of the patterns and sequence of development from
conception through the adolescent period. Students are required to observe children under guidance and to
apply methods of child study.

PSYC 214 SOCIAL PSYCHOLOGY - 3 semester hours
An introduction to the current concepts and theories that attempt to explain the behavior of the individual
in society. Major topics include culture and personality, social roles, leadership, prejudice and propaganda.
Review and analysis of current concepts and experimentation in the field.

Prerequisites: PSYC 110 or PSYC 111

PSYC 216 DEVELOPMENTAL PSYCHOLOGY - 3 semester hours

This is a course that aims to develop a comprehensive theoretical base in developmental psychology.
Complex processes of human development throughout the life span will be analyzed in systematic form
and the major premises of developmental theorists will be critically examined. Supplemented by required
observation and participation in the Human Development and Learning Laboratory.

PSYC 305 PRACTICUM - 8 HRS. PRACTICE - 2 semester hours
Supervised field experience in mental health.

PSYC 309 EXPERIMENTAL PSYCHOLOGY LABORATORY - 1 semester hour
Experiments conducted that illustrate techniques of control and statistical analysis in various areas of
psychology. Focuses on human performance and equipment and laboratory procedures used in the
measuring of this performance. Must be taken concurrently with PSYC 310.
Prerequisite: PSYC 315 - Quantitative Methods

PSYC 310 EXPERIMENTAL PSYCHOLOGY - 3 semester hours

The experimental design of psychological research involving the appropriate techniques of control and
statistical data analyses. Must be taken concurrently with PSYC 309.
Prerequisite: PSYC 315 - Quantitative Methods

PSYC 311 MENTAL HYGIENE - 3 semester hours

A critical consideration of the literature on mental health and personal adjustment. Emphasis is placed
on the maintenance of wholesome personal-social relations and the prevention of serious mental disturbances.

PSYC 313 COGNITIVE BEHAVIOR AND LEARNING - 3 semester hours
Focuses on an analysis of cognitive behavior, such as attention memory, thinking, problem solving and
metacognition and theories of learning. Instructional strategies in the use of cognitive behaviors to enhance
learning will be discussed. The effects of psychological variables on learning will also be examined. This course
has practical applications for educators, psychologists, develop mentalists, and human service workers.
Prerequisite: Psychology 212 or Psychology 216

PSYC 314 EDUCATIONAL TESTS AND MEASUREMENTS - 3 semester hours
A study of the general field of tests and measurements including elementary statistics. Concerned with
the selection and administration of group tests of mental ability, aptitude, interest, achievement and
personality.
Prerequisite: Psychology 212 or Psychology 216

PSYC 315 QUANTITATIVE METHODS IN PSYCHOLOGY - 3 semester hours
A general introductory course to the study of methods and techniques of research in psychology with
emphasis upon research design and statistical concepts. Some automatic data processing experience is
also provided.
Prerequisite: STAT 210

PSYC 316 ABNORMAL PSYCHOLOGY - 3 semester hours
A study of the origins and symptoms of psychopathological behavior. This course considers psychopathology
from the major theoretical perspectives. The course is supplemented by required observations at Central
State Hospital.
Prerequisites: Psychology 111 and 216

PSYC 318 APPLIED PSYCHOLOGY - 3 semester hours
The application of psychological research in the solution of specific problems. Emphasis upon psychology
in industry (training, human engineering, fatigue, other conditions affecting work) and in advertising
(attention, motivation, imagery appeal).

PSYC 324 PROBLEMS IN PSYCHOLOGY - 2-4 semester hours

A study of problems in psychology by intensive reading of the major periodicals and classical works
in the field. Provides the student with the opportunity to pursue a research project through independent study.

PSYC 325 PERSONALITY DEVELOPMENT - 3 semester hours
A survey of theory and research on the development of the personality. Primary emphasis is upon the factors
that shape personality. Class projects involve some laboratory work with children.
Prerequisites: Psychology 110 or Psychology 111 and consent of instructor.

PSYC 400 SENIOR SEMINAR - 3 semester hours
An integrative course designed to show the relationship among the separate courses pursued by the student
in the undergraduate experience. The course provides an in-depth review of some of the major concepts and
issues in psychology.
Prerequisite: Senior status as a Psychology Major

PSYC 401 TOPICS IN PSYCHOLOGY - 3 semester hours
Involves a critical discussion of current theoretical and experimental issues in four areas of psychology:
African-American experiences, Spiritual Experiences, Adulthood and Aging, and Selected Issues in
Psychology. One topic will be offered each semester, and the course may be repeated once for credit.

PSYC 402 BLACK PSYCHOLOGY - 3 semester hours
This course provides an introduction to the theory, research, and practice relative to the study of
psychosocial experience from the unique worldview framework of the history and culture of African people.
Emphasis will be given to such issues as the African/African-American and European/European-American
worldviews and the manner in which cross cultural systems of social reality impact the Black experience in
America, theories of African/Black personality, psychological health and mental disorder, family and social

relationships, community functioning and cultural infrastructure development, and the nature, function and
impact of White/European supremacy domination.
Prerequisites: PSYC 101 and **Jr. or Sr. Standing and consent of Instructor**

PSYC 403 PSYCHOLOGY OF THE SPRITUAL EXPERIENCE - 3 semester hours
This course introduces students to the study and interpretation of spiritual experiences throughout the
history of psychology, and explores what is now called Transpersonal Psychology. Historically, this subject
matter has included religious and ""mystical"" experiences, and altered states of consciousness. Students
will be exposed to the thoughts on these topics by major figures in psychology, philosophy, and theology,
including Freud, James, Jung, Huxley, Wilber, Maslow, Frankl, Campbell, and Tillich.
Prerequisite: Jr. or Sr. Standing and consent of Instructor

PSYC 404 PSYCHOLOGY OF RELATIONSHIPS - 3 semester hours
This course is an in-depth study of relationship science. It includes coverage of the major issues involved in
attraction, the basic processes that underlie intimate relationships (such as communication and
interdependency), common relationship issues (such as jealousy, betrayal, & conflict), intimacy, and
relationship management & loss. This course will also introduce students to the standard methods employed
in studying intimate relationships.
Prerequisites: Jr. or Sr. Standing and consent of Instructor

PSYC 405 FORENSIC PSYCHOLOGY - 3 semester hours
The topics studied by forensic psychologists vary widely. They range from the effects of drugs on behavior,
to criminal behavior, juvenile delinquency, psychopathology, and profiling serial killers, just to name a few.
The goal of this course is to introduce students to some representative areas of forensic psychology and to
explore how forensic psychologists contribute to the legal system. Students are introduced to the methods
used by forensic psychologists to explain behavior by examining a number of studies devoted to topics
related to forensic psychology.
Prerequisites: PSYC 101 and PSYC 316 Jr. or Sr. Standing and consent of Instructor

PSYC 406 OBESITY IN CHILDHOOD - 3 semester hours
The course will introduce students to psychosocial factors that contribute to childhood obesity. Students
will develop an understanding of why childhood obesity is a risk factor for chronic illnesses. The course
will involve extensive use of empirical studies.
Prerequisites: PSYC 216 and PSYC 310 ***Jr. or Sr. Standing and consent of Instructor***

PSYC 407 HEALTH PSYCHOLOGY – 3 semester hours
This introduction to health psychology provides a general overview of the discipline of health psychology,
including its origins, concepts and methods. A number of types of intervention efforts will be explored,
including risk factor modification, secondary preventive/rehabilitative efforts for chronic illness
and community/ public health interventions. Some of the major areas and topics in health psychology are
explored, such as stress, chronic and acute diseases, substance use and abuse. Students will acquire skills
and knowledge that should enhance their critical thinking and understanding the relationship of thought's,
emotions, motivations, and actions on human health. Students will learn to apply health promotion and
disease prevention theory, concepts and methods to real life situations.
Prerequisites: PSYC 101 and Jr. or Sr. Standing and consent of Instructor

PSYC 410 INTRODUCTION TO PSYCHOLOGICAL TESTING - 4 semester hours
Focuses on supervised intellectual assessment of children and adults using such instruments as WAIS,
WISC, WPPSI and Stanford-Binet. Relevant literature on the concept of intelligence and test construction
is required reading.
Prerequisites: PSYC 216 and department permission

PSYC 411 DIAGNOSTIC PROCEDURES FOR EXCEPTIONAL CHILDREN - 4 semester hours
A study of psycho-diagnostic procedures useful in evaluating the abilities of exceptional children and youth.
includes how to select and administer appropriate tests of intelligence, personality, and specific disabilities,
and how to utilize the findings in planning pupil experience.
Prerequisite: Psychology 410

PSYC 412 PHYSIOLOGICAL PSYCHOLOGY - 3 semester hours
A study of the physiological systems of the human organism as a basis for psychological reactions,
with special reference to the endocrine and central nervous systems.
Prerequisites: Biology 315 and 316

PSYC 413 HISTORY AND SYSTEMS OF PSYCHOLOGY - 3 semester hours
The history of scientific psychology through a critical analysis of the major psychological systems, stressing
the problems, methods, and contribution of each and the philosophical and physiological foundations of the
discipline.
Prerequisite: Senior or graduate status

PSYC 414 PERCEPTION - 3 semester
The various theories of perception and the experimental research relating to them.

PSYC 415 CULTURE AND PERSONALITY - 3 semester hours
A course designed to enhance the general education of students regardless of their majors. A cross- culture
approach to the study of personality and national character by examining the value systems, institutions,
culture traits and child rearing practices of diverse cultures.
Prerequisite: Junior status or above

PSYC 416 THE TEACHING OF PSYCHOLOGY IN SECONDARY SCHOOL - 3 semester hours

Focuses on methods and materials of instruction in psychology at the secondary level, with emphasis on the
design of laboratory activities. The implementation of ethical principles and arrangement of major topics
within psychology under the core areas. Students will explore lecture, discussion inquiry, audiovisual
presentations, core history analysis, role playing, simulation, field work, demonstration, experiments,
research projects as techniques for making abstract conceptions of psychology more accessible.

PSYC 417 PSYCHOLOGICAL DEVELOPMENT THROUGH THE PRIMARY YEARS - 3 semester hours
A course designed for teachers seeking certification in early childhood education (K-3), and for those
students pursuing the master's degree in early childhood education. Aims to develop an understanding of
psychological growth and personality development during the first decade of life. Not open to students
having credit for Psychology 117.

PSYC 418 PSYCHOLOGY OF THE DISADVANTAGED - 3 semester hours

A course examining the dynamics of the behavior of disadvantaged groups. After an analysis of major
historical revolutions, the focus is turned to contemporary groups who occupy disadvantaged positions
in American society.
Prerequisite: Upper class or graduate status

PSYC 419 INTRODUCTION TO SCHOOL PSYCHOLOGY - 3 semester hours

A course designed to acquaint the student with educational policies and procedures and the role of the
school psychologist.

PSYC 420 DRUGS AND BEHAVIOR - 3 semester hours
A course designed to aid students in understanding the chemistry of certain drugs and their effects upon the
organism as well as the psychological changes that accompany them, and to aid service providers in dealing
constructively with the problem.
Prerequisite: Junior status and above

PSYC 421 LANGUAGE AND COGNITIVE DEVELOPMENT - 3 semester hours
An overview of recent advances in the understanding of language acquisition and cognitive development
in the child. It emphasizes several major theoretical positions and associated empirical works.
Prerequisite: Junior status and above

PSYC 424 RESEARCH IN PSYCHOLOGY - 3 semester hours
A course designed to provide the student with the opportunity to pursue an original research project through
independent study. Emphasis is placed upon planning and conducting research, analyzing and interpreting
data, and communicating about research.
Prerequisite: Department permission

PSYC 429 CRISIS INTERVENTION STRATEGIES - 3 semester hours
A course designed primarily to give students an opportunity to learn how to select and utilize psychological
knowledge for the determination of appropriate strategies for crisis intervention situations. The course is
supplemented by field work in selected agencies.

PSYC 430 THE CLINICAL INTERVIEW - 3 semester hours
A seminar designed to provide an understanding of the relationship of theory to practical experience and
skill-building in the use of the interview process. Emphasis is upon employing the interview to establish
and maintain support with human service recipients.
Prerequisite: Consent of instructor

Psychology Major, Bachelor of Science (B.S.)

Freshman Year		
1st Semester		**Credit Hours**
PSYC 110	Introduction to Psychology I	3
BIOL 120	Principles Of Biology I (and Lab)	3
BIOL 120 Principles Of Biology I Lab		1
HIST 122 or HIST 123	U.S. History to 1865 or U.S. History After 1865	3
MATH 120	College Algebra	3
ENGL 110	Composition I	3
	Credit Hours	**16**
2nd Semester		
PSYC 111	Introduction to Psychology II	3
ENGL 111	Composition II	3
Humanities Elective (Not Philosophy)		3
STAT 210	Elementary Statistics I	3
HPER 170	Health And Wellness	2
HPER 170	Physical Education Elective	1
	Credit Hours	**15**
Sophomore Year		
1st Semester		
HIST 114 or HIST 115	World History to 1500 or World History Since 1500	3
ENGL 201	Introduction To Literature	3
PSYC 216	Developmental Psychology	3
PSYC 315	Quantitative Methods In Psyc	3
Restricted Elective	Natural or Health Science	3
	Credit Hours	**15**
2nd Semester		
Global Studies	200 Level or Above	3
PSYC 214	Social Psychology	3
GEEN 310		3
PSYC 310	Experimental Psychology	3
PSYC 309	Experimental Psychology Lab	1
Unrestricted Elective		3
	Credit Hours	**16**
Junior Year		
1st Semester		
PHIL 140	Philosophy	3
Psychology Elective		3
PSYC 325	Personality Development	3
BIOL 318	Hum Anatmy/Physiol (Nurs)	3
Global Studies	Course level 200 or Above	3
	Credit Hours	**15**
2nd Semester		
Psychology Elective		3
PHIL 180 or PHIL 220	Critical Thinking or Introduction To Logic	3

BIOL 319	Hum Anatmy/Physio II i(Nurs)	3
Unrestricted Elective		3
PSYC 316	Abnormal Psychology	3
	Credit Hours	**15**
Senior Year		
1st Semester		
HPER	Physical Education Elective	1
Social Science	Restrictive Elective	3
Unrestricted Elective		3
Unrestricted Elective		3
PSYC 412	Physiological Psychology	3
PSYC 314	Educational Tets & Measurement	3
	Credit Hours	**16**
2nd Semester		
Unrestricted Elective		3
Unrestricted Elective		3
Social Science	Social Science Elective	3
PSYC 413	History & Systems Of Psycholog	3
	Credit Hours	**12**
	Total Credit Hours	**120**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
BIOL 218	Human Anatomy & Physiology I	3
BIOL 219	Human Anatomy & Physiology II	3
PSYC 110	Introduction to Psychology I	3
or PSYC 101	Introduction to Psychology	
PSYC 111	Introduction to Psychology II	3
PSYC 213	Quantitative Methods in Psych	3
PSYC 216	Developmental Psychology	3
PSYC 314	Educational Tets & Measurement	3
PSYC 316	Abnormal Psychology	3
PSYC 412	Physiological Psychology	3
PSYC 413	History & Systems Of Psycholog	3
Total Credit Hours		**30**

Code	Title	Credit Hours
PSYC 214	Social Psychology	3
PSYC 215	Research Methods in Psychology	3
PSYC 215L	Research Methods in Psych Lab	1
PSYC 325	Personality Development	3
PSYC 402	Introd to Black Psychology	3
Total Credit Hours		**13**

Code	Title	Credit Hours
Restricted Electives		26
Unrestricted Electives		18
Total Credit Hours		**44**

Code	Title	Credit Hours
General Education		33
Core Requirements		30
Major/Concentration Requirements		13
Electives		44
Total Credit Hours		**120**

Psychology, Minor in Psychology

• Students must obtain approval from the academic advisor and department chair.

• Students must complete and submit the Minor Request Form with all required signatures to the Registrar's office for processing.

• Only declared minors will appear on the official transcript.

Code	Title	Credit Hours
PSYC 110	Introduction to Psychology I	3
PSYC 111	Introduction to Psychology II	3
PSYC 214	Social Psychology	3
PSYC 216	Developmental Psychology	3
PSYC 316	Abnormal Psychology	3
PSYC 325	Personality Development	3
Total Credit Hours		**18**

Reginald F. Lewis College of Business

Dean
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Sr. Associate Dean
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Mission Statement

We provide opportunities for diverse students to become successful, ethical and socially responsible business professionals through a technology-infuse curriculum that emphasizes professional development pathways, exposure to real-world business operations, and service to society.

Consistent with our mission, we identify the following focus areas and priorities for student experience in the Reginald F. Lewis College of Business:

• Problem Solving

• Technology Integration

• Professional Development

• Business Ethics and Social Responsibility

• Communication

• Global Perspectives

Organization of the College

The Reginald F. Lewis College of Business is an academic unit of Virginia State University administered by the Dean with the support of an Associate Dean and three Chairpersons. The College is organized into three departments: the Department of Accounting and Finance, the Department of Computer Information Systems, and the Department of Management and Marketing. Undergraduate programs of the College lead to the degree of Bachelor of Science in the following majors:

- Accounting
- Management Information Systems
- Management
- Marketing

In addition to the three departments, other units in the College are the Office of the Dean, the Assessment Center, Student Advisement Center, Center for Entrepreneurship, and Office of Corporate Relations.

ADMISSION REQUIREMENTS TO THE REGINALD F. LEWIS COLLEGE OF BUSINESS

The curriculum in the Reginald F. Lewis College of Business is divided into two phases, namely: Pre-Business and Business phases. Business majors are required to earn at least a grade of "C" in ENGL 110, ENGL 111 and all Business courses.

Pre-Business Phase Requirements

The pre-business phase consists of 60 credit hours of coursework consisting primarily of the General Education curriculum. Students are required to maintain minimum GPA of 2.25 in the pre-business phase before being admitted to the Business Phase. The following curriculum outlines the course of study for all majors in the Reginald F. Lewis College of Business for the freshman and sophomore years.

Pre-Business Phase Curriculum Requirements

The following curriculum outlines the course of study for all majors in the Reginald F. Lewis College of Business for the freshman and sophomore years.

Course	Title	Credit Hours
Freshman Year		
ENGL 110	Composition I	3
COBU 101	Introduction to Business	3
MATH 120	College Algebra	3
FRST 101	Freshman Studies	0
GE Science Electives (p. 147)		4
GE Social Science Electives (p. 147)		3
ENGL 111	Composition II	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3
GE History Electives (p. 146)		3
GE Wellness/Health Electives (p. 147)		2
	Credit Hours	**31**
Sophomore Year		
SPEE 214	Introduction To Public Speakin	3
MATH 212	Business Calculus	3
COBU 201	Introductory Accounting I	3
COBU 210	Financial Economics	3
COBU 202	Introductory Accounting II	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
GE Global Studies Electives (p. 146)		3
GE Literature Electives (p. 147)		3
	Credit Hours	**30**
	Total Credit Hours	**61**

Pre-Business Phase Electives

Code	Title	Credit Hours
Sciences Electives		
BIOL 116	Biological Science	4
CHEM 100	Chemistry in Society (& Lab)	4
Wellness/Health		
Must take one 2 credit course or two 1 credit courses.		
HPER 165	Personal Fitness	1

HPER 170	Health And Wellness	2
HPER 171	Lifetime Sports/Wellness	1
HPER 180	Fitness Walking	1
HPER 181	Golf	1
HPER 188	Beginning Tennis	1
History Electives		
HIST 114	World History to 1500	3
HIST 115	World History Since 1500	3
HIST 122	U.S. History to 1865	3
HIST 123	U.S. History After 1865	3
Social Sciences Electives		
PSYC 101	Introduction to Psychology	3
SOCI 101	Introduction To Sociology	3
Literature Electives		
ENGL 201	Introduction To Literature	3
ENGL 202	Intro African American Lit	3
ENGL 210	English Literature I	3
ENGL 211	English Literature II	3
ENGL 212	American Literature I	3
ENGL 213	American Literature Ii	3
ENGL 214	World Literature I	3
ENGL 215	World Literature II	3
Global Studies Electives		
AGRI 295	Contemporary Global Studies	3
FREN 110	Elementary French I	3
GEOG 210	World Geography	3
POLI 210	Comparative Government	3
SPAN 110	Elementary Spanish I	3

CORE BUSINESS

All business students are required to take a set of common courses in addition to courses required by their respective majors. These courses provide the breadth knowledge and lay the foundation for successful business careers.

COBU 101 INTRODUCTION TO BUSINESS - 3 semester hours

For Business Majors only. This course introduces the student to the fundamental principles of business, organizations, finance, banking, credit management, salesmanship, advertising, ecology and consumers. The student will be able to relate/work with real world examples in higher-level courses with an emphasis on use of the library (information literacy), research skills, writing skills, critical thinking, and the synthesis and analysis of information.

COBU 111 PROFESSIONAL ENHANCEMENT/CAREER DEVELOPMENT-1 semester hour

For Business Majors only. This course is designed to aid students in becoming competitive in today's dynamic environment by providing students with the necessary skills and resources to be successful as they enter the corporate arena and develop their career.
Prerequisite(s): COBU 101

COBU 155 INTRODUCTION TO INFORMATION SYSTEMS/ELEM-K -2 semester hours

This course is designed to introduce the student to the basic concepts and procedures required in the development and use of computer information systems. It provides a hands-on experience on computer application software for spreadsheet modeling and database management.
Prerequisite: High school algebra or equivalent

COBU 170 LEGAL, ETHICAL AND DIGITAL ENVIRONMENT - 3 semester hours

For Business Majors only. This course is an introduction to the background, role, structure, and importance of the legal system of the United States of America. Civil procedure, tort law, administrative law, bankruptcy and criminal law will be surveyed. Other areas of the law to be treated in more depth include contracts, personal property and bailments, intellectual property and piracy, real property, agency, as well as the ethics of managers and the social responsibility of business.
Prerequisite: COBU 101

COBU 200 BUSINESS COMMUNICATIONS – 3 semester hours

For Business Majors only. Designed to improve practical communication, both written and oral. Students learn business style and formats (the letter, memo, resume, and report), as well as strategies for presenting neutral, negative, and persuasive messages. Students will speak on business or professional topics.
Prerequisites: ENGL 111 or equivalent

COBU 201 INTRODUCTORY ACCOUNTING I - 3 semester hours

For Business Majors and Minors only. This course is a study of fundamental principles of financial accounting as applied to the contemporary business environment. Problems of measuring and reporting 460 income, assets, liabilities, and equity as shown on financial statements are discussed.
Prerequisite: COBU 101 and MATH 120 or equivalent

COBU 202 INTRODUCTORY ACCOUNTING II - 3 semester hours

For Business Majors and Minors only. This course is a study of introductory management accounting principles as applied to the competitive business environment. Emphasis is on using data from an organization's management information system to formulate and implement business strategy.
Prerequisite: COBU 201

COBU 210 FINANCIAL ECONOMICS – 3 semester hours

For Business Majors only. An introductory course on the principles of economics, covering macroeconomic concepts, theory, analysis, and applications.

COBU 211 CAREER LAUNCH - 1 semester hour

For Second Semester Junior and Senior Business Majors Only. This course is designed to make students competitive in today's dynamic job market. It will cover all professional career areas including job search, interviewing, etiquette, resume and business writing, and behavior and attitudes, and provide students the necessary skills and resources to be successful in finding and keeping a professional position. This course cannot be used to satisfy a business elective.
Prerequisite(s): COBU 111

COBU 220 FINANCIAL MANAGERIAL ECONOMICS - 3 semester hours

For Business Majors only. This course covers the fundamental economic principles essential for applied business decisions from micro business perspectives.
Prerequisite(s): COBU 210

COBU 260 BUSINESS STATISTICS - 3 semester hours

For Business Majors only. Introduction to the use of statistical methods as a scientific tool in the analysis of problems in business and economics. Coverage will include probability, probability distributions, measures of central tendency and dispersions, sampling distributions, and estimation. Methods include hypothesis testing, regression and correlation, ANOVA and Chi square tests.
Prerequisites: COBU 155 and MATH 122 or its equivalent

COBU 300 PRINCIPLES OF FINANCE - 3 semester hours

For Business Majors only. Students are exposed to the field of finance including financial concepts, financial analysis, decisions involving long-term assets, sources and forms of long-term financing, international financial markets and issues, as well as selected ethical and social issues related to finance.
Prerequisites: COBU 202

COBU 301 PRINCIPLES OF MARKETING - 3 semester hours

For Business Majors only. This course is designed to cover the basic concepts of marketing management in consumer and industrial markets, and the formulation of marketing strategies relating to products, channels of distribution, promotion, and price. The course seeks to promote a managerial approach to solving marketing problems and reviews the fundamental marketing institutions, with an awareness of ethical considerations and the global environment.
Prerequisites: Completion of the Pre-Business Phase requirements or equivalent.

COBU 302 ORGANIZATION AND MANAGEMENT - 3 semester hours

For Business Majors only. This course provides an overview of the many aspects of managing organizations. Emphasis will be placed on management processes, human behavior in organizations and applications of classroom knowledge to actual challenges facing managers. The application of management concepts will be practiced using such activities as case studies, team projects, decision 461 making exercises, presentations, and active in-class discussion of current management issues.
Prerequisite(s): Completion of the Pre-Business Phase requirements.

COBU 303 BUSINESS INFORMATION SYSTEMS- 3 semester hours

This course will examine common operational-level organizational processes to provide an understanding of the nature of such processes and the role of data and information systems in facilitating and integrating organizational processes. It focuses on Enterprise Resource Planning (ERP) Systems and the role they play in modern organizations. Students will gain an understanding of ERP Systems from both functional (business process) and ERP software-based implementation perspectives. The following business process software modules will be covered: Software Navigation; Sales and distribution (SD)--Order to Cash, Procure to Pay; Financial Accounting (FI); Financial Control (CO); Human Capital Management (HCM).

Prerequisites: COBU 201 and COBU 202

COBU 305 OPERATIONS MANAGEMENT - 3 semester hours

This course provides a general introduction to operations management. Operations management is the design and control of business processes, that is, the recurring activities of a firm. The aim of the course is to provide the student with an understanding of the: (1) major operational problems and issues that confront modern-day managers, (2) language, concepts, insights and tools to deal with these issues in order to gain competitive advantage through operations, and 3) introduction to Enterprise Resource Planning (ERP) and management practices that include: review of Sales and Distribution (SD), Material Management (MM); Production Planning (PP); Warehouse Management (WM); Project Systems (PS) and Enterprise Asset Management (EAM) processing using specialized and in-demand software.

Prerequisite: COBU 303. Prerequisites must have been completed with a grade of C or better. This course must be completed with a minimum grade of C to meet the requirements of a business major.

COBU 306 BUSINESS ANALYTICS – 3 semester hours

This course is designed as an introduction to Business Analytics. It covers managerial statistical tools in descriptive analytics and predictive analytics, including regression. Other topics covered include forecasting, risk analysis, simulation, data mining, and decision analysis. The course provides students with fundamental concepts and tools needed to understand the emerging role of business analytics in organizations. It shows students how to apply basic business analytics tools in a spreadsheet environment and how to communicate with analytics tools to effectively use and interpret analytic models and results for better business decision-making. Emphasis would be placed on concepts, applications and interpretation of results, rather than theory and computations. Students will use computer software packages for data analysis.
Prerequisite: COBU 260 or permission of the instructor.

COBU 400 ORGANIZATIONAL POLICY AND STRATEGY - 3 semester hours

For Business Majors only. This is the capstone business course. This course is designed to probe the interrelationships of the functional areas within an organization. Students will apply management skills and processes to integrate these areas, make decisions and formulate policies to accomplish organizational goals. A project is an important part of the course that allows students to apply and demonstrate these skills.

Prerequisites: May only be taken in the final semester of the senior year or with permission of the Management & Marketing Department Chair.

COBU 406 BUSINESS ANALYTICS II - 3 semester hours

This course is designed as a more advanced course in Business Analytics. In this course, students will explore the capabilities and limitations challenges of data-driven business decision-making. The course will integrate specialized tools such as SAP HANA and S4/HANA cloud platform to simplify business analytics at a data model and user level, and to deliver big data processing and reporting for business decision-making. Students will learn to use these tools to handle transactional as well as non-traditional data, such as social media information, consumer preferences, and other contextual information to compile a complete and more realistic picture of a business and its customers. Among others, the enterprise reporting generated with the

tools is expected to provide a competitive advantage to the enterprise in order to stay ahead of the market.

Prerequisite: COBU 306

COBU 410 GLOBAL BUSINESS PERSPECTIVES - 3 semester hours

This course provides an analysis of major global challenges that affect businesses. The course focus will be on cultural, economic and political environment of global firms. This course will also explore multiple functional areas of global businesses, specifically the areas of marketing, human resources, finance, information technology and accounting.

Prerequisite: COBU 300, COBU 301 and COBU 302

COBU 415 SPECIAL TOPICS IN SERVICE LEARNING - 2 semester hours

This course is designed to (1) inform students about the historical importance of business professionals' engagement in community and civic service to minority communities, in particular, and to improve society as a whole, and to (2) engage students in group service-learning activities that enable them to utilize their business skills to benefit society. Students will be assigned to one or more organizations that are committed to resolving a pressing a social issue and assist the organization(s) with creating a specific deliverable or solving a specific problem. At the end of the course, students will produce a report summarizing their activity and articulating the importance of service leadership and giving back to society throughout their career(s).

Prerequisite: COBU 300, COBU 301 and COBU 302

BUSINESS PHASE

The Business phase also consists of 60 credit hours of course work primarily focusing on courses in the student's chosen major. The curriculum for the Business Phase varies across majors. The curricular requirements are described under the respective departments.

Department of Accounting & Finance

Chairperson: Dr. Hari Sharma
Location: Singleton Hall, Room 101
Contact Information: 804-524-5842 | hsharma@vsu.edu

Department Overview

The Department of Accounting and Finance offers a program of study to prepare students for professional accounting and finance careers in public, private and nonprofit organizations. The programs of study also prepare students for graduate study and for professional certifications.

The Department of Accounting and Finance offers a **Bachelor of Science (B.S.) in Accounting**. The Department offers minors in Accounting and in Finance comprising of 18 semester hours for each minor.

Mission statement

The mission of the Department of Accounting and Finance is to cultivate knowledgeable, ethical, and career-ready professionals equipped to excel in a dynamic global economy. Through rigorous academic instruction, experiential learning, and co-curricular engagement, the department prepares students for successful careers in public, private, and nonprofit sectors, as well as for graduate study and professional certification.

Emphasizing analytical thinking, effective communication, research, and financial acumen, the department fosters a deep understanding of financial management, accounting standards, and regulatory frameworks. We are committed to developing leaders who contribute meaningfully to the financial integrity and economic advancement of their communities.

Degree Highlight Information

Our graduates earn positions in professional accounting and finance areas at public, private and nonprofit organizations. Additionally, many of our students go on to graduate school and/or pursue professional certifications.

Students' oral and written communication skills as well as research skills are refined while accruing a broad understanding of financial management of profit and not-for-profit organizations. Our graduates depart with an understanding of accounting guidelines and regulations.

Our students are encouraged to get involved in extracurricular activities to support their academic goals. We offer memberships in The Virginia State University Chapters of the National Association of Black Accountants (NABA) and the Financial Management Association (FMA). Students have hands on experience as well as opportunities to receive financial support through internships and scholarships available for qualified students.

accreditation information

In December of 2006, the business school was granted accreditation through the Association to Advance Collegiate Schools of Business International (AASCB). AACSB accreditation represents the highest standard of achievement for business schools worldwide.

Department Goals

In the Accounting Program, we prepare students with the following:

1. Experiential Learning - Accounting majors will participate in job shadowing, internships, service learning projects, and international business-related activities during the junior and senior years.
2. Employment - Accounting graduates will be prepared to seek employment in the area of accounting upon the completion of the degree.
3. Scholarly Activities - Accounting faculty will be engaged in scholarly activities on an ongoing basis.
4. Innovative Teaching - Accounting faculty will implement research-based teaching strategies in class.

Program Listings

Bachelor of Science (B.S.) in Accounting

The Accounting Program equips students with the foundational knowledge and practical skills needed to navigate the complex, data-driven world of financial management and reporting within a global economy. Students develop a broad understanding of the financial operations of both profit and not-for-profit organizations, gaining fluency in accounting principles, financial regulations, and ethical standards. Emphasis is placed on strengthening oral and written communication, critical thinking, and research capabilities—skills essential to success in the professional accounting and finance landscape.

Course Requirements: Students are required to earn a grade of "C" or higher in all Accounting courses.

Major

- Accounting, Bachelor of Science (B.S.) (p. 397)

Minor(s)

- Minor in Accounting (p. 398)
- Minor in Finance (p. 398)

Accounting Course Descriptions

ACCT 200 INTRODUCTION TO FINANCE & MANAGERIAL ACCOUNTING – 3 semester hours
A nontechnical introduction to the principles of financial and managerial accounting with emphasis on the use and interpretation of financial reports, managerial planning and control. The course is for the individual who seeks a basic knowledge of accounting and its uses. It is designed for the user of accounting information rather than the preparer. This course cannot be substituted for COBU 201 or 202 for business majors.
Prerequisite: None

ACCT 201 INTRODUCTORY ACCOUNTING I - 3 semester hours
This course is a study of fundamental principles of financial accounting as applied to the contemporary business environment. Problems of measuring and reporting income, assets, liabilities, and equity as shown on financial statements are discussed.
Prerequisite: COBU 101 and MATH 120 or equivalent

ACCT 202 INTRODUCTORY ACCOUNTING II - 3 semester hours
This course is a study of introductory management accounting principles as applied to the competitive business environment. Emphasis is on using data from an organization's management information system to formulate and implement business strategy.
Prerequisite: ACCT 201 or COBU 201

ACCT 301 INTERMEDIATE ACCOUNTING I - 3 semester hours
The course provides an in-depth study of generally accepted accounting principles as they relate to financial statement presentation.
Prerequisite: COBU 201 and COBU 202

ACCT 302 INTERMEDIATE ACCOUNTING II – 3 semester hours
This course provides an in-dept study of generally accepted accounting principles as they relate to financial statement presentation.
Prerequisite: ACCT 301

ACCT 306 COST ACCOUNTING - 3 semester hours
The issues of cost accumulation for inventory pricing and income determination are examined as well as the study of cost accounting systems. Special topics in relevant costs for routine and non-routine decisions are also discussed.
Prerequisite: COBU 201 and COBU 202

ACCT 307 FEDERAL INCOME TAX I - 3 semester hours
This course studies how federal income tax principles apply to and affect individual taxpayers.
Prerequisite: COBU 201 and COBU 202

ACCT 308 FEDERAL INCOME TAX II - 3 semester hours
This course studies how federal income tax principles apply to and affect corporations, and partnerships, estates and trusts transactions.
Prerequisite: ACCT 307

ACCT 315 ACCOUNTING INFORMATION SYSTEMS - 3 semester hours
This course provides a basis for understanding, using, designing, and controlling accounting information systems as found in business organizations. Emphasis is on analysis and control of accounting information systems throughout their life cycle.
Prerequisite: COBU 201 and COBU 202

ACCT 375 INTERNSHIPS IN ACCOUNTING- 3 semester hours
The internship course allows students to obtain practical work experience in accounting positions under supervised conditions. The internship provides real-world application of accounting education under the critical supervision of an on-site administrator and an accounting faculty member.
Prerequisites: ACCT 302 or permission of the instructor

ACCT 403 ADVANCED ACCOUNTING - 3 semester hours
The financial accounting issues related to consolidations, partnerships, foreign currency translations, hedging and segment reporting are examined.
Prerequisite: ACCT 302

ACCT 406 ADVANCED COST ACCOUNTING - 3 semester hours
This course covers selected topics in management accounting, such as responsibility accounting, transfer pricing, JIT manufacturing, activity-based costing, and relevant costs for special decisions. Ethical and international aspects of management accounting are also discussed.
Prerequisite: ACCT 306

ACCT 407 AUDITING - 3 semester hours
The analysis and application of the theory and techniques of auditing principles and procedures, with emphasis on the duties and responsibilities of the auditor.
Prerequisite: ACCT 302

ACCT 410 FORENSIC ACCOUNTING - 3 semester hours
Fraud and abuse are costly, pervasive problems in business, nonprofit and government organizations. This course introduces a specialty field in accounting, the practice of which utilizes accounting, audition and investigative skills to provide support in legal matters.
Prerequisites: ACCT 302

ACCT 411 SEMINAR IN ACCOUNTING THEORY AND PRACTICE - 3 semester hours
This course is designed to investigate contemporary accounting theories and applications in the various areas of accounting to include financial, managerial, cost and auditing. Students will be exposed to pronouncements issued by the American Institute of Certified Public Accountants, the Security Exchange Commission, the Public Company Accounting Oversight Board, the International Accounting Standards Board, and the Financial Accounting Standards Board.

Prerequisite: ACCT 302

ACCT 415 GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING - 3 semester hours
The course is a study of accounting principles and their application for governmental and not-for-profit agencies/organizations and their related financial reporting and disclosure requirements. The objectives of financial reporting for these entities and the theoretical structure underlying these principles will be examined.
Prerequisite: ACCT 302

ACCT 495 SPECIAL TOPICS IN ACCOUNTING – 3 semester hour
The course offers selected special topics in accounting, which may include ethics and professionalism, EDP auditing, accounting history, international accounting, and other appropriate subjects.
Prerequisite: ACCT 302 or permission of the instructor

Finance Course Descriptions

FINC 301 PRINCIPLES OF REAL ESTATE - 3 semester hours
Emphasis in this course is on the economic and social aspects of real estate-markets, property rights, contracts, deeds, property ownership, insurance, management and planning for the future.
Prerequisites: None

FINC 305 PERSONAL FINANCE – 3 semester hours
Principles and methods of managing personal income, wealth and credit are examined. Included are sources and uses of funds, budgeting, taxation, insurance, time value of money, estate planning and retirement planning.
Prerequisites: None

FINC 309 PRINCIPLES OF FINANCE – 3 semester hours
Students are exposed to the field of finance including financial concepts, financial analysis, decision involving long-term assets, sources and forms of long-term financing, international financial markets and issues, as well as selected ethical and social issues related to finance.
Prerequisites: ACCT 200 or permission of the instructor

FINC 400 CORPORATE FINANCE - 3 semester hours
Students learn the concepts critical to the financial manager in a contemporary environment, including risk valuation, capital budgeting, cost of capital, capital structure, long-term financing, derivative securities, as well as topics of special interest like mergers and acquisitions, lease financing, and working capital management.
Prerequisite: COBU 300

FINC 415 INTERNATIONAL FINANCIAL MANAGEMENT – 3 semester hours
The course deals with an in-depth analysis of risks of financing foreign operations and the management of international assets as viewed by multinational financial managers. It concentrates on the development of risk management policies that are appropriate for the multinational firm.
Prerequisite: COBU 300

FINC 446 ENTREPRENEURIAL FINANCE - 3 semester hours
The course examines small business start-up management with emphasis on financial decision-making for entrepreneurs, and the functions of investment banking institutions as they relate to small business capital acquisition and management. Also included are legal concerns and strategies for minority start- up ventures. The case study method will be used.
Prerequisite: COBU 300 or permission of the instructor

FINC 450 INVESTMENTS – 3 semester hours
This course examines the various types of securities, valuation models for bonds, stocks, and options, security markets, and theories of portfolio management. Special emphasis is placed on common stock portfolios.
Prerequisite: COBU 300 or FINC 309 or permission of the instructor

FINC 460 INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT - 3 semester hours
The course provides an in-depth analysis of various types of securities and markets. Financial theories are applied to the construction of security portfolios. Topics include duration, convexity, realized compound yield, mortgage-backed securities, interest-rate swaps, bond immunization, and interest-rate futures and options.
Prerequisite: FINC 450

FINC 465 MANAGEMENT OF FINANCIAL INSTITUTIONS - 3 semester hours
Students are exposed to the analysis of the management of financial institutions, including the management of asset and liability structures, control of financial operations, and the effect of regulations on financial management practices.
Prerequisite: COBU 300 or permission of the instructor

FINC 472 RISK MANAGEMENT AND INSURANCE - 3 semester hours
This is a study of the insurance industry, the different forms of insurance coverage, and an analysis of the concept of risk. The course examines risk management techniques to neutralize the effect of risk inherent in daily life.
Prerequisite: COBU 300 or permission of the instructor

Accounting Major, Bachelor of Science (B.S.)

Junior Year		**Credit Hours**
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 306	Cost Accounting	3
ACCT 315	Accounting Information Sys	3
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
Restricted Elective	Business Course	3
	Credit Hours	**30**
Senior Year		
ACCT 307	Federal Income Tax I	3
ACCT 315	Accounting Information Sys	3
ACCT 403	Advanced Accounting	3
ACCT 407	Auditing	3
Restricted Elective	ACCT Course	3
COBU 400	Organization Policy & Strategy	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
FINC 450	Investments	3
ACCT 408	Accounting Data Analytics	3
	Credit Hours	**29**
	Total Credit Hours	**59**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
COBU 101	Introduction to Business	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
COBU 210	Financial Economics	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
Total Credit Hours		**28**

Code	Title	Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
COBU 400	Organization Policy & Strategy	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 306	Cost Accounting	3
ACCT 307	Federal Income Tax I	3
ACCT 315	Accounting Information Sys	3
ACCT 407	Auditing	3
ACCT 408	Accounting Data Analytics	3
FINC 450	Investments	3
Total Credit Hours		**47**

Code	Title	Credit Hours
Restricted Electives		12
Unrestricted Electives		0
Total Credit Hours		**12**

Code	Title	Credit Hours
General Education		33
Core Requirements		24
Major/Concentration Requirements		51
Electives		12
Total Credit Hours		**120**

Accounting, Minor in Accounting

This minor will require six courses (18 semester hours) in addition to prerequisites. One of the courses may satisfy your restrictive elective requirements. This minor is directed toward the student who is willing to stay in school for a minimum of 4½ years.

Code	Title	Credit Hours
Prerequisites (6 Credits)		
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
Required Courses (12 Credits)		
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 315	Accounting Information Sys	3
ACCT 407	Auditing	3
Electives (6 Credits)		
ACCT 306	Cost Accounting	3
ACCT 307	Federal Income Tax I	3
ACCT 308	Federal Income Tax II	3
ACCT 403	Advanced Accounting	3
ACCT 406	Advanced Cost Accounting	3
ACCT 415	Govt'L & Not-For-Profit Acct	3
ACCT 495	Special Topics In Accounting	3

The student should seek academic advisement from an Accounting and Finance faculty member in the Reginald F. Lewis College of Business. The student is required to meet any prerequisite course requirements before enrolling in any course.

Accounting, Minor in Finance

This minor will require six courses (18 semester hours) in addition to prerequisite(s). One of the courses may satisfy your restrictive elective requirements.

Code	Title	Credit Hours
Prerequisites for Business Majors (6 Credits)		
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
Prerequisites for Non-Business Majors (3 Credits)		
ACCT 200	Introd Finc & Managerial Acct	3
Required Courses (12 Credits)		
COBU 300	Principles of Finance	3
FINC 450	Investments	3
FINC 400	Corporate Finance	3
FINC 460	Invet Analysis & Portfolio Mgm	3
Electives (6 Credits)		
FINC 301	Principles of Real Estate	3
FINC 305	Personal Finance Management	3
FINC 415	International Financial Manage	3
FINC 446	Entrepreneurial Finance	3
FINC 465	Mgmt Financial Institutions	3
FINC 472	Risk Management & Insurance	3
Total Credit Hours		**39**

The student should seek academic advisement from an Accounting and Finance faculty member in the Reginald F. Lewis College of Business. The student is required to meet any prerequisite course requirements before enrolling in any course.

Department of Computer Information Systems

Chairperson: Dr. Ephrem Eyob
Location: Singleton Hall, Room 318
Contact Information: 804-504-7076 | eeyob@vsu.edu

Department Overview

The Department of Computer Information Systems provides students with a comprehensive understanding of the use, design, development, and management of information systems and information technology that leads to a **Bachelor of Science (B.S.) in Management Information Systems** degree. Through a curriculum that emphasizes both theory and practical application, students gain the skills necessary to address business challenges using technological solutions. The department is committed to preparing students for careers in the dynamic and evolving field of Management Information Systems (MIS).

Mission Statement

The mission of the Computer Information Systems Department is to prepare students for professional careers in Management Information Systems by equipping them with foundational knowledge in quantitative analysis, systems thinking, programming, and up-to-date information technology. The department fosters ethical awareness and global perspectives while promoting experiential learning and innovative teaching practices.

Degree Highlight Information

The MIS curriculum is structured to give students the opportunity to develop and manage a variety of projects derived from real business settings. Students gain a strong foundation in analytical and modeling techniques, programming languages, systems orientation, and contemporary IT tools. Throughout the program, students engage with ethical and global considerations and enhance their communication skills.

Key learning outcomes include:

- Business problem-solving using analytical tools
- Integration of technology for business solutions
- Understanding of ethics and social responsibility
- Effective communication
- Knowledge of the global business environment
- Demonstrated proficiency in MIS disciplinary knowledge

Additionally, MIS majors are encouraged to participate in experiential learning activities such as internships, job shadowing, service learning projects, and international business experiences during their junior and senior years.

Accreditation Information

In December of 2006, the R. F. Lewis College of Business was granted accreditation through the Association to Advance Collegiate Schools of Business International (AASCB). AACSB accreditation represents the highest standard of achievement for business schools worldwide.

Department Goals

The Department of Computer Information Systems is committed to the following goals:

1. **Experiential Learning** – Facilitate job shadowing, internships, service learning, and international business engagement for junior and senior MIS students.
2. **Employment Preparation** – Ensure graduates are career-ready and able to pursue positions in management information systems.
3. **Faculty Scholarship** – Promote continuous faculty engagement in scholarly research and academic contributions.
4. **Innovative Teaching** – Integrate research-based instructional strategies to enhance classroom learning experiences.

Program Listings

Bachelor of Science (B.S.) in Management Information Systems

The MIS degree program covers a broad spectrum of IT topics, providing students with a solid foundation in computer science concepts, programming and web development, database management, networking, and systems analysis. Graduates with a MIS degree are well-equipped for various IT roles within organizations.

Course Requirements: Students are required to earn a grade of "C" or higher in all major specific courses.

Minors

Cybersecurity and Forensics

Information Systems

Major(s)

- Management Information Systems, Bachelor of Science (B.S.) (p. 402)

Minor(s)

- Minor in Computer Security and Forensics (p. 403)
- Minor in Information Systems (p. 403)

CISY 201 MICROCOMPUTER CONCEPTS - 3 semester hours
This course is for non-business majors. This course provides a hands-on computer experience through the use of microcomputers with an emphasis on a microcomputer operating system and an in-depth coverage of various computer application packages, such as, but not limited to, word processing, database, spreadsheet software, and presentation graphics.
Prerequisite: High School Algebra or equivalent

CISY 300 COMPUTER INTERNSHIP - 3 semester hours
Off campus (approved by the Department). Broad spectrum of "hands-on" work experience as an apprentice programmer/analyst in a computer environment for not less than 120 clock hours.

Prerequisite: CISY 362, CISY 385 or permission of the instructor.

CISY 305 PROGRAMING LOGIC AND DESIGN – 3 semester hours
This course teaches skills for development of algorithms for problem solving. Students are taught how to use structured and other approaches to analyze problems and express their solutions. Through the introduction of programming concepts, this course enforces good style and outlines logical thinking. **Prerequisite: COBU 155 or permission of the instructor**

CISY 311 INFORMATION TECHNOLOGY INFRASTRUCTURE - 3 semester hours

This course is designed to introduce the student to current operating systems, computing networks, and data communication infrastructure. Students are expected to come away with an understanding of the functions of operating systems, data and voice communication concepts and terminology, modes of data transmissions, transmission media, different types of networks, mass storage and I/O technologies, file systems, and computing technology trends.

Prerequisites: CISY 305 or permission of the instructor

CISY 312 OPERATING SYSTEMS ADMINISTRATION - 3 semester hours
This course provides students with basic knowledge and practical skills in the important activities of operating systems administration mainly in Linux and Windows systems. It deals with users, file systems, process and software administration, setting permissions, device configuration, setting up disks, operating system installation and controlling the booting process, managing backup and recovery, security problems, and configuring some network services. Students will also learn techniques to develop shell scripts to perform complex tasks such as automating user account management, backups, and routine system monitoring activities. Numerous illustrations and hands-on activities in the course will provide students the foundation that will enable them to handle different troubleshooting situations.

Prerequisite: COBU 155

CISY 330 COMPUTER PROGRAMMING I - 3 semester hours
This course provides an introduction to Object-oriented programming. Students will learn how to develop small to medium sized applications. Special topics include programming concepts, Object-Oriented design, Application Programming Interface (API), Graphical User Interface (GUI) components, event handling, exceptions, graphics, input/output, and inheritance.
Prerequisites: COBU 155 or permission of the instructor

CISY 344 INTRODUCTION TO VISUAL BASIC PROGRAM - 3 semester hours

The course introduces the student to programming using and Object-oriented programming language. The course focuses on the principles of user interface design, general software engineering principles and business application development.

Prerequisites: CISY 305 or permission of the instructor

CISY 350 MANAGEMENT INFORMATION SYSTEMS – 3 semester hours

An informative course designed to provide students with an understanding of the importance and the role of Business Information Systems in making decisions affecting the success of an organization, and the types of information systems that support business functions. Emphasis will be placed on the planning, development, installation and maintenance of business computer applications that are utilized in the typical business environment.

Prerequisite: COBU 155 or equivalent

CISY 362 SYSTEMS ANALYSIS AND DESIGN – 3 semester hours
This course focuses on the application of information technologies (IT) to systems analysis, systems design, and systems implementation practices. Methodologies related to identification of information requirement's function, feasibility (economic, legal and contractual, operational, political, technical and schedule) and related issues are covered. Development of data dictionary and the application of computer aided system engineering (CASE) tools for diagramming information flow and procedures in system development process is covered.
Prerequisites: COBU 302, COBU 303 and an introductory level computer programming language or permission of the instructor.

CISY 367 COMPUTER NETWORKS I – 3 semester hours
This course is an introduction to the fundamentals of computer communications networks. The course focuses on the network concepts, media, topologies, components, protocols and standards; and issues

involved in the design, implementation and management of computer networks. Also, analog and digital 473 transmission of data, transmission media and devices, LANS and WANS, TCP/IP fundamentals and message switching will be discussed.
Prerequisite: COBU 303 or permission of the instructor

CISY 368 INFO. SECURITY AND ASSURANCE I - 3 semester hours
The purpose of this course is to introduce the business student to the rapidly evolving and critical arenas of information security. Students will learn principles and methods of information security, various security models, architectures, firewalls and internet security. Students will also learn how to plan and manage security, security policies, business continuity plans, disaster recovery planning, and to build an understanding of the social and legal issues of information security.
Prerequisite(s): CISY 367 or permission of the instructor

CISY 385 WEB DEVELOPMENT AND APPLICATION I - 3 semester hours
This course provides students with basic knowledge and practical skills in designing and developing World Wide Web pages using HTML (HyperText Markup Language) and CSS (Cascading Style Sheets). The course will cover HTML tags for text, images, links, lists, simple layouts, complex layouts, tables, frames, style, internal style sheets, and external style sheets. Basic issues in using graphics on the Web will also be covered.
Prerequisite: COBU 155 or permission of the instructor

CISY 430 ADVANCED JAVA PROGRAMMING – 3 semester hours

This course is the second part of a two semester JAVA programming course sequence. Students will learn how to write small to medium sized JAVA applications and JAVA applets. Special topics include key issues related to software engineering, object-oriented design, Java Application Programming Interface (API), graphical user interface components, event handling, exceptions, input/output, and inheritance, data structures, and multithreading and animation.

Prerequisite: CISY 330 or permission of the instructor

CISY 431 COMPUTER PROGRAMMING II - 3 semester hours

This is a second course on Object-oriented programming. Students will learn how to develop medium sized applications and applets. Special topics include key issues related to software engineering, object-oriented design, Application Programming Interface (API), graphical user interface components, event handling, exceptions, input/output, and inheritance, data structures, and multithreading and animation.

Prerequisite: CISY 330 or Permission of the instructor

CISY 444 PROGRAMMING II USING AN OBJECT-ORIENTED LANGUAGE – 3 semester hours

This course is a continuation of MISY 344. Topics include event-driven programming techniques, scripting, business computing, and integration with databases.

Prerequisite: MISY 344 or permission of the instructor

CISY 467 ADVANCED COMPUTER NETWORKS TECHNOLOGY - 3 semester hours

This course focuses on computer networking technologies for individual workstations, LANS, WANS, and the Internet. Topics include network support; storage area networks; virtual servers; managed switches, and routers, and firewalls. This course also prepares the student for the industry's Network+ certification examination.

Prerequisite: CISY 367

CISY 478 MANAGING ORGANIZATIONAL IT SECURITY RISKS – 3 semester hours
This course takes a multi-disciplinary perspective of risk assessment, modeling, and management. Topics discussed include concepts of personal accountability versus governance and policy, how organizations define and measure risk and loss, and planning for contingencies.
Prerequisite: CISY 368 or permission of the instructor

CISY 468 ADVANCED INFORMATION SECURITYAND ASSURANCE – 3 semester hours

This is an advanced level information security course. The student will learn contemporary security issues; infrastructure security management processes, architecture and model; risk analysis and management; security planning, analysis and safeguards; security policies development and administration; contingency planning, incidence handling and response; and security standards. This course prepares the student for the Security+ certification

Prerequisite(s): CISY 368

CISY 480 DATABASE DESIGN AND APPLICATIONS - 3 semester hours
A study of the principles of database systems with emphasis on the relational model of data and covering both the user and the system perspectives. User issues include data modeling, informal and commercial query languages and the theory of database design. System issues include file structures, query formulation, form design, and report generation using different database management systems (DBMSs).
Prerequisites: COBU 303, CISY 362, and an introductory level programming language or permission of the instructor

CISY 485 ADVANCED WEB DEVELOPMENT AND APPLICATIONS – 3 semester hours
This course provides students with the understanding and practical experience in web-enabled database and e-commerce business application development. Topics include scripting business rules and application logic on a web server, client and server-side technologies, and techniques to develop fully functional business applications. Application design uses current application software. E-commerce business issues and security implementations are also covered.
Prerequisite: CISY 385 or permission of the instructor

CISY 487 SYSTEMS CONFIGURATION - 3 semester hours

The goal of the course is to customize ERP for a typical modern organization. Students will learn about business processes, managing changes to those processes, and configuring an Enterprise Resource 474 Planning system to implement business process changes. Students will setup Financial Accounting (FI), Controlling (CO), Material Management (MM), and Sales Distribution (SD), Production Planning (PP) modules to configure the company structure, business processes and master data. Students will learn to implement ERP from the ground up and test the configured system with transactions for the various modules.

Prerequisite: COBU 303, COBU 305

CISY 488 INFORMATION TECHNOLOGY SECURITYAND FORENSICS– 3 semester hours
This course will introduce students to how forensic science, management information systems, and information security all blend into

digital forensics. The students will learn the fundamentals of the forensic process, evidence handling, and quality assurance as they apply to digital forensics.

Prerequisite: CISY 368 or permission of the instructor

CISY 491 SPECIAL TOPICS IN IT - 1 semester hours

In-depth treatment within a seminar format of timely topics in Information Systems and Technology.

Prerequisite: Permission of the instructor.

CISY 492 SPECIAL TOPICS IN IT - 2 semester hours

In-depth treatment within a seminar format of timely topics in Information Systems and Technology.

Prerequisite: Permission of the instructor.

CISY 493 SPECIAL TOPICS IN IT - 3 semester hours

In-depth treatment within a seminar format of timely topics in Information Systems and Technology

Prerequisite: Permission of the instructor.

CISY 495 SPECIAL TOPICS IN IT - 3 semester hours
In-depth treatment within a seminar format of a timely topic in Information Systems and Decision Sciences.
Prerequisite: Permission of the instructor.

CISY 499 PROFESSIONAL CERTIFICATION PATH - 3 semester hours

This is the capstone course for students pursing a major in Computer Information Systems. The department enrolls each student in an entry-level professional certification preparation course from the current list approved by the department's Curriculum Committee and the Chair

Prerequisite: Permission of the instructor

Management Information Systems Major, Bachelor of Science (B.S.)

Junior Year		Credit Hours
CISY 312	Operating Systems Administrati	3
CISY 367	Computer Networks I	3
CISY 331	Python Programming	3
CISY 385	Web Develop & Application I	3
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
	Credit Hours	**27**
Senior Year		
CISY 362	Systems Analysis And Design	3
CISY 368	Infor Security & Assurance I	3
CISY 480	Database Design & Applications	3
CISY 499	Professiona Certification Path	3
Restricted Elective	CISY Course	3
COBU 400	Organization Policy & Strategy	3
COBU 406	Business Analytics II	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
CISY 432	Advanced Python Programming	3
CISY 487	ERP Systems Configuration	3
CISY 499	Professiona Certification Path	3
	Credit Hours	**35**
	Total Credit Hours	**62**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
COBU 101	Introduction to Business	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
COBU 210	Financial Economics	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
Total Credit Hours		**28**

Code	Title	Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
COBU 400	Organization Policy & Strategy	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
CISY 312	Operating Systems Administrati	3
CISY 331	Python Programming	3
CISY 362	Systems Analysis And Design	3

CISY 367	Computer Networks I	3
CISY 368	Infor Security & Assurance I	3
CISY 385	Web Develop & Application I	3
CISY 432	Advanced Python Programming	3
CISY 480	Database Design & Applications	3
CISY 487	ERP Systems Configuration	3
CISY 499	Professiona Certification Path	3
COBU 406	Business Analytics II	3
Total Credit Hours		**56**

Code	Title	Credit Hours
Restricted Electives	Management Information Systems Course	3
Unrestricted Electives		0
Total Credit Hours		**3**

Code	Title	Credit Hours
General Requirements		33
Core Requirements		28
Major/Concentration Requirements		56
Electives		3
Total Credit Hours		**120**

Computer Information Systems, Minor in Computer Security and Forensics

The minor is directed toward the student who is willing to stay in school for a minimum of 4½ years. It includes an additional 18 semester hours in Information Systems.

Code	Title	Credit Hours
Prerequisites		
CISY 305	Programming Logic (or Permission of the Department Chair)	3
Required Courses		
CISY 330	Computer Programming I	3
CISY 367	Computer Networks I	3
CISY 368	Infor Security & Assurance I	3
CISY 478	Managing Org'l IT Sec Risks	3
CISY 488	Infor Tech Security & Forensic	3
Total Credit Hours		**18**

The student should seek proper academic advisement from Computer Information Systems faculty in the Reginald F. Lewis College of Business. The student is required to meet all prerequisites before enrolling in any course.

Computer Information Systems, Minor in Information Systems

The minor is directed toward the student who is willing to stay in school for a minimum of 4½ years. It includes a major other than Management Information Systems and additional 18 semester hours in Information Systems.

Code	Title	Credit Hours
Required Courses		
CISY 312	Operating Systems Administrati	3
CISY 330	Computer Programming I	3
CISY 362	Systems Analysis And Design	3
CISY 367	Computer Networks I	3
CISY 480	Database Design & Applications	3
Electives for Information Systems Minor		
Select one from the following:		3
CISY 430		3
CISY 489	(Enterprise Resource Planning Configuration)	3
Total Credit Hours		**24**

The student should seek academic advisement from a Management Information Systems faculty member in the Reginald F. Lewis College of Business. The student is required to meet any prerequisite course requirements before enrolling in any course.

Department of Management and Marketing

Chairperson: Dr. Venkatapparao Mummalaneni
Location: Singleton Hall, Room 106B
Contact Information: 804-524-5782 | vmummalaneni@vsu.edu (http://catalog.vsu.edu/undergraduate/lewis-college-business/department-management-marketing/vmummalaneni@vsu.edu)

Department Overview

The Department of Management and Marketing at Virginia State University prepares students to excel in a competitive global marketplace through comprehensive academic programs in Management and Marketing. The Department offers a **Bachelor of Science (B.S.) in Management**, with an optional concentration in Human Resource Management. A **Bachelor of Science (B.S.) in Marketing** is also offered. Students may enhance their academic experience by pursuing minors in Marketing, and under the Management Program in International Business Management, or Entrepreneurship.

Mission Statement

The Department of Management and Marketing is committed to developing students' competencies in the fields of management and marketing by delivering dynamic curricula that prepare graduates for leadership roles in business, government, nonprofit, and global organizations. The Department emphasizes communication, ethical responsibility, cultural awareness, and experiential learning while fostering scholarly excellence and innovative teaching among faculty.

Degree Highlight Information

The Department fosters the development of strong oral and written communication skills and cultivates a global perspective with an emphasis on cultural diversity and ethical leadership. Students benefit from hands-on learning, professional engagement, and career preparation through internships, service-learning, and access to professional certifications.

Student organizations such as the Business Professionals of America (BPA) and the Marketing Association offer experiential learning through speaker series, workshops, service projects, and case studies. Faculty contribute to scholarly research and remain at the forefront of innovation in management and marketing education.

Accreditation Information

In December of 2006, the R. F. Lewis College of Business was granted accreditation through the Association to Advance Collegiate Schools of Business International (AASCB). AACSB accreditation represents the highest standard of achievement for business schools worldwide.

Department Goals

In the Management and Marketing Programs, we aim to:

1. Promote experiential learning through job shadowing, internships, service-learning projects, and international business-related activities.
2. Prepare graduates for employment in management and marketing-related fields.
3. Encourage faculty engagement in scholarly research and academic contributions.
4. Foster the use of research-based, innovative teaching strategies in the classroom.
5. Develop students' understanding of the global business environment and ethical responsibilities of leadership.
6. Support professional growth through integration of certifications, workshops, and student-led initiatives.

Program Listings

Bachelor of Science (B.S) in Management

The B.S. in Management provides a strong foundation in managerial leadership for both for-profit and nonprofit sectors. Students explore essential management functions and concepts, with the option to specialize in Human Resource Management. The program consists of 120 semester hours and encourages participation in internships for practical experience.

Human Resource Management Concentration
This specialization equips students with the knowledge and skills to effectively manage workforce dynamics and navigate relationships between employees, managers, and organizational leadership. It covers core areas of management and business functions.

Management Minors

- Entrepreneurship
- International Business Management

Bachelor of Science (B.S.) in Marketing

The B.S. in Marketing prepares students for the dynamic field of marketing through an integrated curriculum that includes strategy, communication, research, and consumer behavior. Professional development is supported through student involvement in the Marketing Association and engagement with marketing professionals.

Minor

- Marketing

Major(s)

- Management, Bachelor of Science (B.S.) (p. 406)
- Management, Bachelor of Science with a Concentration in Human Resource Management (B.S.) (p. 407)
- Marketing, Bachelor of Science (B.S.) (p. 408)

Minor(s)

- Minor in Management (p. 409)
- Minor in International Business (http://catalog.vsu.edu/undergraduate/lewis-college-business/department-management-marketing/international-business-minor/)
- Minor in Marketing (p. 409)

MGMT 150 PRINCIPLES OF BUSINESS - 3 semester hours
For non-business majors. This course introduces the student to the fundamental principles of business, organizations, finance, banking, credit management, salesmanship, advertising, ecology and consumers. Through this introduction the student will be able to relate/work with real world examples in higher-level courses.

MGMT 300 ORGANIZATION AND MANAGEMENT - 3 semester hours
This course provides an overview of the many aspects of managing organizations. Emphasis will be placed on management processes, human behavior in organizations and applications of classroom knowledge to actual challenges facing managers. The application of management concepts will be practiced using such activities as case studies, team projects, decision making exercises, presentations, and active in-class discussion of current management issues.

MGMT 320 INTERNATIONAL BUSINESS - 3 semester hours
This course explores the critical importance of the environments that surround international business and how multinational and global enterprises are expected to adapt their operations and functional strategies to these constantly changing environments. Additional topics explored include theories of international trade, international development and investment, international organizations that impact international business, the international system, exporting and importing, etc.
Prerequisite: COBU 302 or MGMT 300

MGMT 330 ORGANIZATIONAL BEHAVIOR AND LEADERSHIP - 3 semester hours

An in-depth study of the behaviors of individuals and small groups in organizations. A problem solving approach is applied to such concepts as motivation, personalities, work attitudes, leadership, communication effectiveness, managerial decision making, conflict resolution, office politics, and change management.
Prerequisite: COBU 302 or MGMT 300

MGMT 340 PERSONNEL/HUMAN RESOURCE MANAGEMENT - 3 semester hours
The basic principles of managing the workforce are covered in this course. Topics such as recruitment and selection, employee training, performance evaluation, compensation, occupational safety and health, equal employment opportunity and employment discrimination policies as well as retirement and pension issues will be discussed.
Prerequisite: COBU 302 or MGMT 300

MGMT 371 BUSINESS LAW - 3 semester hours
This course deals with business law topics frequently addressed on the CPA examination as well as an in-depth coverage of selected articles of the Uniform Commercial Code.
Prerequisite: COBU 170 and sophomore standing.

MGMT 375 INTERNSHIP - 3 semester hours
The internship course allows students to obtain practical work experience in a management position under supervised conditions. The internship provides real-world application of management education under the critical supervision of an on-site administrator and a management faculty member.
Prerequisite: COBU 302 or MGMT 300 and Junior standing or special permission of the instructor

MGMT 418 ORGANIZATION AND ENVIRONMENT - 3 semester hours
The course deals generally with the mutual influences of public policies and business activities. Selected public policy issues and programs are examined in-depth from the perspectives of how they impact on business planning and operations, including anti- trust legislations and landmark court decisions arising from them.
Prerequisite: COBU 302 or MGMT 300

MGMT 420 MANAGING IN A GLOBAL ECONOMY - 3 semester hours
The student will examine the techniques of managing international businesses with emphasis on the problems of communications as well as cultural, political and social differences with reference to multi-national businesses operating in different parts of the world.
Prerequisite: COBU 302 or MGMT 300

MGMT 444 INTRODUCTION TO ENTREPRENEURSHIP & SMALL BUSINESS MANAGEMENT - 3 semester hours
This course provides and introductory analysis of the entrepreneur's role in conceptualizing, developing and managing small business ventures. It is designed to expose students to the problems and opportunities inherent in establishing and managing a small business, the initial research and resources required, and the techniques employed in launching and sustaining a new venture. Students will be exposed to information and resources that expand their knowledge basis and creativity, and that will spur them to explore potential small business opportunities they would like to initiate in the future. They also have the opportunity to employ various management, marketing, human resources, financial planning and ethics/social responsibility principles as they specifically relate to entrepreneurship and small business management.

MGMT 445 SMALL BUSINESS CONSULTING - 3 semester hours
The small business consulting course is designed to develop practical consulting skills of students in the area of small business management and development. Students will apply conceptual and theoretical skills to identify opportunities, diagnose, analyze and resolve problems of small business owners.
Prerequisites: MGMT 444 and Senior standing or permission of instructor.

MGMT 446 ENTREPRENEURIAL MARKETING & NEW PRODUCT INNOVATION – 3 semester hours
This course is designed for business and non-business students who want to use their creativity and knowledge to create and market novel products and services for consumers. Student pursuing for-profit or non-profit entrepreneurship ventures will be required to create a value proposition for their new innovation, strategies to protect their intellectual property, and a marketing plan to deliver their new product/service to customers. As a result of this course, students will be capable of conducting effective market analysis, industry analysis, competitive analysis and risk analysis to successfully market an innovation or an entrepreneurship venture.
Prerequisites: MGMT 444

MGMT 447 SOCIAL ENTREPRENEURSHIP & SUSTAINABLE VENTURES – 3 semester hours
The purpose of this course is to examine entrepreneurship as a mechanism for social change, community economic development, and societal sustainability. Via interaction with social entrepreneurs and owners of sustainable enterprises, we will examine the social impacts that both social enterprises and social responsible for–profit ventures can have in the markets where they are located. A key goal of this course is for students to be able to develop a business model that is scalable (with potential for exponential growth and impact) and sustainable for either a non-profit or for-profit venture.
Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior non-profit or for profit venture.

MGMT 448 TECHNOLOGY & ENTREPRENEURSHIP – 3 semester hours
This course will provide an overview of the relevance of technology to the success of new ventures and highlight specific technology tools, including financial management software, website development services and programs, e-commerce and social media and e-marketing tools that are crucial for 21st century entrepreneurs in any industry. As part of the course, student will have the opportunity to develop their own website for their small business and e-marketing plan.
Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior experience.

MGMT 449 SPECIAL TOPICS – 3 semester hours
This course will cover dynamic topics of relevance to entrepreneurs in various industries, including specialty coverage of music entrepreneurship, education entrepreneurship, social media marketing, global entrepreneurship, technology based ventures and other contemporary topics relevant to prospective and current entrepreneurs.
Prerequisites: MGMT 444. Prerequisite(s) can be waived by instructor based on student's prior experience.

MGMT 450 ORGANIZATIONAL THEORY - 3 semester hours
An in-depth study of how to restructure any organization. Restructuring groups, people and organizes activities to accomplish the organization's goals. Each student will develop the ability to analyze an organization's internal and external structural contingencies and design the correspondingly appropriate structures. Emphasis will be placed on applying this ability through case studies.
Prerequisite: COBU 302 or MGMT 300

MGMT 454 WORKPLACE DEMOCRACY - 3 semester hours
The student will examine non-hierarchical organizational forms and structures that would facilitate democratic involvement and participation in workplace decision- making and activities. The content will include: cooperatives, worker-owned firms, self- managed enterprises, ESOPS, Workers Council and Quality Circles.
Prerequisite: COBU 302 or MGMT 300

MGMT 464 EMPLOYMENT LAWS AND POLICIES - 3 semester hours
This course is designed as a critical review of current or proposed laws and public policies dealing with the dynamics of employment including the important areas of human resources acquisition, development, maintenance, utilization and compensation.
Prerequisite: COBU 302 or MGMT 300

MGMT 466 COMPENSATION MANAGEMENT - 3 semester hours
The student will gain an understanding of the principles and factors involved in designing and implementing an effective and equitable compensation system for administrative, operative and professional employees in private and public organizations. Compensation management also deals with the role of compensation as a managerial and motivational tool.
Prerequisites: COBU 302 or MGMT 300

MGMT 468 COMPARATIVE UNION MOVEMENTS - 3 semester hours
This course is a comparison of labor union movements and industrial relations practices in different countries, particularly in Western Europe, North America, Japan and Africa with respect to their history, rationale, objectives and laws and their implications for multinational enterprises which must deal with the differences associated with these systems.
Prerequisite: COBU 302 or MGMT 300

MGMT 470 HUMAN RESOURCES PLANNING AND DEVELOPMENT - 3 semester hours
This course surveys the concepts and techniques of determining human resources requirements and methods of acquisition, training and development of the workforce.
Prerequisites: COBU 302 or MGMT 300 and MGMT 340 or equivalent

MGMT 480 ORGANIZATIONAL DEVELOPMENT - 3 semester hours
An integrated application of behavioral science to the improvement of overall organizational performance. Studied will be several techniques of large-scale planned change which redesign an organization's culture and processes. Emphasis will be placed on applying these techniques through case studies.
Prerequisites: COBU 302 or MGMT 300, MGMT 330, MGMT 340, and MGMT 450

MGMT 484 INDUSTRIAL RELATIONS AND COLLECTIVE BARGAINING - 3 semester hours
This course is a survey of labor union movement and collective bargaining in the United States. Includes the rationale, structure and government of labor union internal affairs and the laws and policies relating to unfair labor practices in plant unionization and collective bargaining between management and labor organizations.
Prerequisites: COBU 302 or MGMT 300 and MGMT 340

MGMT 490 SEMINAR: ISSUES IN MANAGEMENT - 3 semester hours
The seminar course is designed to provide students the opportunity to study in-depth topics pertaining to management. Students will take initiative in identifying current topics, issues and problems confronting managers.
Prerequisites: COBU 302 or MGMT 300 and Senior standing

Management Major, Bachelor of Science (B.S.)

Junior Year		Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
MGMT 330	Org'l Behavior & Leadership	3
MGMT 340	Personnel/Human Resources Mgmt	3
Restricted Elective	MGMT Course	3
Restricted Elective	MGMT Course	3
Restricted Elective	COBU Course	3
Restricted Elective	COBU Course	3
	Credit Hours	**33**
Senior Year		
COBU 400	Organization Policy & Strategy	3
MGMT 406	Managerial Analytics	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
MGMT 418	Organization And Environment	3
MGMT 450	Organizational Theory & Design	3
Restricted Elective	MGMT Course	3
Restricted Elective	MGMT Course	3
Restricted Elective	MGMT Course	3
	Credit Hours	**26**
	Total Credit Hours	**59**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
COBU 101	Introduction to Business	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3

COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
COBU 210	Financial Economics	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
Total Credit Hours		**28**

Code	Title	Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
COBU 415	Special Topics Service Learnin	2
MGMT 330	Org'l Behavior & Leadership	3
MGMT 340	Personnel/Human Resources Mgmt	3
COBU 400	Organization Policy & Strategy	3
MGMT 406	Managerial Analytics	3
COBU 410	Global Business Perspectives	3
MGMT 418	Organization And Environment	3
MGMT 450	Organizational Theory & Design	3
Total Credit Hours		**38**

Code	Title	Credit Hours
Restricted Electives		21
Unrestricted Electives		0
Total Credit Hours		**21**

Code	Title	Credit Hours
General Education		33
Core Requirements		28
Major/Concentration Requirements		38
Electives		21
Total Credit Hours		**120**

Management, Bachelor of Science with a Concentration in Human Resource Management (B.S.)

Junior Year		Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 302	Organization & Management	3
COBU 303	Business Information Systems	3
COBU 306	Business Analytics I	3
COBU 305	Operations Management	3
MGMT 330	Org'l Behavior & Leadership	3
MGMT 340	Personnel/Human Resources Mgmt	3
Restricted Elective	MGMT Course	3
Restricted Elective	MGMT Course	3
	Credit Hours	**30**
Senior Year		
COBU 400	Organization Policy & Strategy	3
COBU 406	Business Analytics II	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
MGMT 450	Organizational Theory & Design	3
MGMT 466	Compensation Management	3
MGMT 464	Employment Laws And Policies	3
MGMT 484	Indus Relations Collec Bargain	3
Restricted Elective	MGMT Course	3
Restricted Elective	MGMT Course	3
	Credit Hours	**29**
	Total Credit Hours	**59**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
COBU 101	Introduction to Business	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
COBU 210	Financial Economics	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
Total Credit Hours		**28**

Code	Title	Credit Hours
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3

COBU 306	Business Analytics I	3
COBU 415	Special Topics Service Learnin	2
MGMT 330	Org'l Behavior & Leadership	3
MGMT 340	Personnel/Human Resources Mgmt	3
COBU 400	Organization Policy & Strategy	3
MGMT 406	Managerial Analytics	3
COBU 410	Global Business Perspectives	3
MGMT 418	Organization And Environment	3
MGMT 450	Organizational Theory & Design	3
MGMT 464	Employment Laws And Policies	3
MGMT 466	Compensation Management	3
MGMT 484	Indus Relations Collec Bargain	3
Total Credit Hours		**47**

Code	Title	Credit Hours
General Education		33
Core Requirements		28
Major/Concentration Requirements		47
Electives		12
Total Credit Hours		**120**

Code	Title	Credit Hours
General Education		33
Core Requirements		28
Major/Concentration Requirements		47
Electives		12
Total Credit Hours		**120**

Marketing Major, Bachelor of Science (B.S.)

Junior Year		**Credit Hours**
COBU 300	Principles of Finance	3
COBU 301	Principles of Marketing	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
Restricted Elective	MKTG Course	3
Restricted Elective	MKTG Course	3
Restricted Elective	MKTG Course	3
MKTG 303	Integrated Marketing Comm	3
MKTG 305	Brand Management	3
MKTG 306	Mktg Channels Physical Distr M	3
	Credit Hours	**33**
Senior Year		
COBU 400	Organization Policy & Strategy	3
COBU 406	Business Analytics II	3
COBU 410	Global Business Perspectives	3
COBU 415	Special Topics Service Learnin	2
MKTG 401	Marketing Research	3
MKTG 404	Consumer Behavior	3
Restricted Elective	MKTG Course	3
Restricted Elective	Business Course	3
Restricted Elective	Business Course	3
MKTG 489	Strategic Marketing	3
	Credit Hours	**29**
	Total Credit Hours	**62**

General Education Requirements for the B.S. Degree

Code	Title	Credit Hours
GE English Electives (p. 146)		
GE Global Studies Electives (p. 146)		
GE History Electives (p. 146)		
GE Humanities Electives (p. 146)		
GE Literature Electives (p. 147)		
GE Science Electives (p. 147)		
GE Social Science Electives (p. 147)		
GE Wellness/Health Electives (p. 147)		
GE Mathematics Electives (p. 147)		

Total Requirements Semester Hours: 33

A single course may simultaneously fulfill a general education requirement and a departmental or major/minor requirement. A single course cannot be used to fulfill more than one general education requirement. Department or major/minor areas may opt to exceed the minimum credit hour requirements above.

Code	Title	Credit Hours
COBU 101	Introduction to Business	3
COBU 111	Professional Enhance/Career De	1
COBU 155	Information Systems & Tech I	3
COBU 170	Legal, Ethical & Digital Envir	3
COBU 201	Introductory Accounting I	3
COBU 202	Introductory Accounting II	3
COBU 210	Financial Economics	3
COBU 220	Financial Managerial Economics	3
COBU 260	Business Statistics	3
COBU 302	Organization & Management	3
Total Credit Hours		**28**

Code	Title	Credit Hours
COBU 300	Principles of Finance	3
COBU 303	Business Information Systems	3
COBU 305	Operations Management	3
COBU 306	Business Analytics I	3
COBU 400	Organization Policy & Strategy	3
COBU 415	Special Topics Service Learnin	2
COBU 301	Principles of Marketing	3
MKTG 303	Integrated Marketing Comm	3
MKTG 305	Brand Management	3
MKTG 401	Marketing Research	3
MKTG 404	Consumer Behavior	3
MKTG 407	Digital Marketing Analytics	3
MKTG 489	Strategic Marketing	3

COBU 410	Global Business Perspectives	3
Total Credit Hours		**41**

Code	Title	Credit Hours
Restricted Electives		18
Unrestricted Electives		0
Total Credit Hours		**18**

Code	Title	Credit Hours
General Education		33
Core Requirements		28
Major/Concentration Requirements		41
Electives		18
Total Credit Hours		**120**

Management and Marketing, Minor in Management

The minor in management is directed toward the student who is willing to stay in school for a minimum of 4½ years. It includes a major other than management and an additional 18 semester hours in management courses.

Code	Title	Credit Hours
Required Courses		
MGMT 300	Organization & Management	3
or COBU 302	Organization & Management	
Electives		
The student may select five of the following management courses:		15
MGMT 320	International Business	3
MGMT 330	Org'l Behavior & Leadership	3
MGMT 340	Personnel/Human Resources Mgmt	3
MGMT 371	Business Law	3
MGMT 444	Entrepreneurship Small Bus Mgm	3
MGMT 450	Organizational Theory & Design	3
MGMT 452	Organizational Culture Diversi	3
MGMT 464	Employment Laws And Policies	3
MGMT 466	Compensation Management	3
MGMT 480	Organizational Development	3
MGMT 484	Indus Relations Collec Bargain	3
MGMT 490	Seminar: Issues In Management	3
Total Credit Hours		**54**

The student should seek proper academic advisement from Management faculty in the Reginald F. Lewis College of Business. The student is required to meet all prerequisites before enrolling in any course.

Management and Marketing, Minor in Marketing

The minor in marketing is directed toward the student who is willing to stay in school for a minimum of 4½ years. It includes a major other than marketing and an additional 18 semester hours in marketing courses.

Code	Title	Credit Hours
Required Courses		
MKTG 300	Principles Of Marketing	3
Or		
COBU 301	Principles of Marketing	3
Electives		
The student may select five of the following marketing courses:		15
MKTG 303	Integrated Marketing Comm	3
MKTG 305	Brand Management	3
MKTG 306	Mktg Channels Physical Distr M	3
MKTG 401	Marketing Research	3
MKTG 402	Advertising	3
MKTG 404	Consumer Behavior	3
MKTG 405	Seminar In Marketing	3
MKTG 406	Digital Marketing	3
MKTG 408	International Marketing	3
MKTG 411	Purchasing Materials Managemen	3
MKTG 460	Direct Marketing	3
MKTG 461	Sales Management	3
MKTG 462	Industrial Marketing	3
MKTG 470	Services & Non-Profit Marketin	3
MKTG 489	Strategic Marketing	3
Total Credit Hours		**66**

The student should seek proper academic advisement from Marketing faculty in the Reginald F. Lewis College of Business. The student is required to meet all prerequisites before enrolling in any course.

GRADUATE CATALOG

Virginia State University
2025-2026
Graduate Catalog

Virginia State University
1 Hayden Drive
Virginia State University, Virginia

This catalog describes academic courses, programs, and standards for student progress and retention at time of publication. However, the provisions of this publication are not to be regarded as an irrevocable contract between the student and Virginia State University. There are established procedures for making changes, which protect the institution's right to make changes that are deemed appropriate. A change of curriculum or graduation requirement is not made retroactive unless the alteration is to the student's advantage and can be accommodated within the span of years normally required for graduation.

Virginia State University is committed to a policy of equal opportunity in education and employment without regard to race, creed, sex or national origin. There are affirmative programs at VSU that support the commitment to this democratic approach to public education.

Courses A-Z

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BIOL: Biology (BIOL)

BIOL 501. Intro to Computational Biology. (3 Credits)
This course will expose the student to many of the fundamental tools needed to analyze and manipulate large biological data sets. This course will introduce different methods of data management, computer programming methods, and data analysis. The course format will be primarily hands-on activities with targeted lectures and assignments. The overall goal of the course is to give the students the basic tools needed for computational biology and data analysis with resources to allow them opportunities for deeper self-study in each topic area.

BIOL 508. Biology & Human Affairs. (1-4 Credits)
A seminar designed to inquire into the impact and potential of biology and society. Topics discussed might include such things as population control, the biological meaning of race, the ecological crises, biological nuclear and chemical toxicants, control of fertility and aging.

BIOL 510. Human Genetics. (1-3 Credits)
Theory and methods of analyses of genetic traits in individuals, families, and populations. Techniques include pedigree analysis, cytogenetics, tissue culture, and probability determination. Prerequisite: BIOL 320 Principles of Genetics or permission of the instructor. Lab A laboratory course designed to be taken in conjunction with BIOL 510 Human Genetics lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 510 Human Genetics lecture.

BIOL 511. Topics In Modern Biology. (3 Credits)
Explores the recent developments in the field of biology on a chemical-physical basis. Includes discussions on the nature of science, evidence and trends in evolution; metabolism photosynthesis, nutrition and respiration; and the biological events in cell division growth, genetics, enzyme activity and the treatment of disease. Lectures, demonstrations, and discussions. Prerequisites: Two semesters each of mathematics, biology, and physics; three semesters of chemistry; or permission of the department.

BIOL 513. Seminar. (1 Credit)
A one hour seminar is held each week. The course will feature presentations by researchers, outside speakers and second year graduate students. Students in the first year are expected to attend all presentations and to complete other assignments as required. Students in their second year will be expected to make presentations during seminars.

BIOL 514. Endocrinology. (1-4 Credits)
The study of hormonal integration of life activity of animals. Along with a survey of glands of internal secretions, consideration is given to the concepts of self-regulation through "servo" or "feed-back" mechanisms. Some consideration is given to the mechanism of hormone action at the molecular level. The neuroendocrine system as a functional entity is discussed. Attention is given to the role of internal secretions in metabolism, in growth and development, and in reproduction. Prerequisite: BIOL 417 General Physiology LAB A laboratory course designed to be taken in conjunction with BIOL 514 Endocrinology lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 514 Endocrinology lecture.

BIOL 515. Advd Invertebrate Zoology. (3 Credits)
An intensive study of the classification, morphology, development, physiology and life histories of the invertebrates exclusive of insects. Prerequisite: BIOL 313 General Zoology.

BIOL 518. Advanced Plant Physiology. (3 Credits)
Primarily a reading course designed for advanced undergraduates and graduate students to cover such topics as photosynthesis, plant nutrition and metabolism, and other topics not treated in the plant physiology program.

BIOL 520. Cytology. (1-4 Credits)
A study of cell structures and cytological techniques with emphasis on the morphologic, physiologic, and genetic aspects of modern cytology. Attention is given to the chemical and ultrastructural aspects of cytology. Consideration is given to the instruments employed in studying the sub microscopic structures of the cell. Prerequisite: Twelve semester hours of biological science or the permission of the instructor LAB A laboratory course designed to be taken in conjunction with the BIOL 520 Cytology lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 520 Cytology lecture.

BIOL 521. Plant Morphogenesis. (1-4 Credits)
A study of growth in general, the cellular basis of growth, and meristems; the phenomena of morphogenesis correlation, polarity, symmetry, differentiation, regeneration, tissue mixtures, and abnormal growth; morphogenic factors-light, water temperature, various physical factors of mechanical nature; chemical factors, types and influences of growth substances. The laboratory work includes: a study of representatives of the plant kingdom which show various stages of development of tissues and organs; the influence of the environment and chemicals upon the development of various plant structures; isolation of cells, tissue transplant, and tissue cultures. Prerequisites: BIOL 310 Plant Morphology LAB A laboratory course required to be taken in conjunction with the BIOL 521 Plant Morphogenesis lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 521 Plant Morphogenesis lecture.

BIOL 522. Investigations In Biology. (3 Credits)
The department has facilities to enable qualified students to undertake studies of an investigative nature. Students will undertake supervised research activity in different labs (depending upon availability) that will expose them to varied research questions and methods. Students in the thesis option will use these experiences to aid in the selection of a thesis research project. Prerequisite: Permission of the instructor.

BIOL 524. Research & Thesis. (2-6 Credits)
Students conduct research and write theses under the supervision of thesis or research professors. Prerequisite: Admission to candidacy for the master's degree and permission of thesis professor.

BIOL 525. Leading a Biology Lab Course. (3 Credits)
This course is designed to provide experience leading in a biology lab course. Persons who enroll in Biology 525 will attend the course lectures, observe and participate in an organization and planning session each week and supervise a laboratory course during the semester. This course is available to students in the second year of their program who have completed at least 18 graduate credit hours.

BIOL 526. Experimental Embryology. (1-4 Credits)
Experimental morphology of growth and development: Fertilization, organ differentiation, and regeneration. The first part of the course will deal with classical experiments and concepts. LAB A laboratory course required to be taken in conjunction with the BIOL 526 Experimental Embryology lecture course. This course will involve exercises related to selected lecture topics. Co-requisite: BIOL 526 Experimental Embryology lecture.

BIOL 533. Introduction to Neuroscience. (3 Credits)
This course is a general introduction to the field of neuroscience. The course provides a foundation in the basic operating principles of neural tissue. The course moves from a focus on the basic element of nervous systems, the neuron, to studying how simple sensory, motor, and learning capacities arise from the operations of neural networks.

BIOL 537. Oral And/Or Writn Comp Exm. (0 Credits)
A requirement of the non-thesis M.S. option to be taken during the last semester. A candidate for the Master of Science degree must pass satisfactorily an examination arranged by his/her chairperson or committee. This examination may be oral or written or both, and will cover the biology major and minor areas of study.

BIOL 542. Advanced Biochemistry. (3 Credits)
A study of the principal types of biochemical activities of the microorganisms: (1) respiration, fermentation, photosynthesis and different types of phosphorylation, (2) metabolism of proteins, nucleic acids and general properties and activities of enzymes, and (3) physical and chemical factors affecting biochemical activities. Prerequisite: CHEM305/307 Organic Chemistry I or permission of the instructor.

BIOL 546. Advanced Immunobiology. (3 Credits)
An advanced treatment of current theory and its application to various aspects of immunobiology; antibody specificity, antigen antibody reactions, immediate and delayed hypersensitivity, immunological tolerance and autoimmunization are among the topics covered. Prerequisite: BIOL 443 Immunology and Serology, BIOL 443 Immunology and Serology Laboratory and a course in biochemistry or the equivalent.

BIOL 548. Molecular Biology. (3 Credits)
A study of the principles of biological organization and activities on the molecular level. Analysis of the important events in terms of established principles of physics and chemistry. Basics structures and functions of important classes of biological molecules such as proteins, enzymes, RNA and DNA will be emphasized. Prerequisites: One semester of genetics.

BIOL 551. Topic in Molecular Biol & Geno. (3 Credits)
Study of recent advances and applications of research in genomics and molecular biology offered in accordance with faculty and student interest.

BIOL 552. Topic in Ecology and Evol Biol. (3 Credits)
Study of recent advances and applications of research in ecology and evolutionary biology offered in accordance with faculty and student interest.

BIOL 553. Topic in Organismal Biology. (3 Credits)

BIOL 554. Topic in Computational Biology. (3 Credits)
Study of recent advances and applications of research in computational biology offered in accordance with faculty and student interest.

CJUS: Criminal Justice (CJUS)

CJUS 501. Theories Of Crime And Criminlo. (3 Credits)
Survey of the contemporary theories of crime and criminality. Study of the biological, psychological, and sociological perspectives on crime and deviance, and assessment of theoretical advances including integration and general theories of crime. Understanding of relations between theories and crime policy.

CJUS 502. Contemporary Criminal Justice. (3 Credits)
This course will examine the evolving nature of the contemporary criminal justice system in the United States. The students will gain knowledge about the evolution of the Bill of Rights, competing interpretations of the constitution, Supreme Court cases, and other laws and institutions unique to the American Criminal Justice System.

CJUS 503. Research Methods In Crim Justi. (3 Credits)
Introduction to research design as applied to problems in crime and criminal justice. Logic, design analysis and ethical principles in criminal justice research. Design and preparation of Master's Thesis proposal.

CJUS 504. Stat/Data Anal In Crim Justice. (3 Credits)
The study of descriptive and inferential statistics in analyzing criminal justice data from such agencies as the Bureau of Justice Statistics, UCR system of the FBI, National Incidence Based Reporting System, and National Archives of Criminal Justice Data. Students will learn to use of SPSS and SAS in relation to data entry and data analysis, and the use and modification of secondary data sets.

CJUS 505. Policy Analy In Criminal Justi. (3 Credits)
The study of descriptive and inferential statistics in analyzing criminal justice data from such agencies as the Bureau of Justice Statistics, UCR system of the FBI, National Incidence Based Reporting System, and National Archives of Criminal Justice Data. Students will learn to use of SPSS and SAS in relation to data entry and data analysis, and the use and modification of secondary data sets.

CJUS 506. Ethics In Criminal Justice. (3 Credits)
responsibility in criminal justice professions, such as the Law Enforcement Code of Ethics, ABA Standards of Professional Responsibility, American Jail Association Code of Ethics, and the American Correctional Code of Ethics. The students will also obtain knowledge about different systems of ethical thoughts and morality related to criminal justice.

CJUS 532. Problems African-Amer Communit. (3 Credits)

CJUS 533. African-Amer and Crim Thought. (3 Credits)

CJUS 537. Crime, Sex, Law and Order. (3 Credits)

CJUS 550. Sem Organization/Administratio. (3 Credits)
This course will provide a comprehensive overview of criminal justice administration and management with an emphasis on organizational theories. Different theories or organization and organizational behavior will be examined and their relevance to the administration of criminal justice agencies will be explored.

CJUS 551. Human Resource Development. (3 Credits)
This course will introduce the theories and principles of human resource management as tools for management in criminal justice agencies. The students will also learn the impact of various federal and state laws on human resource management in criminal justice agencies including hiring and promotion, reward system, gender equality, issues of cultural diversities, and dispute resolution.

CJUS 552. Research Methods/Plannng Reso. (3 Credits)
This course will examine the different theories of strategic planning as they relate to criminal justice organizations. The students will learn to synthesize research-based knowledge for effective management of criminal justice agencies.

CJUS 553. Comm Theories/Crimina Justice. (3 Credits)
Surveys and analyzes literature on relations between crime and communities. Examines the theories of relations between crime, demography, and ecology, and assess their impact on justice administration. Different models of community crime preventive strategies and their administrative implications are examined.

CJUS 554. Sem Leadrshp and Mgmt. (3 Credits)
Explores the theories of leadership and their relevance to criminal justice management: The students will learn the art and the principles of strategic leadership and their use in effective and innovative management of criminal justice organizations.

CJUS 555. Law and Criminal Just Mgmt. (3 Credits)
Examination of the legal issues commonly facing managers in justice agencies related particularly to personnel management, human resource management, labor laws, and intra-agency dispute resolution. Both state and federal statutory and case laws are examined.

CJUS 556. Computer/Crim Justice Mgmt. (3 Credits)
The course is designed to teach the applications of computer in matters of storage, processing, and dissemination of criminal justice data and information. The students will gain understanding of contemporary federal and state criminal justice information networks systems and programs.

CJUS 557. Program Eval Crim Just Mgmt. (3 Credits)
Principles and techniques of program evaluation as they relate to crime and justice programs. Understanding of the different models of program evaluation, and their relative significance in criminal justice management.

CJUS 558. Budget Aspects Crim Just Mgmt. (3 Credits)
Study of criminal justice management from the perspectives of the different models of budgeting. Understanding of state and federal budgetary principles and allocations in justice programs.

CJUS 559. Introducation To Corrections. (3 Credits)

CJUS 567. Ethics in Correctional Mgmt. (3 Credits)

CJUS 570. Advance Data Analysis. (3 Credits)
Study of the use of statistical data and models in the development and management of criminal justice projects. Will focus on discussing issues in crime analysis and crime mapping.

CJUS 571. Use of Secondary Data Sources. (3 Credits)
Application of advanced statistical models and computer methodologies in the use and analysis of secondary data sources from the National Institute of Justice and other federal agencies. Will focus on learning the art of research synthesis using statistical and computer models.

CJUS 572. Juvenile Justice System. (3 Credits)
Reviews the history and philosophy of the juvenile justice system in America. Study of federal and state statutes and court decisions related to juvenile justice. Also provides comparative overview of juvenile justice practices in major industrialized countries.

CJUS 574. Theories Juvenile Deliquency. (3 Credits)
Examines the major medical, psychological, and sociological theories of juvenile delinquency and the recent efforts for theoretical integration in juvenile delinquency studies and research.

CJUS 575. Prison and Penology. (3 Credits)
Reviews the history of punishment with emphasis on the changing role of penitentiary in the criminal justice system. The goal of punishment, including deterrence, incapacitation, and rehabilitation are discussed and examine.

CJUS 576. Community-Oriented Policing. (3 Credits)
The nature, philosophy, and the evolution of community policing as a model for law enforcement. Organization, strategies, and the role of community-policing in crime control and prevention strategies.

CJUS 577. Constitutional Law/Crim Just. (3 Credits)
Analyzes the role of the U.S. Constitution and the Bill of Rights in shaping the American criminal justice system. Landmark decision of the U.S. Supreme Court related to substantive and procedural criminal justice issues.

CJUS 579. Justice Theories. (3 Credits)
The nature of different justice theories: retributive justice, therapeutic justice, restorative justice, and community justice. How different justice theories define crime and punishment and interpret the balance between individual liberty and public order.

CJUS 580. Victimology. (3 Credits)
Study of the victim's experience with the criminal justice system. Topics in this course will include psychological impacts of crime, the process and impacts of victimization, legal approaches to victims, services provided to victims, restorative justice and emerging understandings of the victim.

CJUS 590. Master's Project. (3 Credits)
This course must be taken by students in the Master of Criminal Justice program who are under Plan B: Non-Thesis Option. This course will prepare students for the Comprehensive Examination.

CJUS 591. Independent Study in CJUS. (3 Credits)
This course allows graduate students to pursue a specialized area of research under the supervision of one of the Criminal Justice graduate faculty. Students will meet with their faculty instructor on a mutually agreed upon schedule and will be expected to do a substantial amount of reading, research and writing. This course may not be repeated for credit.

CJUS 597. Research & Master's Thesis I. (1-3 Credits)
Students pursuing the Thesis Option will register and Graduate Committee consisting of three faculty will be assigned. Students will be required to select research topic, formulate a hypothesis, complete a literature review and begin writing the thesis.

CJUS 598. Comprehensive Examination. (0 Credits)
This course must be taken by students in the Master of Criminal Justice program who are under Plan B: Non-Thesis Option. The course must be taken during the semester the student plans to take the comprehensive examination. The course may be repeated consistent with the policy of the Criminal Justice Program.

CJUS 599. Research & Master's Thesis II. (1-3 Credits)
Students pursuing the thesis will complete the research work and write the report under the supervision of Thesis Committee. The thesis must be prepared according to guidelines of the College of Graduate Studies. The Thesis must be successfully defended in an oral defense.

COUN: Counselor Education (COUN)

COUN 523. School Coun/Leadership (PreK12. (3 Credits)
A comprehensive school counseling program and the developmental role of the school counselor is examined from prekindergarten through 12th grade of high school. Characteristics of learners, skills and processes, program planning and evaluation, coordination, counseling and staffing patterns all will be considered at each school level. Prerequisites: Prerequisites: School Counseling program Students only, COUN 524 Ethics in Counseling, COUN 525 Principles of Counseling, COUN 526 Measurements and Evaluation in Counseling, COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling, COUN 531 Group Procedures and Counseling, COUN 527 Career Development and Counseling.

COUN 524. Prof Orient & Ethical Practice. (3 Credits)
This course in ethics, in counseling and professional identity is designed to acquaint students with the ethical, legal, and professional issues in counseling. Current trends in with a foundation in the identity of the professional counseling and the elements of ethical practice include: 1) a study of the philosophy and history of the counseling profession, 2) credentialing and professional counseling functioning, and 3) the standards for ethical practice in the counseling profession will be covered.

COUN 525. Principles of Counseling. (3 Credits)
This course provides comprehensive survey of the counseling field, stressing philosophy, principles, and the need for counseling in schools, the community, and higher education.

COUN 526. Measurement & Evaluation Couns. (3 Credits)
This course covers measurement, evaluation, and appraisal in counseling. As an advanced course in group testing, it is organized to acquaint professional counselors and other school personnel with the various types of standardized tests, with emphasis on scoring, computations, and interpretation procedures. This course includes the study of: formal and informal assessment procedures, 2) test statistics, 3) validity and reliability in testing and 4) utilization of test finding in the counseling process. Prerequisite: COUN 550 Research in Counseling.

COUN 527. Career Development & Counselin. (3 Credits)
This course explores career development, counseling, psychotherapy theories and techniques, by studying the scope and purpose of the career development process. Special attention is given to: 3. 1) the factors that influence career development, 2) the theories and research related to career decision making, 3) career assessment, along with 4) individual and group career counseling techniques. Occupation, education, and personal-social information resources are reviewed, with a variety of field visits arranged. The course emphasizes the integration of career development concepts in counseling programs for all ages.

COUN 528. Human Growth and Development. (3 Credits)
This graduate course is designed to provide an overview of theoretical human development perspectives for counselors. Topics include: 1) the nature of developmental needs from infancy to adulthood, 2) the elements of development that may influence dysfunction and mental health, and 3) the methods of promoting healthy development across the lifespan. Thus, counselors are assisted in studying individuals and their problems, helping pupils understand themselves, and assisting young people and adults in planning realistic courses of action toward solving their problems and developing their potential. Prerequisites: COUN 525 Principles of Counseling; COUN 526 Measurement and Evaluation.

COUN 529. Theories of Counseling. (3 Credits)
This course in theories of counseling and psychotherapy is designed for the candidate to critically analyze the major theories of counseling and psychotherapy used in the counseling process. Emphasis is placed upon the rationale underlying counseling and theoretical approaches with a focus on: 1) humanistic, 2) cognitive-behavioral, 3) psychodynamic, and 4) post- modern theoretical orientations. Prerequisites: COUN 524 Ethics in Counseling; COUN 525 Principles of Counseling.

COUN 530. Techniques Coun & Psychotherap. (3 Credits)
This course in techniques of counseling and psychotherapy focuses on the concepts, strategies, and techniques of the counseling process. Attention is given to: 1) establishing the counseling relationship, setting treatment goals, 2) applying listening and interviewing skills in relationship building, 3) initiating termination and 4) recognizing the parameters and limitations of the treatment process as related to practical application of the major counseling theories. Prerequisite: COUN 524 Ethics in Counseling, COUN 525 Principles of Counseling, COUN 526 Measurements and Evaluation in Counseling, COUN 529 Theories of Counseling;

COUN 531. Group Procedures in Counseling. (3 Credits)
This course in techniques of counseling and psychotherapy focuses on the concepts, strategies, and techniques of the counseling process. Attention is given to: 1) establishing the counseling relationship, setting treatment goals, 2) applying listening and interviewing skills in relationship building, 3) initiating termination and 4) recognizing the parameters and limitations of the treatment process as related to practical application of the major counseling theories. Prerequisite: COUN 524 Ethics in Counseling, COUN 525 Principles of Counseling, COUN 526 Measurements and Evaluation in Counseling, COUN 529 Theories of Counseling;

COUN 532. Counsel Children & Spec Popula. (3 Credits)
This course is designed to help counselors identify and gain an in-depth understanding of individuals with special needs and develop counseling skills to assist such individuals. Prerequisites: COUN 525 Principles of Counseling; COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling.

COUN 533. Abnormal Behavior & Psychopath. (3 Credits)
This course in problems and adjustment in abnormal behavior and psychopathology focuses on the nature and causes of adjustment problems and of the various techniques utilized by individuals to cope with such problems. Focus on the major categories of mental disorders including: 1) their etiology and progression, 2) their impact and prevalence, 3) the role of motivation in behavior and adjustment and 4) the evidence of adjustment and maladjustment. Attention is also given to counseling interventions that can assist individuals in learning to cope effectively with mental health adjustment problems. Prerequisites: COUN 524 Ethics in Counseling, COUN 525 Principles of Counseling COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling; COUN 536 Community /Agency Counseling, COUN 555 Marriage and Family Systems Theory, and COUN 554 Diagnosis and Treatment of Addictive Disorders.

COUN 536. Found Mental Health Counseling. (3 Credits)
This course provides a study of human services in such settings as mental health, social service, religious, penal, rehabilitation and employment agencies. It focuses on the counseling and consulting skills that prepare counselors to provide effective client assistance and to work collaboratively in the community.

COUN 537. Internship Clinical Mental Hlt. (6 Credits)
Provides supervised internship practice of at least 600 hours in a clinical field counseling placement setting similar to the setting in which the Counseling Candidate may eventually work. Skills and practice build on previous practicum experiences. The clinical field hours include a minimum of: 400 hours of face to face counseling, 100 hours of individual on-site supervision, and 100 hours of individual/group off site (faculty) supervision. Prerequisite: Degree candidacy, completion of practicum course requirements, completion of 42 semester hours towards degree must include 36 semester hours of 12 Core Program Course requirements and 3 semester hours of 1 perquisite core course.

COUN 538. Practicum in School Counseling. (3 Credits)
This course provides supervised practice of at least 200 hours in a counseling setting similar to the setting in which the candidate may work. Skills and practice includes: 1) 80 hours of face to face counseling experience, 10 hours of field site supervisor's on-site supervision and 3) 10 hours of individual/group off site (faculty) supervision. Prerequisites: Degree candidacy, completion of 39 semester hours towards degree must include 36 semester hours of 12 Core Program Course requirements and 3 semester hours of 1 perquisite core course.

COUN 539. Research and Thesis. (3 Credits)
This course provides the opportunity for a formal and directed quantitative research investigation into counseling topics, issues, problems and/or outcomes. The principles and processes of performing counseling research includes conducting a formalized study on a counseling topic which includes the development of 3 research chapters: 1) An overview of the problem, 2) A review of the literature, 3) the proposed study analysis, 4) the results of the study and 5) the recommendations and implications for further research. Prerequisites: Degree candidacy, completion of 39 to 40 semester hours towards degree must include 36 semester hours of 12 Core Program Course requirements and 3 semester hours of 1 perquisite core course, STAT 510 Statistical Procedures in Education and.

COUN 540. Trauma Inform Care/Crisis Inte. (3 Credits)
This course is designed to provide candidates with an understanding of the personal and systemic impact of trauma. Candidates will also explore the effects of crises, disasters, and other trauma-causing events on individuals, couples, families, and communities. Candidates examine theories and response models as they relate to sexual trauma, crisis in individuals and families, crisis in the community, and crisis in the nation and in the world. They explore and discuss topics related to counselor competencies, vicarious trauma and counter transference, specific diagnoses, and advocacy. Candidates also engage in assignments designed to provide practical application of crisis assessment. Through contemporary articles and case studies, they consider and discuss cultural, legal, and ethical issues related to crisis, trauma, and disaster events and response.

COUN 541. Counseling Children. (3 Credits)
This course will present theories, techniques, and strategies for working with children and adolescents and their families. Explores counseling issues related to this population; provides practice of techniques and strategies with emphasis on supervised practice sessions. Prerequisite: COUN 525 Principles of Counseling; COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling.

COUN 549. Internship in School Counselin. (6 Credits)
Provides supervised internship practice of at least 200 hours in a clinical field counseling placement setting similar to the setting in which the Counseling Candidate may eventually work. Skills and practice build on previous practicum experiences. The clinical field hours include a minimum of: 80 hours of face to face counseling, 10 hours of individual on-site supervision, and 10 hours of individual/group off site (faculty) supervision. Prerequisites: Degree candidacy, completion of practicum course requirements, completion of 42 semester hours towards degree must include 36 semester hours of 12 Core Program Course requirements and 3 semester hours of 1 perquisite core course.

COUN 550. Research Design Meth & Eval. (3 Credits)
Candidates will learn quantitative, qualitative and mixed research designs and methods used in counseling research and program evaluation. Instruction will focus on statistical analyses and use of data in counseling. The candidates will understand the importance of research in advancing the counseling profession, including how to interpret and critique research to inform counseling practice. The course will also include identification of evidence-based counseling practices, conducting a needs assessment, and developing and evaluating outcome measures for counseling programs.

COUN 553. Multicultural Counseling. (3 Credits)
This course in multicultural counseling theories and techniques is designed to cover the issues, characteristics, and needs relevant to diverse populations as they relate to counseling. Candidates explore counseling from a multicultural perspective. Counseling candidates receive an overview of the diverse social and cultural contexts that influence counseling relationships such as culture/race/ sex/ethnicity/ gender/ SES, etc. The course includes a study of: 1) current issues and trends in a multicultural society, 2) contemporary theories of multicultural counseling, 3) personal awareness of cultural assumptions and biases, along with 4) the impact of oppression and privilege on individuals/ groups with implications for counseling.

COUN 554. Diagnosis and Treatment. (3 Credits)
This course in diagnosis and treatment of addictive disorders is designed to assist counselors in the study of the principles of diagnosis and use of current diagnostic tools, including the current edition of the Diagnostic and Statistical Manual. Emphasis is placed on: 1) contemporary theories of addictive behavior, 2) pharmacological classification of addictive substances, 3) assessment of addictive disorders, and 4) models of addiction treatment. Additionally, principles and models of biopsychosocial assessments, case conceptualization, concepts of normalcy and psychopathology leading to diagnoses and appropriate counseling plans are covered. Prerequisites: COUN 524 Ethics in Counseling, COUN 525 Principles of counseling COUN 529 Theories of Counseling; COUN 530 COUN 549 INTERNSHIP II- 6 semester hours Techniques of Counseling; COUN 536 Community /Agency Counseling.

COUN 555. Marriage and Family Systems. (3 Credits)
This course in marriage and family systems theory is designed to assist counselors in the study of family systems and dynamics by critically analyzing counseling theories and techniques. Emphasis is placed on family structure, dynamics, strategies and techniques employed in family counseling. The course includes an examination of: 1) family therapy interventions, 2) general systems theory, 3) the stages of family life-cycle development, and 4) family therapy intervention theory. Prerequisites: COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling COUN 536 Community/Agency Counseling.

COUN 556. Play Therapy. (3 Credits)
Designed to promote self-exploration and self-understanding and to help candidates: 1) learn the clinical importance of relating to and working with children through play, 2) understand the major theories of play therapy, 3) develop an awareness of the child's world as viewed by the child, 4) increase understanding of children and their behavior, 5) engender their facility in working with caregivers of child clients, and 6) develop an effective philosophy of and approach to play therapy. Additionally, this course will explore theories and techniques for fostering creativity and therapeutic change in the counseling process through the use of expressive arts, particularly visual art forms and expressive writing.

COUN 557. Classroom Mgmt/Tech Counselors. (3 Credits)
This course will focus on student learning theory, strategies for classroom management, and the use of technology to support student learning. School counselors must collaborate with essential personnel to create learning environments that promote educational equity and success for every student. It is then imperative for counselors to understand learning theories influencing student's actions and how to effectively manage the classroom.

COUN 570. Practicum/Clinical Mental Hth. (3 Credits)
The focus of this course is on experiential learning, which is an essential component of applied professional training. Candidates will complete a supervised Practicum experience at an approved community counseling site with a minimum of 150 hours, allowing them to develop their counseling skills and professional knowledge while under direct supervision. Candidates communicate their learning at the site with their colleagues and university supervisor in the Practicum course and gain additional knowledge regarding clinical practice by interacting with their colleagues and Instructor.

COUN 599. Comprehensive Examination. (0 Credits)
Counseling Candidates take an oral and written examination designed to assess their overall knowledge of course work completed in the program and their ability to apply this knowledge to designated sets of situations. This examination allows candidates to demonstrate their skill of integration of theory and course work with practical application. It must be taken during the last semesters of enrollment in the program. This course is required of all students seeking M.Ed. in Counseling. Prerequisite: Degree candidacy, completion of 45 program hours must include 36 semester hours of 12 Core Program Course requirements and 3 semester hours of 1 perquisite core course, must complete course the last semester of program study.

CSCI: Computer Science (CSCI)

CSCI 503. Introduction to Machine Learni. (3 Credits)
This course provides a broad introduction to machine learning, datamining, and statistical pattern recognition. Topics include: (i) supervised learning (parametric/non-parametric algorithms, support vector machines, kernels, neural networks). (ii) Unsupervised learning (clustering, dimensionality reduction, recommender systems, deep learning). (iii) Best practices in machine learning (bias/variance theory; innovation process in machine learning and AI).

CSCI 545. Advanced Data Communications. (3 Credits)
Topics include classification of data communication systems, developments in communication technologies, routing models and algorithms, performance analysis in data networks, and modeling and simulation of large-scale networks. Prerequisite: CSCI 445 or equivalent.

CSCI 552. Scientific Visualization. (3 Credits)
Fundamental concepts of the algorithms and design principles underlying modern 3D computer graphics, data and scientific visualization. Prerequisite: Permission of the instructor.

CSCI 553. Image Processing. (3 Credits)
Advanced topics in image processing that help students to grasp the theory of mathematically modeling images; to learn how to develop various algorithms for analysis and processing of image signals; to explore new applications of image processing into computer vision, graphics, surveillance and biomedical imaging. Prerequisite: CSCI 453 or equivalent.

CSCI 554. Operating Systems. (3 Credits)
Topics include the history and evolution of operating systems, the concepts behind and structure of various operating systems, process scheduling, inter-process communication, input and output, multli-programming, memory management and file systems. Concepts of distributed operating systems are also introduced. Prerequisite: CSCI 489 or equivalent.

CSCI 555. Information Assurance. (3 Credits)
Advanced topics in information assurance, including selections from the following: penetration testing, formal verification of systems, formal models of information flow and protection, distributed system authentication, protocol design and attack, computer viruses and malware, intrusion and anomaly detection models, multi-level security, active defenses, investigation and forensics, network firewalls, anonymity and identity, e-commerce support, and database security models and mechanisms. Prerequisite: Permission of the instructor.

CSCI 556. Advanced Database Applications. (3 Credits)
Applications of advanced database systems. Students will work on a series of projects using industry standard software. Prerequisite: CSCI 356 or equivalent.

CSCI 560. Embedded Systems. (3 Credits)
An introduction to embedded systems with emphasis on applications. Students will program a microcontroller using a complete development system. Prerequisite: CSCI 303 or equivalent.

CSCI 570. Computer Simulation. (3 Credits)
Advanced applications of discrete and continuous simulation modeling. Prerequisites: CSCI 287 or equivalent; STAT 340 or equivalent.

CSCI 588. Advanced Systems Architecture. (3 Credits)
A study of computer architecture with an emphasis on a quantitative approach to cost/performance design tradeoffs, including the fundamentals of uniprocessors and multiprocessors, scheduling, speculation, and multithreading. Prerequisite: CSCI 303 or equivalent.

CSCI 592. Advanced Algorithms. (3 Credits)
An investigation of the classification of algorithms with emphasis on design and analysis of complexity. Topics include approximation, sorting, searching, optimization, randomize algorithms, and NP completeness. Prerequisite: CSCI 392 or equivalent.

CSCI 600. Thesis I. (3 Credits)
Research on a thesis that represents an original contribution with publishable results. Prerequisite: Permission of the chair of the graduate committee.

CSCI 601. Thesis II. (3 Credits)
Research on a thesis that represents an original contribution with publishable results. A student shall not receive credit for CSCI 601 until the graduate committee approves the draft copy of the thesis. Prerequisite: CSCI 600 Thesis I.

CSCI 602. Adv Artificial Intelligence. (3 Credits)
Topics include Machine Learning, Knowledge Representation and Discovery, Neural and Evolutionary Computation, and Intelligent Agents and Multi-Agent Systems. Prerequisite: CSCI 402 or equivalent.

CSCI 605. Master Project. (4 Credits)
A master's project should include the introduction of new software tools, a novel capability using existing technology, or a novel survey of an area, or require substantial scientific computation. A report must be submitted and approved by the graduate committee. Prerequisite: Permission of the chair of the graduate committee.

CSCI 610. Graduate Seminar I. (1 Credit)
Students present their work for their master's project or thesis. Prerequisite: Permission of the chair of the graduate committee.

CSCI 611. Graduate Seminar II. (1 Credit)
Students present their work for their master's project or thesis. Prerequisite: Permission of the chair of the graduate committee.

CSCI 640. Special Topics in Computer Sci. (3 Credits)
An introduction to a special topic with applications. Students will work on a series of projects using current technology. This course may be repeated for additional credit provided the topic is substantially different than any prior course including transferred credit. Prerequisite: Permission of the instructor.

CSCI 641. Special Topics in Computer Sci. (3 Credits)
An introduction to a special topic with applications. Students will work on a series of projects using current technology. This course may be repeated for additional credit provided the topic is substantially different than any prior course including transferred credit. Prerequisite: Permission of the instructor.

CSCI 642. Special Topics in Computer Sci. (3 Credits)
An introduction to a special topic with applications. Students will work on a series of projects using current technology. This course may be repeated for additional credit provided the topic is substantially different than any prior course including transferred credit. Prerequisite: Permission of the instructor.

CSCI 643. Special Topics in Computer Sci. (3 Credits)
An introduction to a special topic with applications. Students will work on a series of projects using current technology. This course may be repeated for additional credit provided the topic is substantially different than any prior course including transferred credit. Prerequisite: Permission of the instructor.

CSCI 647. Wireless Networks & Mobile Cmp. (3 Credits)
Fundamentals of wireless networks and mobile computing, protocols, quality of service in wireless networks, and applications in wireless and mobile networks including distributed applications, middleware, mobile transactions, mobile multimedia, and remote execution. Prerequisite: CSCI 445 or equivalent;

CSCI 660. Automata and Formal Language. (3 Credits)
The study of three mutually related topics: Languages, machines, and computability. Key topics include regular languages, finite automata, determinism and non-determinism in finite automata, pattern matching, context-free languages, push-down automata, Turing machines, resource-bounded computation. Prerequisite: CSCI 460 or equivalent.

CSCI 670. Computer Security. (3 Credits)
Key concepts and algorithms involved in cryptography and computer security. Includes intrusion detection, firewalls, and digital signatures. Prerequisite: CSCI 358 or equivalent.

CSCI 680. Algorithmic Graph Theory. (3 Credits)
Investigate a variety of graph algorithms, both sequential and parallel, known to have applications to such areas as scheduling, robotics, computational geometry, VLSI design, and pattern recognition. The students will learn graph algorithms both sequential and parallel in a hybrid. Prerequisite: MATH 490 or equivalent.

CSCI 682. Computer Modeling & Animation. (3 Credits)
Applications of 3D computer graphics including modeling, transformations, and animation. Students will work on a series of projects using industry standard software. Prerequisite: CSCI 480 or equivalent.

CSCI 685. Software Engineering. (3 Credits)
This course covers software engineering tools, models/methodologies, use case analysis, user interface design, estimation and scheduling, and software maintenance. It also covers software requirements analysis and specification, software design, software testing, software post-delivery maintenance, software verification, validation, and documentation. Prerequisite: CSCI 487 or equivalent.

CSCI 687. Advanced Software Development. (3 Credits)
The purpose of this course is to provide a basic concepts and principles of the software life cycle with emphasis on software design, development, and implementation. It also examines current issues in software development, software architectures, requirements specification, Quality control and metrics, and software project management. Some of the industry life-cycle models are presented, with examples of their use. Prerequisite: CSCI 487 or equivalent.

CSCI 689. Software Quality Assurance. (3 Credits)
This course covers a variety of topics related to software quality assurance including: activities performed by external participants, activities to project schedules and budget control, risk management, and costs associated with SQA. It also focuses on the methods and techniques in software testing and quality assurance. Prerequisite: CSCI 685.

CSCI 693. Parallel Algorithms. (3 Credits)
An introduction to parallel programming with emphasis on models and algorithms. Topics include communication complexity, tree balancing, partitioning and tree contraction, parallel version of graph, parallel sorting and searching, Omega and Batcher networks. Students are expected to be able to solve problems using different programming paradigms. Prerequisite: CSCI 592.

CSCI 694. Algorithms for VLSI. (3 Credits)
Design and analysis of algorithms for design of VLSI circuits, VLSI test and simulation. Prerequisite: CSCI 303 or equivalent.

CSCI 695. Data Mining. (3 Credits)
A study of knowledge discovery from data with emphasis on theory and application. Topics include data mining techniques such as clustering, classification and association rules, applications such as decision support and failure analysis, and case studies from domains such as engineering. Prerequisites: CSCI 592 and CSCI 356 or equivalent.

DAAN: Data Analytics

DAAN 500. Advanced Prog. for Data Analyt. (3 Credits)
This course delves into advanced topics such as algorithm optimization, parallel processing, and distributed computing, providing students with a robust skill set to handle vast datasets efficiently. Through hands-on projects and real-world applications, students will gain expertise in implementing data structures, designing scalable algorithms, and harnessing the power of frameworks like Apache Spark. The curriculum also covers best practices in code optimization, debugging, and version control, ensuring students graduate with a deep understanding of advanced programming techniques tailored for the demands of modern data analytics using Python and PANDAS.

DAAN 510. Data Analytics I. (3 Credits)
This course is a foundational course designed to provide students with a comprehensive introduction to the fundamental principles and techniques of data analytics. This course aims to develop essential skills for navigating the data landscape, including data collection, cleaning, and exploration. Students will be introduced to popular data analytics tools (e.g., Tableau and Power BI) and programming languages (e.g., Python and R), gaining hands-on experience in manipulating and analyzing real-world datasets. Through a combination of theoretical concepts and practical applications, participants will learn to derive meaningful insights from data, communicate findings effectively, and make data-driven decisions. The course sets the stage for a deeper understanding of data analytics, laying the groundwork for more advanced studies in this rapidly evolving field.

DAAN 511. Data Analytics II. (3 Credits)
This course builds upon the foundational concepts introduced in DAAN 510, delving deeper into the multifaceted world of data analysis. This course equips students with advanced skills in data manipulation, exploration, and visualization, emphasizing the practical application of statistical methods and tools such as SPSS, SAS and R. Through hands-on exercises and real-world case studies, students refine their proficiency in data wrangling, employing programming tools to extract valuable insights from diverse datasets. Topics include regression analysis, hypothesis testing, and machine learning fundamentals, providing a comprehensive understanding of how data-driven decisions are made. By the end of the course, students will possess a robust skill set to tackle complex analytical challenges and contribute meaningfully to data-driven decision.

DAAN 520. Advanced Info Visualization. (3 Credits)
This course is designed to deepen students' understanding of cutting-edge techniques and tools in visualizing complex datasets. Student will learn sophisticated visualization technologies, including interactive dashboards, virtual reality, and augmented reality applications, fostering the development of skills essential for effectively communicating insights derived from diverse datasets. Through hands-on projects and case studies, participants will gain proficiency in designing visually compelling representations that enhance data comprehension and decision-making. This course equips students with the expertise needed to address the challenges of presenting information in diverse domains, empowering them to create impactful visualizations that transcend traditional boundaries.

DAAN 530. Ethics in Data Analytics. (3 Credits)
This course explores the ethical considerations and challenges inherent in the rapidly evolving field of data analytics. This course delves into the responsible use of data, addressing issues such as privacy, bias, and transparency. Students will examine real-world case studies to understand the ethical dilemmas faced by data analysts and developed a comprehensive understanding of the social and moral implications of data-driven decision-making. Emphasizing a multidisciplinary approach, the course encourages critical thinking and thoughtful reflection on the ethical dimensions of collecting, analyzing, and interpreting data. Students will engage in discussions on industry standards, legal frameworks, and emerging ethical guidelines, fostering a heightened awareness of the ethical responsibilities associated with harnessing the power of data in today's interconnected world.

DAAN 545. Big Data Analytics. (3 Credits)
This course introduces students to the dynamic field of Big Data Analytics, providing a comprehensive overview of the principles, techniques, and tools essential for extracting valuable insights from large and complex datasets. Emphasizing both theoretical foundations and practical applications, students will delve into the fundamentals of data preprocessing, storage, and retrieval, exploring cutting-edge technologies such as Hadoop and Spark.

DAAN 560. Sport Data Analytics. (3 Credits)
This course provides students with a comprehensive understanding of the application of data analytics in sports. It explores the vast amount of data available in both traditional sports and eSports. By learning to extract valuable insights and make data-driven decisions, students can enhance performance, strategize effectively, and gain a competitive edge. Students will learn the fundamental concepts and techniques of data analytics and their specific application in sports. Additionally, they will gain hands-on experience with various tools and technologies used for data collection, management, analysis, and visualization in the sports industry.

DAAN 562. Financial Analytics. (3 Credits)
Financial Analytics provides students with a comprehensive understanding of the application of data analytics in the field of finance. This in-depth course equips students with the knowledge and skills required to leverage data analytics techniques. The course explores the application of analytical tools and methodologies to extract insights, identify patterns, and make informed decisions in financial domains such as investment management, risk assessment, and financial planning. Students will gain a deep understanding of financial concepts and learn how to apply data analytics techniques to analyze financial data, interpret trends, and make strategic recommendations. They will also develop proficiency in using industry-standard software and tools to manipulate, visualize, and analyze financial data.

DAAN 600. Thesis. (3 Credits)
Research on a thesis that represents an original contribution with publishable results.

DAAN 601. Thesis II. (3 Credits)
Research on a thesis that represents an original contribution with publishable results. A student shall not receive credit for DAEG 601 until the graduate committee approves the draft copy of the thesis.

DAAN 605. Graduate Data Analytics Projec. (3 Credits)
A master's project should include an introduction of new software tools, a novel capability using existing technology, or a novel survey of an area, or require substantial scientific computation. A report must be submitted and approved by the graduate committee.

DAAN 640. Spec.Topics in Data Analytics. (3 Credits)
An introduction to a special topic with applications. Students will work on a series of projects using current technology. This course may be repeated for additional credit provided the topic is substantially different than any prior course including transferred credit.

ECON: Economics and Finance (ECON)

ECON 500. Graduate Principles of Econ. (3 Credits)
Survey of Principles of Economics, including essential elements of microeconomics and macroeconomics. This course is only for graduate students who need exposure in Economics and may be used in the graduate education curriculum. It may not be used for credit toward the graduate degree Program in Economics.

ECON 510. Advanced Microeconomics. (3 Credits)
Foundations of price theory. A rigorous study of the allocating function of prices in our economy. Models and case studies of consumer behavior, product demand, production, costs, the firm in various market structures, factor employment, and factor income distribution. Welfare implications of the theory are examined. Prerequisite: ECON 210: Principles of Microeconomics.

ECON 511. Industrial Organizations. (3 Credits)
Study of the structure and operation of American industry. Topics covered: pricing and output decisions of firms under different market structures; determinants of market structure; theories of oligopoly and monopolistic competition. Empirical findings on structure and performance of markets examined. Prerequisite: ECON 210.

ECON 512. Economics Of Regulation. (3 Credits)
A systematic and critical analysis of the impact of the regulatory process upon the transportation and public utility industries with special attention to capital requirements, resource utilization, and pricing processes. Prerequisite: ECON 210.

ECON 513. Managerial Economics. (3 Credits)
Applications of economics method to planning and decision-making of the firm. Topics include methods of maximizing profits, costs, market structure, forecasting, and pricing. Case studies used. Prerequisite: Intermediate Microeconomics or permission of instructor.

ECON 520. Advanced Macroeconomics. (3 Credits)
Foundations of aggregate income determination. Labor and product-market structures and monetary and fiscal policies are examined as to their impact on aggregate output, the price level, and interest rates. Prerequisites: ECON 210, ECON 211 or ECON 500.

ECON 521. Monetary Economics. (3 Credits)
Monetary theory, policy, and banking institutions examined. Effectiveness and channels of monetary policy assessed along with implications for bank lending policies. Prerequisites: ECON210, ECON 211 or ECON 500.

ECON 523. Public Finance. (3 Credits)
Study of government receipts and expenditures. Emphasis is placed on methods of evaluation (benefit-cost), administration (bureaucracy control), and organization (centralization vs. decentralization) of the public sector with special reference to their application in practice. Prerequisite: ECON 510 or consent of instructor.

ECON 524. Public Administration Theory. (3 Credits)
Presents the basic principles, concepts and scope of the Public Administration professional field. It examines the basic contemporary literature, administrative models, intellectual approaches, and pragmatic developments within the field of Public Administration. These are considered in the light of the important issues and problems related to management, decision making, organizational structure and implementation of public policy.

ECON 525. Personnel Administration. (3 Credits)
Examination of the concepts, principles, and techniques applied by professional practitioners in the public sector. Applications of the behavioral sciences to personnel management in both the private and public sectors are analyzed. Opportunities are afforded to explore developments in employee relations and unionism in the public sector.

ECON 526. Public Policy Process Evaluati. (3 Credits)
The course examines the public policy process and provides a theoretical and practical rationale of the rigorous evaluations of socioeconomic problems. Topics to be discussed will include experimental and quasi-experimental design, research designs, internal and external validity, utilization of evaluation policy-making, and the political and environmental context of evaluation.

ECON 530. Quantitative Methods. (3 Credits)
Application of statistical and mathematical methods to the estimation of economic relations. Regression analysis is developed as a framework for hypothesis testing, economic forecasts, and econometric simulations. Use of statistical computer software is presented in the course. Prerequisite: 3 semester hours of Introductory Statistics.

ECON 531. Advanced Econometrics. (3 Credits)
Study of advanced econometric methods, problems, and models. Prerequisite: ECON 530 or consent of instructor.

ECON 535. Organizational Behavior. (3 Credits)
An examination of human behavior in public organizations with a focus on the manager's role and strategies used for administering more effectively. Topics studied include individual behavior and motivation, interpersonal and group behavior, leadership and power, and organizational change and development. Prerequisite: ECON 510 or Instructor's consent.

ECON 536. Public Sector Budgeting. (3 Credits)
An analysis of how governments obtain and utilize financial resources. Issues discussed will include budget cycles, budgetary theories, and concepts such as efficiency, equity, and accountability, as well as political, economic and social influences on the budgetary process.

ECON 538. Financial Economics. (3 Credits)
Study of concepts, practices, and problems in managing financial decision making of firms. Attention is given to working capital management, capital budgeting, capital structure planning, and dividend policy. Concepts related to the topics include risk management, time value of money, stock and bond valuation, efficient markets, exchange rate theory, agency problems, and ethical dilemmas. Prerequisite: ECON 520.

ECON 540. Labor Economic. (3 Credits)
An analysis of the supply and demand for labor, the allocation of labor resources, the structure of employment and the determination of wages. The development of the American labor movement and the process of collective bargaining are studied as they affect employment and earnings. Prerequisite: ECON 510 or Instructor's consent.

ECON 542. Population Economic. (3 Credits)
Economic determinants and effects of population growth and age structure from developed and less developed countries. Special attention is given to the implication of population growth for economic development and public policy. Prerequisite: Prior or concurrent enrollment in ECON 520 or consent of instructor.

ECON 550. Development Economics. (3 Credits)
Theories, programs, and strategies of economic development as applied to economies that are preindustrial or in early stages of industrialization. Analysis of factors deterring economic expansion and of policies for continuous growth. Theories of economic underdevelopment are studied and tested wherever possible. Prerequisite: Prior or concurrent enrollment in ECON 520 or consent of instructor.

ECON 551. International Economics. (3 Credits)
The theory of international values, comparative advantage, and the gains from trade; alternative routes to adjustment in the balance of payments, capital movements. Prerequisite: Consent of instructor.

ECON 570. History Of Economic Thought. (3 Credits)
Surveys historical contributions to the advancement of economic analysis, knowledge, and thought including the Physiocratic, Classical, Marginalist, Socialist, Neoclassical, Institutionalist, and contemporary schools of thought. Prerequisite: ECON 210.

ECON 580. Readings In Economics. (3 Credits)
Independent supervised study in areas of particular interest to supplement course requirements. Prerequisite: ECON 210.

ECON 581. Special Topics In Economics. (3 Credits)
A course allowing students to study topics of special interest which are not available as regular courses. The special topic is selected by the instructor and will be reported on the student's transcript. Prerequisite: ECON 210.

ECON 582. Seminar In Public Administrati. (3 Credits)
A seminar designed to study the development and process of policy making at the local, state, and national level. The emphasis in this course is on problem solving an individual research. Each student is required to identify a problem area and prepare a research paper for class discussion in which a solution to the problem is proposed and analyzed. Prerequisite: Consent of instructor.

ECON 585. Internship Public Administrati. (3 Credits)
Provides an opportunity for a supervised internship placement at a government or service agency. The purpose is to provide practical experience, test academic models, participate in intergroup experiences, and to develop professional management skills. This course is designed to provide students with operational perspectives relating to agency functions in the delivery of human services. Prerequisite: Consent of instructor.

ECON 590. Research Methodology. (3 Credits)
Hypothesis formulation and verification examined in areas of research interest. A proposal is presented. Prerequisites: ECON 510, ECON 530.

ECON 598. Comprehensive Examination. (0 Credits)
This course is to be taken by students in the Master of Economics program during the semester that they are eligible and plan to take the required comprehensive examination. Prerequisites: (a) admission to candidacy by the College of Graduate Studies, (b) 30 semester hours of complete approved coursework including ECON 510, 520, 530, and 590, and enrollment in remaining course work, and (c) approval by the candidate's faculty advisor to apply for the examination.

ECON 599. Thesis. (3-6 Credits)
Research of a scholarly nature in the student's area of interest. The thesis must include a survey of existing literature as well as the student's own findings. The thesis is designed to teach organization of research in the application of research and the application of economic principles to economic problems. Prerequisite: Admission to candidacy by the Graduate School and completion of ECON 590.

EDAS: Educational Leadership (EDAS)

EDAS 500. Leadership Theories & Practice. (3 Credits)
Candidates will investigate leadership theories and practices. An exploration of organizational structure and problem solving to include historical and modern day approaches to leadership.

EDAS 501. Organizational Behavior. (3 Credits)
An understanding of human behavior within organizations. Candidates will study motivational theories, team management and coaching techniques as it relates to successful leadership within an organization.

EDAS 502. Organizational Communication. (3 Credits)
An in-depth study and practice of communication within organizations and major theories of organizational communication. Candidates will practice extensively written and oral communication practices.

EDAS 503. Org'l Change: Change Impl & St. (3 Credits)
A proactive study of managing change and the organizational and human issues that accompany change. Topics include theories of change, resistance to change, and becoming agents of change.

EDAS 504. Action Research for Organizati. (3 Credits)
An overview of the role of action research in communities and organizations. Candidates will examine the history and theory of action research. Candidates will be engaged in the action research process.

EDAS 505. Capstone/Comp Exams. (3 Credits)

EDAS 506. Critical Issues Seminar. (3 Credits)
An examination of the historical and contemporary leadership issues related to the cognate of study. Through critical analysis of assigned reading and class discussions, candidates will demonstrate an understanding of leadership and its influences.

EDAS 507. Child, Family & Community. (3 Credits)
A study of the knowledge, skills, and attitudes needed in the development of the preschool child. An investigation of the historical attitudes of family and children as well as the cultural and political factors that impact child care and preschool programs.

EDAS 508. Advocacy & Social Justice. (3 Credits)
A study of the various theories of social justice and an examination of their roots. Candidates will explore opportunities to make a difference in social justice issues.

EDAS 510. Stat & Pred Analytic Ed Leader. (3 Credits)
This course will allow candidates to demonstrate knowledge and skills necessary to use Statistical Data Procedures to create models to assist them in decision-making leading to school improvement. This course develops expertise in a standard set of statistical and graphical techniques, which will be useful in analyzing school-related data. The principles of data-based decision making and their applications in educational settings will be explored.

EDAS 513. Action Research for Educ Ldrs. (3 Credits)
EDAS 513 Action Research for Educational Leaders- 3 Semester hours
This course will assist candidates with the development of knowledge and skills required to utilize Action Research as a tool to make effective curricular and instructional decisions both school-wide and at the classroom level. Their Action Research Project; based within a Social Justice Framework; will seek to address educational challenges by utilizing Change Leadership and implementing a Continuous School Improvement plan of action. The course is designed to prepare practitioners to conduct high quality research using various approaches; including, qualitative, quantitative, single-case design, and mixed methods to complete research to solve educational challenges.

EDAS 520. Foundations of Educ Leadership. (3 Credits)
This course will allow candidates to explore and develop foundational skills to become Culturally Responsive leaders and learn strategies to rectify race, class, and gender inequities that exist throughout educational systems. The course will introduce strategies to provide the tools that children, adults, families and communities need when confronting the devastating effects of Trauma. Candidates utilize trauma informed training to recognize the signs and symptoms of trauma in students, families, staff, and others and respond by fully integrating knowledge about trauma into school policies, procedures, and practices.

EDAS 530. Leadership for Spec Population. (3 Credits)
This course allows the candidate to develop leadership functions that support processes, instructional decisions, and implementation of educational modifications necessary to accommodate and meet the unique needs of Special Populations in schools such as students identified under Special Education, ADA-Section 504, and ELL protections, etc. It proposes that effective leadership for all special student populations involves particular knowledge and requires a strong equity orientation.

EDAS 579. Capstone/E-Portfolio. (3 Credits)
This course is a capstone seminar for EDAS master candidates during the final semester of enrollment. It provides synthesis, integration, and application of prior coursework on educational administration and supervision; specifically, instructional and organizational leadership, systems thinking and school improvement processes. Preparation for comprehensive exams and the SLLA are keys to this course. Prerequisite: Completion of all required coursework. To be completed in final semester of enrollment.

EDAS 583. Legal & Ethical Iss for Sch Le. (3 Credits)
This course is an introduction to school law that deals primarily with laws relating to elementary and secondary public schools in the United States and addresses non-public schools only inasmuch as they are affected by general status. The course is flexible and may meet the needs of students of educational administration, public school administrators, teachers or laymen who are concerned with current readings and implications of school law.

EDAS 584. Curriculum Development. (3 Credits)
This course provides a study of the fundamental aspects of school curriculum development and the basic issues underlying curriculum planning. Four significant aspects are educational directions, ordering potential experiences, patterns of curriculum organization, and the determination of principles and procedures by which change in the curriculum can be made, evaluated and sustained.

EDAS 587. School Plant Management. (3 Credits)
This course provides a study of educational facility sites and the design of buildings to assure maximum accommodation of modern education programs. The course will focus on educational specifications, building, planning, constructing, school plant management and maintenance. Current regulations pertaining to the ingress and egress of the handicapped will be considered.

EDAS 588. School Finance. (3 Credits)
This course provides theoretical and contemporary bases for the acquisition and distribution of local, state and federal funds for the support of education. Problems and issues of financial support for schools will be analyzed in terms of developing alternatives for obtaining resources.

EDAS 589. School Community Relations. (3 Credits)
This course provides for the study of the place and function of the school in American social life and investigation of community agencies and institutions, including those concerned with drugs and behaviors, which may be utilized in the interpretation of the school to the community.

EDAS 590. Introduction Organ & Adm. (3 Credits)
Course focusing upon a description of modern practices in organizing and administering schools and other educational agencies; types of agencies and schools, selection and assignment of personnel, programs of study, records, management of physical facilities, pupil personnel guidance, retention and improvement of staff communication within the school and the public. The study of major administrative theories and the impact of management, leadership, and decision-making for school administrators will be addressed. Systems approach to designing and managing quality/high performing educational organizations with emphasis on systems theory, system dynamics and systems modeling.

EDAS 591. Instructional Leadership. (3 Credits)
Examines processes of instructional leadership in schools. Primary focus on developing school leadership skills necessary to provide a positive working environment through collaboration and team-building, as well as professional opportunities including supervision and evaluation of curriculum & instruction. Focus will be on best practices that lead to school cultures, which build communities of learning. Appropriate field-based project relating theory to practice will be required. Prerequisite: EDAS 593 Leadership Assessment & Development; EDUC 513 Educational Research.

EDAS 592. Human Resource & Fiscal Mgmt. (3 Credits)
A study of theories and policies related to resource projection and management in schools and school divisions. Finance topics include budget, purchasing and accounting, and procedures for obtaining equipment and materials. Human resource topics include staffing requirements, hiring, evaluation and dismissal procedures, and staff-personnel relationships. Appropriate field-based project relating theory to practice will be required. Prerequisite: EDAS 590 Introduction to Organization and Administration.

EDAS 593. Leadership Assess & Developmen. (3 Credits)
This course of study focuses on the school administrator as manager and leader. The assessment portion of this class will require candidates to participate in self-examination of their leadership skills and abilities. Based on simulation activities and practices, candidate will learn strategies for continuous self-development, growth and personal awareness. In addition, candidates will consider the role of school manager and address issues such as safety and educational facilities.

EDAS 594. Data Driven Leadership. (3 Credits)
This course focuses on the candidate as a school leader in school improvement. Candidates will explore the role in making effective decisions using data regarding instruction, finances, administration and school improvement. In addition, an in-depth study of the change process in relation to decision making as well as how to provide leadership in a diverse and political environment Prerequisite: EDAS 593 Leadership Assessment & Development; EDAS 591 Instructional Leadership; STAT 510 Statistical Procedures in Education.

EDAS 679. Internship. (3 Credits)
This course consists of laboratory experiences designed to acquaint educational leaders with the mechanics of leadership, as well as their role in helping other personnel under their leadership to function effectively in today's educational climate. Prerequisite: Candidate must have advanced to candidacy and have prior approval from advisor to enroll in the internship.

EDAS 700. Hist/Philo Foundations of Educ. (3 Credits)
This course guides inquiry into the historical, philosophical, cultural, educational and social context of schools in our diverse society. It also provides candidates with a broad, interdisciplinary prospectus on educational and social issues to guide reflective, professional practice.

EDAS 701. Culturally Responsive Pedagogy. (3 Credits)
This course addresses the origin, concepts, principles, and trends of multicultural education, equity, and the conceptual framework of cultural diversity in relation to education. Topics will include concepts that facilitators of learning will need in order to skillfully and effectively teach in a multicultural setting. Discussions will focus on explication of the concepts and development of strategies for conflict resolution and situational leadership, thus enabling candidates to become better decision makers and change agents.

EDAS 703. Planning & Management Finance. (3 Credits)
This course provides a study of historical development, design, and management of systems of financing public education. Topics studied include fiscal planning, sources of revenue, state and local systems of school finance, building level financial management, budget development, and administration and federal participation in educational funding. Special emphasis is given to the Virginia system of funding public education and to contemporary issues in school finance.

EDAS 704. Human Resources Management. (3 Credits)
This course provides a study of personnel services for educational and public agency administrators. Selected retention, selection, induction, compensation, and evaluation are discussed.

EDAS 705. School Law & Policy Studies. (3 Credits)
This course provides an in-depth examination of the theoretical and conceptual bases of politics and public policy in education and their relationship to the successful practice of educational administration. This course will also focus on legal issues and professional ethics of particular concern to education policy makers and central office school administrators. Federal and Virginia school law will be included with attention given both to theoretical and practical concerns.

EDAS 706. School, Comm, Public Rela Ed. (3 Credits)
This course focuses on the principles, knowledge, and skills related to effective interpersonal and public relations in educational organizations. Special emphasis is given to the study of communication theory and practice, the social ecology of organizations, conflict and crisis management, community relations, strategic marketing in educational organizations, and legal and ethical considerations.

EDAS 707. Adm & Instructional Leadership. (3 Credits)
This course is designed to analyze the relationship between administrative theory and practice by utilizing the literature and organizational theory and administrative behavior, and by applying the concept to administrative practice in educational settings. This course also focuses on curriculum and instruction, master theories, design implementation, and evaluation. Case studies and simulations that enhance change will be included. Equal emphasis will be placed on personal assessment and evaluation of leadership competencies. Provisions will be made for skill development and improvement.

EDAS 720. Research in Practice I. (3 Credits)
This foundational course introduces doctoral candidates to practice-based research and improvement science in educational leadership. Candidates develop skills in systematic literature review, theoretical framework construction, and scholarly writing. The course also emphasizes critical analysis of research literature and APA formatting. Through examining implementation science and its applications in educational settings, candidates learn to bridge the gap between research and practice.

EDAS 721. Research in Practice II. (3 Credits)
This course introduces candidates to advanced research, design and evaluation methodology. Candidates will develop an in-depth understanding of experimental and non-experimental research designs used in qualitative and quantitative research as well as the uses and limitations of these designs. Survey research design and program evaluation will also be explored.

EDAS 722. Qualitative Research. (3 Credits)
This course is designed to study qualitative research from different theoretical and methodological approaches. It is designed to assist the educational leader in becoming a more effective facilitator of learning through knowing how to conduct research without formal hypotheses, allowing the hypotheses to evolve over time as events unfold. The researcher begins without preconceived ideas about what will be observed and describes behavior that seems important.

EDAS 723. Quantitative Research. (3 Credits)
This course provides administrators with the knowledge of the methods and analytical approaches in educational research that will aid in dealing with school restructuring. Measurement, design, and analysis procedures that are the most useful for dealing with a changing school system will be presented. An integrated approach to statistics and educational research will provide the student with an awareness of the interrelations and interdependencies among the statistics and research procedures presented.

EDAS 730. Leadership Internship. (3-12 Credits)
The leadership internship/seminar is designed to provide in-depth experiences with senior and experienced school administrators at the superintendent's level. A mentor relationship will be developed to assist the potential leader in analyzing complex practices and procedures related to school system-wide functions. Monthly seminar sessions will be held at various school systems or the University in order to provide an opportunity for students placed in different educational environments to discuss identified problems, practices and procedures. This course is limited to doctoral students. The advanced educational leadership internship will be a year-long educational experience that will provide an opportunity for students to engage in a series of clinical experiences. An individualized plan will be developed as a team by the student, the faculty advisor, and the supervisor in the participating school division. These experiences will be based on the experiences, background, needs, and professional goals of the student.

EDAS 732. Mixed Methods Design & Proc. (3 Credits)
This course provides students an advanced understanding of mixed methods research applied to educational problems of practice with an emphasis on social justice and equity. Course topics focus on developing research questions suited to in-depth mixed methods inquiry of educational issues, sampling adequately from vulnerable or hard-to-reach populations, employing rigorous quantitative and qualitative procedures tailored to community collaboration, integrating textual and numeric data to provide a more complete understanding of marginality and exclusion, addressing validity threats unique to educational mixed methods, and reporting compelling mixed methods findings to inform policy and practice.

EDAS 733. Advanced Qualitative Methods. (3 Credits)
This course builds expertise in rigorous qualitative approaches investigating complex educational and social issues, emphasizing marginalized perspectives. Through an applied project, students strengthen skills in: conceptualizing from critical paradigms; crafting research questions giving voice; principle-based sampling of hard-to-reach groups; innovative methodological applications; and ethical reporting of sensitive data.

EDAS 735. Teaching in Higher Education. (3 Credits)
This course provides professional development for doctoral students interested in pursuing faculty careers. Students will gain exposure to the range of faculty responsibilities across different types of higher education institutions, expand their understanding of effective teaching approaches and learning assessment, and develop skills related to service and shared governance.

EDAS 736. Evaluation & Grant Writing. (3 Credits)
This graduate-level course focuses on two essential skills for educational administrators: program evaluation and grant writing. Students will learn to design and implement comprehensive program evaluations to assess the effectiveness of educational initiatives. The course covers various evaluation methodologies, data collection techniques, and analysis methods. Additionally, students will develop proficiency in grant writing, including identifying funding opportunities, crafting compelling proposals, and aligning projects with funders' priorities. Through hands-on projects and case studies, participants will gain practical experience in both evaluation and grant writing, preparing them to secure resources and demonstrate program impact in educational settings.

EDAS 739. Dissertation Sem/Capstone Proj. (3 Credits)
This seminar offers students a collaborative setting for exploring a topic area, refining their research questions and beginning the process of constructing a coherent research proposal for the Dissertation or the Capstone Project. This is an introduction to research in leadership that is designed to help students to think like researchers and analysts, to effectively search all relevant information sources (both print and non-print), to read and critique research, and to provide opportunities for "hands-on" research practice. Successful completion of the seminar includes the submission of a written Project Proposal for completing the Dissertation or Capstone Project.

EDAS 740. Dissertation/Capstone Project. (3-6 Credits)
Doctor of Education candidates have the option of completing a Dissertation or a Capstone as the final culminating product leading to program completion. Dissertation: This is a formal research investigation related to current educational problems that will allow the researcher to build upon the body of established knowledge reflected in the literature. The dissertation process serves to bring together all of the experiences in which students have engaged during the entire program. The dissertation culminates the theoretical and practical research experiences of the candidates. The applications of theory and research to solve. Capstone: A self-directed experiential project through which students apply what they are learning to solving some real educational problems or dealing with emerging challenges in the educational settings. Doctoral students are expected to demonstrate their understanding of leadership theories and models by integrating theories/research with practices. Student synthesize and apply skills and content from across the leadership curriculum and their primary academic discipline to research, design, critique alternatives, propose a solution, and effect change in a leadership challenge or community problem needing leadership. Students identify a personally meaningful real world problem and lead positive change to address that problem. Capstone Projects Process Identifying a Problem of Practice Gather relevant Data Interpret Data Design a Plan of Action Evaluate Results .

EDAS 790. Intro to MSI in Higher Ed. (3 Credits)
In broad strokes, this course examines the origins, contemporary landscape, structures, and stakeholders in Minority-Serving Institutions (MSIs)—Historically Black Colleges and Universities, Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), and Asian American Native American Pacific Islander Institutions (AANAPIs)—and the challenges and opportunities for research and practice in MSIs. The course will explore the values/mission, characteristics and issues related to MSIs as is specific to each institution type or designation (e.g., HBCU, TCU). On a larger scale, the course seeks to examine the emergence of the use of MSI as a Federal designation in higher education and consider the impact that may have at the institutional level with respect to students, faculty, and staff as it relates to campus climate, student learning, and engagement.

EDAS 791. MSI Admin & Org. of Higher Ed. (3 Credits)
This course provides supervised opportunities for experiences within MSI higher education administration. The course will engage in an in-depth examination looking at the duality between the university academic administration and university operational administration structure within the context of MSI university missions. The course will also examine strategic planning in the context of moving MSI Higher Ed. organizations forward.

EDAS 792. Higher Ed Law & Public Policy. (3 Credits)
This course examines legal issues relevant to American colleges and universities to provide students with the fundamental knowledge of higher education law for administrators. This course will examine the origin and evolution of the laws and policies that govern race, gender, national origin and sexual orientation in the United States. The course will commence with a consideration of the legal status of groups under state and federal law. It will explore the impact of the post-civil war constitutional amendments on the legal status of groups during the Reconstruction Era. Subsequent developments, from the establishment of state-sponsored segregation at the end of the 19th century, through the enactment of the civil rights legislation of the 1960s will be analyzed. The final weeks of the course will focus on contemporary civil rights issues including, among others, school desegregation, affirmative action, voting rights, criminal justice and fair housing. The course will examine emerging and consider the implications of the Supreme Court's current approach to civil rights issues.

EDAS 793. Equity-Centered Change LDR. (3 Credits)
This course is designed to provide advanced exposure to current research and practice in leading for equity and inclusion within professional educational settings. This course is geared toward deepening students' understanding of the challenges, the techniques, and the burdens associated with initiating and implementing major change in an organization. Throughout the course, the objective will be to prepare students to meet the challenges of organizational change successfully with a strong conceptual foundation in leadership theories that enhance equity in terms of access, student outcomes, and institutional culture, There's an emphasis on application of leadership approaches to real world administrative settings in educational and human service contexts. The course is practice-oriented and utilizes class discussion, personal reflections, and case studies in leadership to prepare students for taking actions in their own practice that promote equity and inclusion.

EDAS 794. Inst'l Assmt. Accred. & Eff.. (3 Credits)
The purpose of this course is to introduce the concept of institutional effectiveness which focuses on an institution's ability to use planning strategies and evaluation information to assess current performance and plan for improvements. The design and appropriate implementation of assessment evaluations methods as they relate to addressing various accreditation standards will be examined. The course will explore assessment programs and research that informs planning and results in measurable improvements for students. The course will also explore how assessment can be used to align programs with the goals and values of the institution, while satisfying accreditation requirements. This course explores assessment strategies that leaders within higher education can use to bring about continuous improvements, which align with the mission and values of the institution while simultaneously satisfying the requirements of accreditation agencies and other stakeholders.

EDUC: Education (EDUC)

EDUC 501. Foundation Of Education. (3 Credits)
This course is designed to develop an understanding of the historical, philosophical, and social foundations underlying the role, development, and organization of public education in the United States. This course outlines the legal status of teachers and students, including federal and state laws and regulations; schools as an organization/culture, and contemporary issues in education. Close attention is paid to the relationships among assessment, instruction, and monitoring student progress. * Field experiences embedded in this course show the alignment between regular and special education; how the current curriculum (SOLs) impacts student learning, and how the laws regulate learning experiences and instruction.

EDUC 502. Collaboration & Instr with LEA. (3 Credits)
This course addresses consultations, case management, collaboration with families and service personnel, curriculum and instruction at the secondary level, and transition planning and services. Topics covered include the implementation of collaborative models, the roles and responsibilities of collaborative teams, the use of effective communication with a variety of educational stakeholders, student performance evaluation; the relationship among assessment, instruction, and progress monitoring, data collection and analysis, standards-based instructional strategies and planning in secondary education, assistive technology, and service delivery options necessary for successful postsecondary transition, e.g., college readiness skills, independent living skills, career development, community resources; entitlement and eligibility for agency services such as SSI, work incentive, Medicaid.

EDUC 503. Seminar in Special Education. (3 Credits)
This course provides knowledge of historical perspectives; characteristics of children and youth with disabilities; developmental milestones; medical aspects of disabilities; the influence of the family system and cultural/environmental issues related to disabilities, the educational implications; understanding the ethical and practice of accepted behavior; an understanding and application of legal regulations and statues with regards to disabilities which include but not limited to IDEIA, § 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, the No Child Left Behind Act, etc., and the current regulations governing special education with placements and rights and privileges of parents and students. *Field Experiences are embedded in this course. Candidates in the Special Education program are responsible for participation in collaborative consultative classrooms and inclusive classrooms with students with disabilities in K-12 schools. This course gives an overview of the exceptionalities and how they fit into the regular curriculum.

EDUC 511. Guidelines Plan Conduct Curr E. (1-3 Credits)
Analyzes such topics as evaluation as it relates to research and assessment; strategies for selecting appropriate evaluation techniques; guidelines for planning evaluation studies; a comparative examination of criterion referenced, domain referenced, norm- referenced data collection and analysis procedures; and generating evaluation objectives. An emphasis will be placed on systematic needs assessment, planning, and articulated involvement within and between all groups having an impact on the curriculum.

EDUC 512. Strategies Implem Mult-Cult Ed. (1-3 Credits)
Designed to help teachers, administrators, and curriculum specialists to increase their understanding of the concept of multi-cultural education, and to gain some experiences in how to effective multi-cultural education programs in schools. Explores the implications of ethnic and cultural diversity for staff preparation, curriculum design, and classroom instruction. Specifically, the two major objectives of the course are 1) to delineate the conceptual and theoretical framework of multi-cultural and 2) to illustrate How the theory can be translated into practice through select.

EDUC 513. Educational Research. (3 Credits)
This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and pilot study) with emphasis on the following: (1) statement of the problem, (2) related studies, (3) rationale of the proposed study, (4) hypothesis writing, and (5) procedures to be used in collection and evaluation of data. The course will include some examination of significant studies in the field of education and their significance for educational practice. This course is a core course, required of all Masters candidates and should be taken after STAT 510.

EDUC 520. Technologies of Media. (3 Credits)
A variety of instructional media; such as Laser Disc, Digital imagery, Computer Assisted Instruction and personal productivity tools are presented in this course. The emphasis will be on systematically enhancing the teaching-learning process with multi-media instruction and effective computer usage. The course will focus on the basic operation of the computer and the utilization of computers to aid instruction and productivity in the classroom. Candidates will be given the opportunity to reflect upon the most effective and efficient uses of various technologies for individual students, groups of students, and for their own personal use in the classroom. They will be expected to create certain types of software, presentations and materials to achieve instructional goals and objectives.

EDUC 522. Infor Proc,CySpace Internet We. (3 Credits)
This course is designed to study curriculum procedures, organizations, and instructional methods of teaching desk-top publishing for curriculum and instruction. Skills are developed in elements of desktop publishing using current curriculum software and other components of page layoiut, composition, and graphics software. This course will infuse technology into instruction in diverse content areas. Another outcome for the course will be to define new technology terms and discover ways to integrate new technology tools into the curriculum.

EDUC 528. Teaching Curriculum Developmen. (3 Credits)
Focuses on problems of innovation and improvement of curriculum and instruction for classroom teachers, supervisors, and administrators in the Pre-K-12 setting. Attention is given to the design of performance oriented curricula, strategic instructional planning, critrion-based education, theory and practice of unit construction, individualized instruction, application of instructional systems and technology and organization for teaching and learning.

EDUC 530. Curr Instr Materials In Elem S. (3 Credits)
This course focuses on curriculum development and instructional procedures in the elementary school. Attention is given to research, theory, practice, current issues, and trends applicable to teaching and learning in the elementary school. Emphasis is placed on the roles of the teacher, classroom learning environments, curriculum integration, and instructional planning and teaching models. The utilization of current and emerging technologies in educational process is emphasized as is the impact of curriculum design and implementation of the education of students with special needs. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

EDUC 531. Lang Instr & Literacy Elem Sch. (3 Credits)
This course focuses on the research, issues, trends, theory and practice relative to instruction in reading and the other language arts in the elementary school. Attention is given to instructional approaches, methods, materials, and resources for planning, implementing, and evaluating learning. The utilization of current and emerging technologies in the educational process is emphasized as well as the education of students with special needs in the areas of language instruction and literacy. Special attention is given to the assessment of reading skills and how assessment results drive instruction.

EDUC 534. Language Acquisi & Literacy II. (3 Credits)
This course is designed to be a continuation of Language Acquisition and Reading I. This course enhances beginning reading skills and emphasizes comprehension skills in content. Special attention is given to the assessment of reading skills and how assessment results drive instruction. Implementation of literature-based instruction is further explored to enhance reading comprehension skills for students.

EDUC 535. Data Driven Assess Instruction. (3 Credits)
This course is designed to investigate various forms of, and issues related to, assessment, from traditional and standardized to performance and authentic. An understanding of the relationship between assessment, instruction and the monitoring of student progress will be developed. There will be investigation of the various forms of assessment such as classroom rubrics and portfolios. Pre-candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

EDUC 536. Practicum In Elementary Educat. (3 Credits)
Internship in Elementary Education is a capstone course for prospective teachers and emphasizes learning through application, analyses, synthesis, evaluation, and reflection. In this educational environment, the student teacher will participate in the planning and implementation of instruction. The student teacher will engage in the teacher-learning process as a reflective practitioner. All of the components of the conceptual framework are applied and formerly assessed at least weekly by the cooperating teacher and the university supervisor(s). The main focus will be to enhance the proficiencies and dispositions of the teacher candidate as a competent, caring, effective and reflective practitioner.

EDUC 537. Independent Study Curr Instruc. (3 Credits)
Provides the student with an opportunity to pursue an intensive and extensive exploration, analysis, and examinination of a curriculum and instruction in an educational setting. Designed to provide opportunities for in-service teachers and for administrators to work directly with curriculum specialists during the semester. Experiences include observation and participation in school and community work, curriculum planning and evaluating technology and learning strategies.

EDUC 540. Assessment Instruc & Behavior. (3 Credits)
This course is designed to develop an understanding and application of the foundation of assessment and evaluation related to best practices; ethical issues and responsibilities in the assessment process; knowledge of the procedures for screening, pre-referral, referral, and eligibility determinations; cultural, behavioral and learning diversity factors which may influence assessment; the administration, scoring, and interpretation of data from commonly used individual and group assessments; data analysis; classroom, organization and curriculum development; scope and sequence of the general education curriculum; how to differentiate instruction in numeracy, alternative ways to teach content, how to evaluate instruction; strategies to promote integration of students w/ disabilities with their nondisabled peers; technology, and structure and organization of the general education classroom. *Field experiences are embedded in this class on how assessments work. Candidates are a part of the public schools and participate in several types of assessments and how results from these assessments are used to structure instruction.

EDUC 541. Assess Instr & Behavior Mgmt. (3 Credits)
This course addresses the theory and application of best practices in assessment and evaluation; ethical issues and responsibilities in the assessment process; knowledge of the procedures for screening, pre-referral, referral, and eligibility determinations - including Response to Intervention; cultural, behavioral and learning diversity factors which may influence instruction and assessment; the administration, scoring, and interpretation of data from commonly used individual and group assessments - including curriculum-based measurements, and standardized assessments; data collection and analysis; classroom organization and management; the application of classroom and behavior management skills that promote emotional well-being, teach and maintain behavioral skills based on culturally reponsive and trauma informed theory and practice.

EDUC 542. Career and Life Choices. (3 Credits)
This course provides the knowledge base to prepare students and work with families to provide transition throughout the educational experience to include postsecondary training, employment, and independent living skills that address long-term planning, career development, community experiences and resources, self-advocacy, and self-determination; coordinates service delivery agencies, have awareness of community resources; and knowledge of related services; accommodations that pertain school to work programs; know about entitlement and eligibility for agency services such as SSI, work incentive, Medicaid and knowledge of generic skills that lead to success in and out of school. *Field experiences embedded in this course include those by which candidates work closely with the schools and students in planning their transitioning from different phases in their life. They learn how to write transition plans to work collaboratively with all parties involved in the transition process.

EDUC 543. Lang Acquisition & Implementat. (3 Credits)
This course explores language development and speech and language deficits associated with articulation disorders, voice production, fluency, and hearing loss. Educational interventions to address learner deficits are introduced. Instruction is to be given to demonstrate strategies to deliver instruction and improve student achievement as part of a quality learning experience. Skills in this area shall be designed to impart a thorough understanding of the complex nature of language acquisition which includes phonemic awareness, print, fluency, and vocabulary development.*Field experiences embedded in this course for candidates are designed so that candidates understand and know the complex nature of language acquisition and reading and how to apply these skills to non-readers.

EDUC 547. Stud w/ Except: Curr & Instruc. (3 Credits)
EDUC 547 Students with Exceptionalities: Curriculum and Instruction - 3 semester hours Exploration of instructional programming and student program evaluation appropriate to learners with exceptionalities is presented with the goal of facilitating their integration in inclusive settings. Included are methods for remediating oral and written language learning disabilities and social emotional and nonverbal disabilities. the utilization of current and emerging technologies in the educational process is emphasized.

EDUC 550. Rdg Dev & Achieve Class Settin. (3 Credits)
This course provides the knowledge base and demonstration of the skills needed to: (a) assess and develop the language and reading skills of exceptional learners from Pre-K through adolescence, (b) distinguish between the influence of cultural difference and disability in the acquisition and development of skills, (c) develop IEPs based on appropriate use of the general education curriculum and SOLs, (d) design, select, implement, and evaluate reading and language programs, and (e) use technology in language and reading instruction. Skills in this area shall include phonics, reading rate, and comprehension strategies. Additional skills hall include proficiency in writing strategies, as well as the ability to foster appreciation of a variety of literature and independent reading. *Field experiences embedded in these courses for pre-candidates and candidates are designed so that these candidates understand and know the complex nature of language acquisition and reading and how to apply these skills to non-readers.

EDUC 553. Graduate Internship in SPED. (3 Credits)
This supervised field experience provides the graduate candidate with an opportunity to develop and use the skills, dispositions, and competencies necessary for the successful implementation of evidence-based, culturally reponsive instructional strategies with diverse learners with exceptionalities in the general K-12 classroom.

EDUC 554. Charac & Instr Learners Except. (3 Credits)
This course demonstrates knowldege of definitions, characteristics, and learning and behavioral support needs of students identified as having learning disabilities; emotional disabilities; intellectual disabilities; Developmental delay; autism; other health impaired; traumatic brain injury; and multiple disabilities. Topics covered will include Response to Intervention (RTI), Universal Design for Learning. Evidence-Based Practices, assistive technology, pre-referral to eligibility assessment data collectiom and analysis, IEP development and implementation, standards based instructional strategies and planning at the elementary level, assessment and evaluation of data from task analyses, observation, portfolio assessment and other curriculum-based measures for learners with exceptionalities who assess the K-12 general education curriculum.

EDUC 556. Indiv Ed Prog Implementation I. (3 Credits)
This course is designed to apply knowledge of assessment and evaluation throughout the K-12 grade levels to know, use, and assess data from task analysis, observation, portfolio assessment and other curriculum-based measures and to make decision about student progress, instruction, program, accommodations, placements and teaching methodology for students with exceptional needs who assess the general education curriculum across the k-12 classroom setting. *Field experiences are embedded in this course. Since this course gives an overview of special education and the special education process, the development of Individualized Education Plans is an integral part of this course. Candidates learn how to write and apply the IEP to the total school program. They learn the language of the IEPs and how this interprets into instruction.

EDUC 558. Curr & Instruct'l Procedures. (3 Credits)
This course is designed to contribute to the understanding of the application of skills in discipline-specific methodology; communication processes; selection and use of materials, including media and computers; evaluation of pupil performance; and the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices, the ability to construct and interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standard-based environment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance. *Field experiences embedded in these courses ensure the candidates and pre-candidates can read data, read IEPs and teach individuals with disabilities using alternate teaching methods and assistive technology.

EDUC 580. Action Research. (3 Credits)
Action Research requires candidates to plan, design, and implement an action research project that relates to problems and issues in a specific area of concentration. Candidates implement the problem and write results following the scientific method. They are required to meet regular with their advisor and present result in a prescribed written form.

FANS: Food and Nutrition Scie (FANS)

FANS 501. Adv Practice in Dietetics. (3 Credits)
This course is designed to prepare students for the supervised practice component of the Dietetic Internship Program. The course will focus on advanced principles of food, nutrition and dietetics principles required for professional practice as a Registered Dietitian.

FANS 540. Clin Food/Comm Srvc Dietet I. (5 Credits)
This course is designed to accompany the supervised practice component of The Virginia State University Dietetic Internship Program (VSU DI). The course will focus on the theory of clinical, food and community services. 400 hours of field experience are required. Interns will be expected to develop professionally as they practice instituting the Academy of Nutrition and Dietetics values.

FANS 550. Clin Food/Comm Srvc Dietet II. (5 Credits)
This is a continuation course that is designed to accompany the supervised practice component of the Virginia State University Dietetic Internship Program (VSU DI). The course will focus on the theory of clinical, food and community services. 400 hours of field experience are required. Interns will be expected to develop professionally as they practice instituting the Academy of Nutrition and Dietetics values.

FANS 570. Food Nurt Sci Resr Methodology. (3 Credits)
This course is designed to accompany the research laboratory component of The Virginia State University Dietetic Internship Program (VSU DI). The course will focus on applying food and nutrition laboratory techniques to a research question. Students are expected to prepare a manuscript and poster and present their findings at a local, state or national conference. 300 hours of laboratory experience are required. Interns will be expected to develop professionally as they practice instituting the Academy of Nutrition and Dietetics values.

HIST: History (HIST)

HIST 501. Colonial Era in Amer History. (3 Credits)
An in-depth survey of North American history from the early beginnings to the American Revolution, including the interactions between native Americans, Europeans, and Africans.

HIST 506. Native Americans in Early Amer. (3 Credits)
A study of Native Americans in North America through the early nineteenth century, including the earliest migrations to North America, the development of the early agricutural societies, the rise and fall of the Pre-Columbian civilizations, the evolution of Plains and Eastern Woodland cultures in the centuries immediately preceding the arrival of Europeans, the effects of European contact and encounters, and the impact of the formation of the United State on Native American societies.

HIST 509. The Philosophy & Theory HIST. (3 Credits)
The course explores the philosophy and theory of history, including the roles of ethics, politics, and cultural identity in historical interpretation, the variety of connections that exist between the past, present, and future, and how these connections can be expressed in terms of historical consciousness and interpretation. The course then focuses on various specific theories of historical interpretation, and how these theories connect with other disciplines. Prerequisite: None.

HIST 510. Historiography. (3 Credits)
The course provides an intensive reading colloquium on the literature of history paying special attention to how and why different schools of historical thought have provided competing interpretations of the same events. Readings will focus on the history of America and the Atlantic World from the Colonial period to the contemporary era, though specific topics will vary depending on the instructor. Prerequisite: HIST 509.

HIST 511. Spec Topics in U.S. History. (1-3 Credits)
A reading and writing intensive seminar dealing with various topics in American History, based on particular interests, research fields, or topics.

HIST 512. Special Topics World History. (3 Credits)
The course provides students the opportunity to read and research in various topics of periods related to African, Asian, European or later American history.

HIST 513. Revolutionary Era Amer History. (3 Credits)
A critical investigation into the social, economic, and political developments inside colonial America that led to the American Revolution, followed by an examination of the revolution itself, successes and possible failures, and longer-term political, social, and economic results of the revolution.

HIST 514. Seminar In Southern History. (3 Credits)
A reading, writing, and research intensive seminar on aspects of Southern History.

HIST 515. Antebellum And Civil War Ameri. (3 Credits)
This course concentrates upon the regional transformation of the United States in the early Nineteenth Century and its tragic outcome, the Civil War. Drawing upon political, economic, social, and regional themes, the course presents a comprehensive view of why the Civil War occurred and how the conflict transformed America.

HIST 517. Seminar In Reconstruction. (3 Credits)
Intensive study of various historical interpretations of Reconstruction (1865-1877) -- a reading, writing, and discussion intensive graduate seminar.

HIST 518. Indust,Expan,Rise of Amer Empi. (3 Credits)
A critical historical investigation into a seminal period in American history, with an emphasis on the social and economic forces that brought about the unprecedented changes that led to the formation of American economic and military superiority. Both short and long-term consequences will be evaluated, and students will research different aspects of the costs and benefits of industrialization, expansion, and the rise of the American empire.

HIST 520. Seminar in Amer After WWII. (3 Credits)
Students will study the forces that changed America after World War II.

HIST 536. Comprehensive Examination. (0 Credits)
A requirement of the Non-Thesis Option, the comprehensive examination is intended to demonstrate the student's competency in history at the Master's Degree level. The student's Master's Defense Committee is responsible for determining the exact form and content to be covered in the student's comprehensive examination, which will, in any case, include both a written and an oral component. Prerequisite: Approval of Faculty Advisor and Department Chair. Approval will only be granted on the assumption that the student will have completed a minimum of 30 credit hours for the M.A. degree during the semester in which the student registers for HIST 536.

HIST 537. Econ & Business Hist Of U.S.. (3 Credits)
The Graduate track of HIST 437, offered at the same time under the same title. A study of the ideas, forces, and people behind the emergence of a capitalist economy in the United States, from the Revolution to the present.

HIST 539. Hist Of Constitution Of U.S.. (3 Credits)
The Graduate track of HIST 439, offered at the same time under the same title. An investigation into the historical formation, interpretations over time, and changes of the U.S. Constitution.

HIST 540. Freedom To Slavery:Black Ex 18. (3 Credits)
A comprehensive historical investigation into the social and economic forces that led to European colonialism, the trans-Atlantic slave trade, various forms of bondage and slavery in North American, black cultural, intellectual, and institutional development within the confines of slavery and racism, the continuous, multi-faceted struggle for freedom, and the significance of blacks in the shaping of American history. While the course emphasizes the black experience, other racial and ethnic groups who were affected by European expansion and slavery will also be investigated.

HIST 541. Slavery To Freedom:Black Ex 18. (3 Credits)
An intensive exploration of the experiences of blacks in America from the end of slavery to the present. Key topics of investigation include: the promises and failures of Reconstruction; comparing the experiences of blacks in the era of segregation based on variables such as region, occupation, and gender; the roots of the civil rights movement in the actions of earlier generations; the civil rights movement; and the successes, failures, and unexpected consequences of desegregation. While the course emphasizes the black experience, other social groups who were either significantly involved and/or affected in the course of the black experience in the U.S. since slavery will also be investigated.

HIST 542. Hist Slavery Nat'L & Intern'L. (3 Credits)
A critical in-depth examination into the causes, significance, and consequences of slavery in the United States. U.S. slavery will be juxtaposed to other known forms of slavery in America and around the world, evaluated in its consequences on slave populations and their resistance to slavery, and studied in its impact on the social realities of race, class, and power in American society.

HIST 543. History Race Relations In U.S.. (3 Credits)
An intensive critical analysis of the role of race in American history, with an emphasis on race as a social and historical construct. The seminar will investigate the historical formations of racial identities, changing patterns of race relations over time, forms of racism and white supremacy, as well as the continued significance of race in the social reality of modern American society. All students will be required to engage in research.

HIST 545. American Women's History. (3 Credits)
The Graduate track of HIST 445, offered at the same time under the same title. A study of the significance of women in American history, focusing on the changing historical roles of women in society and the emergence of the women's movement.

HIST 546. Modern American Social History. (3 Credits)
A critical study of the work of an increasingly significant sub-field of American history. Depending on instructor and semester, changing investigative emphasis will be placed on such classical fields of American Social History as Women's History, Labor History, Social Movements, and Civil Rights. A writing and discussion intensive seminar.

HIST 547. Oral History. (3 Credits)
An intensive theoretical and practical study of oral history research methodologies. Students will gain practical experiences in the field of oral history.

HIST 551. Independent Study American His. (3 Credits)
This course allows graduate students to pursue specialized topics of research and historical training in American History under the supervision of one of the History Department graduate faculty. Students will meet with their instructor on a mutually agreed upon schedule, and will be expected to do a substantial amount of reading, research, and writing. Prerequisite: One semester of studying the program or at least 6 hours of graduate history courses.

HIST 553. History Black Education In U.S. (3 Credits)
The Graduate track of HIST 453, offered at the same time under the same title. An investigation into the ideologies, methods, and struggles involved in the education of blacks in the United States across time and regions.

HIST 554. Historical Research Methods. (3 Credits)
A pre-requisite for HIST 555 (Thesis), this course is intended to let students become acquainted with and gain experience doing historical research, including interpretation of primary sources, using archival materials, compiling annotated bibliographies, and citing historical sources. Special attention will be paid to improving students' skills and abilities in writing historical essays. During this course, students will initiate serious research and data collection for the M.A. Thesis Prerequisite: HIST 509.

HIST 555. Research And Thesis. (3 Credits)
A requirement for the Thesis option, the thesis produced must follow the guidelines set by the Department of History and Philosophy as well as those of the School of Graduate Studies for the M.A. Thesis. The final draft of the thesis must be approved by all members of the student's Master's Thesis Defense Committee. Prerequisite: HIST 554.

HIST 559. Hist Black Religious Exper Ame. (3 Credits)
The Graduate track of HIST 459, offered at the same time under the same title. This course examines the origins and contributions of the black sectarian and established religious experiences in America from the Colonial period to the present.

HIST 561. Africa To 1800. (3 Credits)
The Graduate track of HIST 461, offered at the same time under the same title. This course covers the history of Africa from the earliest times, through the period of early state formation until the end of the eighteenth century.

HIST 562. Africa Since 1800. (3 Credits)
The Graduate track of HIST 462, offered at the same time under the same title. This course traces the history of Africa since the early nineteenth century. The course includes the Islamic revolutions, the increasing European influence, and African resistance, ending with the development of independent nations.

HIST 563. Atlantic World During Colonial. (3 Credits)
A study of the social, economic and political developments in Europe, West Africa and the New World, which gave rise to the 'Atlantic System' and the triangular trade. Emphasis will be placed on the origin, conduct, and consequences of the trans-Atlantic slave trade, the rise of New World slavery/slave communities as well as the development of African states.

HIST 564. Atlantic World Post-Colonial E. (3 Credits)
A study of the social, economic and political developments in Europe, West Africa and the New World, which resulted in the British-led efforts to end the trans-Atlantic slave trade. Emphasis will be placed on the termination of the slave trade and slavery and their consequences on both sides of the Atlantic.

HIST 592. Coming Amer: Hist of Immigratn. (3 Credits)
The Graduate track of HIST 492, offered at the same time under the same title. A history of immigration to the Americas--both North and South America. Focus on the changing patterns of immigrations, such as source areas, and destinations. Impact of immigration on economy and culture of host areas. Reception of immigrants in host regions. Contemporary issues involving new and old immigrants.

Interdisciplinary Studies

IDST 100. Analytical Reading & Reasoning. (2 Credits)
This course seeks to aid pre-candidates in the refinement and enhancement of learning strategies related to the Praxis I skills assessment. Reading, Writing and Mathematics instruction will focus on strategies to decode information from multiple disciplines. Reading activities include literature taken from Humanities, Social Sciences, Science and Technology. Writing activities are focused on responding to a variety of prompts from multiple disciplines and construction of appropriate essays. Mathematics activities will focus on problem solving and applying critical thinking skills. Students who are successful in passing Praxis I will not be required to take IDST 101.

IDST 101. Analytical Reading/Reasoning 2. (2 Credits)
This course is a continuation of IDST 100. Pre-candidates will continue to focus on skill development related to passing Praxis I. Instruction will be divided by assessment components and will utilize small group and individualized instruction to provide a more focused experience to improve test taking and time management skills related to standardize testing.

IDST 200. Digital Media Teacher Educatio. (3 Credits)
A variety of instructional media; such as DVD Disc, Digital imagery, Computer Assisted Instruction and personal productivity tools are presented in this course. The emphasis will be on systematically enhancing the teaching-learning process with multi-media instruction and effective computer usage. The course will focus on the basic operation of the computer and the utilization of computers to aid instruction and productivity in the classroom. Candidates will be given the opportunity to reflect upon the most effective and efficient uses of various technologies for individual students, groups of students, and for their own personal use in the classroom. They will be expected to create certain types of software, presentations and materials to achieve instructional goals and objectives. The course is intended for juniors in the School of Education.

IDST 510. Mental Health Crisis 101. (3 Credits)
This course is designed to provide a "crash course" in recognizing, assessing, and understanding the different categories of mental health issues and crises that severely effects behavior, interaction, aggression, and sensory experiences. The course will focus on training professionals to recognize mental health crises and their characteristics. This course provides the pre-requisite knowledge for the Trauma Informed Responses and De-escalation (TIRD) course. Co-requisite(s): IDST 520.

IDST 520. Adv Social Psych for Mgmt & Pr. (3 Credits)
This course provides an in depth and critical understanding of theories and theoretical frameworks in social psychology and the manner in which these theories explain the interrelationship between patterns of behavior and interaction. Through an in depth understanding of theoretical perspectives in social psychology, public service leaders and managers gain an integral leadership and analytic tool that can be useful in building trust, consensus, and productivity within an agency/organization. Co-requisite(s): IDST 510.

IDST 530. Trauma Informed Resp and De-es. (3 Credits)
This course is advanced exploration and analysis of the research and literature on the psychosocial effects of trauma and disorganization on individuals and communities. Utilizing the application of relevant psychosocial theories, concepts, and the fundamental knowledge of how to utilize the latest edition of the DSM, this course will explore best practices in trauma informed responses to individual and community crises and de-escalation methods and techniques for field professionals and crisis managers. Pre-requisite(s): IDST 510, IDST 520.

IDST 540. Public Service for Mgmt & Prof. (3 Credits)
This course is designed to provide intensive leadership skills in public service leadership and management. Through the exploration and differentiation of corporate vs. public service leadership, this course will utilize theory and praxis in humanistic leadership to enhance the student's public service leadership competencies. Prerequisite: IDST 510, IDST 520, IDST 530.

IDST 541. Advanced Cult Rel in Pub Ser. (3 Credits)
This course is designed to augment the Public Service Leadership and Management course in order to provide management professionals and enforcement professionals the opportunity to apply theories and concepts learned in IBMP to understanding contemporary events in policing and community culture. This course will allow practitioners to engage in policy and program development projects that will enhance interpersonal and professional relationships within organizations and communities.

IDST 542. Child & Adoles Dev for PS Prof. (3 Credits)
This course is designed to provide a comprehensive study of the research, theories, and concepts of child and adolescent development from cognitive, behavioral, social, and psychological perspectives. It is designed to give the public service practitioners who work with youth an understanding of the behavioral, interactional, and intepersonal stages of development in order to provide context to situations that may arise in school settings. The course will focus on the assessment and praxis of crisis intervention.

IDST 543. Seminar in Constitutional Law. (3 Credits)
This course is designed to provide an advanced exploration of study and application of Constitutional Law as it applies to public service leadership and practice. Through this course, students will study the basic principles of Constitutional Law, the role of the Supreme Court, and its relevance to Civil Rights in the U.S.

IDST 544. Crime and Dev Pub Hlth Issue. (3 Credits)
This course utilizes theory and research to undergird the ways in which crime and deviance affect individual and community health. Through the application of various theoretical perspectives in criminology/sociology, social psychology, and public health, students will explore the manner in which crime and deviance correlates to health issues and disparities in individuals and communities.

IDST 600. Social Justice & Human Rights. (3 Credits)
This course is designed to provide students with advanced knowledge of the five main principles of social justice (access to resources, equity, participation, diversity, and human rights) and how they have manifested globally in their historical, contemporary, and future contexts. Through this course students will explore acts of oppression/genocide/enslavement, global social movement past and present, and the manner in which lack of access, inequity, exclusion, and isms impact justice and human rights.

IDST 610. Dev Theories in Social Justice. (3 Credits)
This course provides a supportive space to further build knowledge and practice around social justice issues. It will examine the manner in which theory and social science aims to not only describe the world but to change it. The material covered in this seminar will introduce multiple perspectives on creating a just world and how theory has been generated from activism and social movements, focusing on how to engage in theoretically-informed social justice work.

IDST 620. Methodologies & Epistemologies. (3 Credits)
This course provides a supportive space where students can further develop their social justice skills as producers and consumers of research. Taking a critical examination of research methods, students will: (1) Think about the purpose of methodology, how it is idealized/theorized, and enacted; (2) Understand the kinds of ethical, social, and political dilemmas methodologies present; (3) Discuss and explore traditional and explicitly critical methods and how they function in relation to existing asymmetrical power dynamics within academia, communities, and institutions; and, (4) Learn how researchers address these concerns and develop their methodological practices.

IDST 630. Rights, Laws, and Legal Issues. (3 Credits)
This course is an exploration of the legal issues that arise in social justice movement and activism and the ways in which the United States Constitution, Federal Laws and Acts, state law, and Supreme Court rulings both influence and are influenced by social issues, the quest for social justice and forms of transformative social movement past, present, and future.

IDST 671. Soc Justice&Human Rights Pract. (4 Credits)
This specialization course directs the students focus in social justice and human rights practice. This course provides and in-depth exploration of social justice and human rights issues and movements as relates to the core social constructs that sustain power in America, race, class, gender, and gender identity. Through the understanding and application of relevant critical theories, students will study the manner in which historic and contemporary issues of oppression, violence, and exclusion based on race, class, gender, and gender identity have impacted the quest for rights, justice, and equity within these communities.

IDST 672. SJ&HR: Educ,Pub Serv,CJ, Sowk. (4 Credits)
This specialization course directs the students focus in social justice and human rights practice. This course provides and in depth exploration of social justice and human rights issues and movements as relates to the core institutions that sustain social order, power, and conformity in America, education, politics and government, criminal justice systems, and institutions the guide the social welfare of the public. Through the understanding and application of relevant critical theories in education, public service and politics, criminology/sociology, and social work, students will study the manner in which historic and contemporary issues of oppression, violence, and exclusion based in various institutions have impacted the quest for rights, justice, and equity within these spaces.

IDST 673. SJ&HR:Immgrtn,Labor, Relig Exp. (4 Credits)
This specialization course directs the students focus on social justice and human rights practice. This course provides an in depth exploration of social justice and human rights issues and movements as relates to the manner in which culture, the distribution of labor, and ethnocentrism sustain social order, power, and conformity in America through immigration, labor, and religious expression. Through the understanding and application of relevant critical theories and histories in immigration, labor, and religious expression, students will study the manner in which historic and contemporary issues of oppression, violence, and exclusion based on various institutions have impacted the quest for rights, justice, and equity within these spaces.

IDST 674. Global Soc Justice&Human Right. (4 Credits)
This specialization course directs the students focus in social justice and human rights practice. This course provides and in depth exploration of social justice and human rights issues globally. Through this course, students will have a safe space to explore global and international social justice issues that include genocide, colonialism, imperialism, conflict and war. Through the understanding and application of relevant global Human Rights treaties and critical theories and histories, students will study the manner in which historic and contemporary issues of colonialism, imperialism, oppression, violence, and war have affected the development, productive stability, and peace of global communities.

IDST 680. Practicum in Social Justice. (2 Credits)
This course is a field placement course where students will be required to obtain a field placement in an area of social justice and human rights in order to apply theoretical knowledge to a practical experience.

IDST 699. MIS Master Project/Thesis. (3 Credits)
The purpose of this courses is to complete a capstone project in the student's primary area of specialization and validating them as master practitioners. Students design, implement, and analyze results of a research problem or project. Completed study is reviewed by faculty.

MAED: Math Education (MAED)

MAED 560. Teaching Math In The Elem Scho. (1 Credit)
Selected mathematical principles and concepts for teaching mathematics at elementary grade levels. Emphasis will be on instructional methods and technological supplements as outlined by the National Council of Teachers of Mathematics and the Virginia State Board of Education. Students will be provided the opportunity to select, create, and evaluate topics, materials, and strategies in teaching elementary school mathematics.

MAED 561. Teaching Math In Middle School. (3 Credits)
Selected mathematical principles and concepts for teaching mathematics at middle school grade levels. Emphasis will be on instructional methods and technological supplements as outlined by the National Council of Teachers of Mathematics and the Virginia State Board of Education. Students will be provided the opportunity to select, create, and evaluate topics, materials, and strategies in teaching middle school mathematics.

MAED 562. Curr Instru & Research Math Ed. (3 Credits)
A study of the historical development of K-12 mathematics curriculum and instruction including current trends and issues in the study of mathematics pedagogy.

MAED 563. Curr Instr & Research Math Ed. (3 Credits)
An examination of theoretical and empirical research in the field of mathematics education including the study of the philosophy and psychology of teaching and learning mathematics and an overview of research design.

MAED 565. Research Based Field Expr Teac. (3 Credits)
Provides an opportunity for the exploration of an area of interest in the teaching of mathematics through systematic observation, reflection, and analysis of a field experience in a K-12 classroom setting. Basic inquiry-based research ideas will be examined with a follow-up field study aimed at increasing understanding of theoretical and practical issues in the mathematical knowledge needed for and pedagogical skills about teaching mathematics.

MAED 590. Independent Study. (3 Credits)
A course permitting the student to pursue topics of special interest, which may not be available through other, formal courses or which may be needed at a time when other courses are not offered. Course may be taken for credit no more than two times.

MAED 591. Field Project/Externship. (3 Credits)
Project must be approved by mathematics education faculty prior to registration. Students are encouraged to obtain an internship with an education-based provider (school, district office, state office, etc.). In the event that a formal internship is not feasible students will participate in a collaborative real world or simulated education-based project. Successful completion of the project will result in a written report including overview of current relevant literature / research, compiled field notes, and summary research paper.

MAED 592. Action Research/Thesis. (3 Credits)
Each student completes a master's thesis in Mathematics Education with the aid of an advisor and committee. A broad range of topics and methods of inquiry can be used to meet the requirement including quantitative and qualitative case studies, historical studies, and action research.

MATH: Mathematics (MATH)

MATH 501. Geometry. (3 Credits)
Points and lines connected with a triangle; circle properties; collinearity and concurrence; Menelaus' Theorem; Cevas' Theorem; Pappus' Theorem; Desargues Theorem; transformations; introduction to inversive and projective geometry. Prerequisite: Admission to the program.

MATH 505. Number & Number Sense. (3 Credits)
This course examines number systems and operations, elementary number theory, concepts of integers and whole numbers including selected number sets, basic counting principles, and computational algorithms in a problem-solving environment. Appropriate use of technology and manipulatives, NCTM-aligned teaching methodology, and multiple means of authentic assessment will be incorporated into this course that emphasizes the equity principle, and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MATH 506. Geometry and Measurement. (3 Credits)
This course examines properties and relationships of polygons, transformational geometry, coordinate geometry, constructions, deductive & inductive reasoning, the process of measurement through geometric investigations, and an introduction to matrix Algebra, fractals and non-Euclidean geometries in a problem-solving environment. Appropriate use of technology and manipulatives, NCTM-aligned teaching methodology, and multiple means of authentic assessment will be incorporated into this course that emphasizes the equity principle and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MATH 507. Pattern Func Algebra Reason. (3 Credits)
The course examines structures of familiar number systems to include basic algebraic operations, linear and quadratic equations, linear systems of equations and inequalities, algebraic and trigonometric functions in the context of modeling and various representations of functions (graphical, tabular, and symbolic) in a problem-solving environment. Appropriate use of technology and manipulatives, NCTM-aligned teaching methodology, and multiple means of authentic assessment will be incorporated into this course that emphasizes the equity principle and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MATH 508. Rational Num & Prop Reas. (3 Credits)
This course examines elementary number theory including divisibility, primes, and composites, concepts of rational numbers, proportions, and computational algorithms in a problem-solving environment. Appropriate use of technology and manipulatives, NCTM-aligned teaching methodology, and multiple means of authentic assessment will be incorporated into this course that emphasizes the equity principle and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MATH 510. Discrete Mathematics. (3 Credits)
Counting techniques; Pigeon-hole principle; Binominal coefficients; Principle of inclusion-exclusion; generating functions; Stirling and Catalan numbers; permutations and graphs. Prerequisite: Admission to the program.

MATH 511. Coding Theory. (3 Credits)
Linear codes; non-linear codes; B.C.H. codes; dual codes and their weight distributions; perfect codes and cyclic codes; additional topics drawn from Reed-Solomon codes; Justessen codes; M.D.S. codes; Reed-Muller codes; Golay codes; self-dual codes and invariant theory. Prerequisite: MATH 325 or equivalent.

MATH 512. Cryptography & Cmptr Security. (3 Credits)
Public key cryptography; classical applications of finite fields and number theory; classical cryptography and cryptoanalysis; monoalpabetic and polyalphabetic ciphers; Shannon's theory of secrecy; modern private-key cryptosystems such as DES, and public-key cryptosystems such as RSA. (Cross listed as CSCI 580). Prerequisite: MATH 325 or equivalent.

MATH 520. Algebra I. (3 Credits)
Group; subgroups; Lagrange's Theorem; normal subgroups; quotient groups; homomorphisms; direct products; fundamental Theorem of finite abelian groups; group actions; Cayley's Theorem; conjugacy classes and the class equation; Sylow Theorems; isomorphism theorems. Prerequisite: MATH 425 or equivalent.

MATH 521. Algebra II. (3 Credits)
Rings; integral domains; introduction to fields; ring homomorphisms; ideals; polynomial rings; Euclidean domains; unique factorization domains; field Theory; geometric constructions; Galois theory. Prerequisites: MATH 520.

MATH 525. Linear Algebra. (3 Credits)
Linear transformations; solving linear equations; LU decomposition; determinants and relation to solving linear equations; eigenvalues and eigenvectors; Jordan canonical form; Schur form; special classes of matrices: normal; symmetric; Hermitian; orthogonal; unitary; Jacobi; Special properties of these matrices; spectral theory for normal matrices; positive matrices; inner product spaces; orthogonality. Prerequisite: MATH 325 or equivalent.

MATH 530. Real Analysis I. (3 Credits)
Functions of bounded variation; Lebesgue measure; differentiation and integration; Lp spaces; introduction to Banach and Hilbert spaces. Prerequisite: MATH 401 or equivalent.

MATH 531. Real Analysis II. (3 Credits)
Abstract measures; mappings of measure spaces; integration sets and products spaces; the Fubini, Torelli and Radon-Nikodyn theorems; the Riesz-Fischer representation theorem; Haar measures on locally compact groups. Prerequisite: MATH 530.

MATH 532. Complex Analysis. (3 Credits)
Linear fractional transformations; conformal mapping; holomorphic functions; Cauchy's theorem; properties of holomorphic functions; argument principle; residues; power series; Laurent series; meromorphic functions; Riemann mapping theorem; Mittag-Leffler's theorem; Weierstrass' theorem. Prerequisite: MATH 432 or equivalent.

MATH 533. Functional Analysis. (3 Credits)
Banach spaces; Hilbert spaces; fundamental theorems for Banach and Hilbert spaces; dual spaces; bounded inverse theorems; uniform boundedness principle and its applications; strong and weak convergence; spectral theory of linear operators in normed spaces; compact linear operator on normed spaces and their spectrum. Prerequisite: MATH 530.

MATH 540. Numerical Analysis. (3 Credits)
Approximations and interpolation; propagation of errors; numerical differentiation and integration; solutions of equations; Newton's method; solutions of differential equations and initial value problems; Runge-Kutta and predictor-corrector methods. Prerequisite: MATH 452 or equivalent.

MATH 545. General Topology. (3 Credits)
Foundations and fundamental concepts of point-set topology; topological spaces; convergence; connected sets; compactness; product spaces; quotient spaces; function spaces; separation properties; metrization theorems; mappings and compactifications; Homotopy and fundamental groups. Prerequisite: MATH 445 or equivalent.

MATH 546. Difference Equations & Appl. (3 Credits)
Topics include difference calculus; linear difference equations; autonomous systems of difference equations; linear periodic systems; stability analysis and Liapunov method; Z-transform; asymptotic behavior of difference equations. Prerequisites: MATH 360 or equivalent; MATH 325 or equivalent.

MATH 548. Differential Equations. (3 Credits)
Existence and uniqueness for systems; linear systems; fundamental matrix solutions; matrix exponential; nonlinear systems; plane autonomous systems and introduction to stability; Poincare-Bendixson theorem. Prerequisite: MATH 350 or equivalent.

MATH 552. Partial Differentiation Equati. (3 Credits)
Preliminaries from ODE and Calculus; methods of solution of partial differential equations of the first order; classification of partial differential equations; elliptic, hyperbolic, and parabolic equations; Sturm-Liouville problems; non-homogeneous equations; potential theory; techniques of solving various partial differential equations; Cauchy problem; Dirichlet and Neumann problems; Green's function; Solutions by eigenfunction expansion method; Applications. Prerequisites: MATH 350.

MATH 554. Math Modeling Life Sciences. (3 Credits)
Study of a variety of mathematical and computational methods used to describe and understand natural phenomena and their dynamics in biological systems; topics include difference equations; ordinary and partial differential equations; stochastic processes; and computer simulation with computer algebra systems. Prerequisite: MATH 548 or MATH 546.

MATH 560. Algebraic & Numerical Comptuta. (3 Credits)
Basic techniques of algorithm design; fundamental computations with polynomials; Fast Fourier transform; polynomial evaluation and interpolation; power series manipulation; fundamental computations with general and special structured matrices and correlation to polynomials; fast algorithms and correlation between algebraic and numerical computations in algorithm design. Prerequisites: MATH 325 and MATH 261.

MATH 562. Mathematical Statistics. (3 Credits)
Univariate and multivariate distribution theory; generating function; inequalities in statistics; order statistics; estimation theory; likelihood; sufficiency; efficiency; maximum likelihood testing hypotheses; likelihood ratio; confidence and prediction interval; Bayesian estimation and testing; basic decision theory. Prerequisite: MATH 261 or equivalent.

MATH 570. Number Theory. (3 Credits)
Arithmetic functions; divisibility and prime factorization; residue classes; congruence; the prime number theorem; primes in arithmetic progression; quadratic reciprocity law; the arithmetic of quadratic fields; Diophantine equations; continued fractions, approximations and sieves. Prerequisite: MATH 425 or equivalent.

MATH 579. History of Mathematics. (3 Credits)
Chronological and topical history of mathematics, mathematics education and related areas as they parallel ancient and modern world history and U.S. history. The influence of mathematics as a derivative of philosophy and science. The origins of mathematical symbols and the development of a deductive system used as structures of knowledge in other disciplines. Specific topics include: women in mathematics, blacks in mathematics, multicultural development of mathematics, the development of calculating devices, using math history in multidisciplinary teaching.

MATH 580. Geometry for Teachers. (3 Credits)
Selected topics in geometry for teachers of mathematics. Topics include deductive logic, incidence geometry, abstract deductive systems, induction, convexity and separation, geometric inequalities, congruence, similarity, parallelism, Euclidean and non-Euclidean geometries.

MATH 581. Modern Algebra. (3 Credits)
Topics in modern algebra including sets, mappings, equivalence relations, groups, groups homomorphism, isomorphism, rings, integral domains, and fields.

MATH 582. Real Analysis for Teachers. (3 Credits)
Real number theory; elementary and advanced set theory including open and closed sets, compacts sets and bounded sets; methodology of writing mathematical proofs including mathematical induction and proof of calculus theorems; introduction to sequence and series; convergence tests.

MATH 583. Problem Solving in Math. (3 Credits)
Students will employ various heuristics while engage in problem solving. Student will pose problems appropriate for middle school and high school students. Problem topics will be selected from arithmetic, basic algebra, geometry, trigonometry, analytic geometry, functions and their graphs, calculus, probability and statistics, discrete mathematics and linear algebra. Mathematical reasoning and mathematical modeling will be emphasized. Appropriate use of technology will be discussed, modeled, and used during the problem-solving process.

MATH 584. Calculus for Teachers I. (3 Credits)
Inequalities, absolute values, limits and rates of changes, continuity, derivatives, applications of differentiation, integers, applications of integration, inverse functions and techniques of integration. Topics are treated from an advanced point of view for teachers of mathematics.

MATH 585. Calculus for Teachers II. (3 Credits)
Integration techniques, polynomial approximation and series, polar coordinates, conics, multivariate calculus, parametric equations, and vectors. Course is designed to make connections between advanced calculus topics and the teaching of AP calculus. Prerequisite: MAED 575.

MATH 586. Discrete Math for Teachers. (3 Credits)
The terminology, concepts, and techniques of some areas of discrete mathematics applicable to middle and high school teaching. Logic, proof techniques, recursion, set theory and enumeration, relations functions, and introduction code and graph theory. Course is designed to make connections between discrete mathematics topics and the teaching of discrete mathematics in middle and high school.

MATH 587. Linear Algebra for Teachers. (3 Credits)
Vectors, matrix operations, systems of linear equations, determinants, systems of linear inequalities and linear transformations. Topics are treated from an advanced point of view for teachers of mathematics. Use knowledge of mathematics to select and use appropriate technological tools, such as but not limited to, spreadsheets, dynamic graphing tools, computer algebra systems, dynamic statistical packages, graphing calculators, data-collection devices, and presentation software.

MATH 588. Differential Geomertry. (3 Credits)
Differential manifolds; tensors; affine connections; and Riemannian manifolds; submanifolds; variation of the length integral; the Morse index theorem. Prerequisites: MATH 445, MATH 401, or equivalent.

MATH 590. Graph Theory. (3 Credits)
Basic concepts of graphs and digraphs; Eulerian and Hamiltonian graphs; trees and distances; matchings and factors; connectivity; colorings; planar graphs; flows and networks; extremal graph theory. Prerequisite: MATH 490 or equivalent.

MATH 592. Optimization Theory. (3 Credits)
Convexity; duality; quadratic forms and matrix factorization; theory of optimization with and without constraints; Lagrange functions; Kuhn-Tucker theory; methods of optimization without constraints; line search; descent methods; Newton methods; conjugate directions; non-linear least squares; methods of optimization with constraints: linear optimization; the simplex and other methods; active sets; quadratic programming; optimization with linear constraints; general non-linear optimization. Prerequisite: MATH 392 or equivalent.

MATH 598. Comprehensive Exam. (0 Credits)
MATH 598 COMPREHENSIVE EXAM - 0 SEMESTER HOURS F, SP A zero-credit course designed for candidates eligible for the Master of Science Degree in Mathematics who have selected the non-thesis option track. Students will be able to register for this course and take the comprehensive exam after completing the core courses.

MATH 599. Research & Thesis. (3-6 Credits)

MCOM: Mass Communications (MCOM)

MCOM 500. Academic Writing Workshop. (3 Credits)
A course designed to strengthen the writing and verbal skills of those students working toward a graduate degree in Media Management. Emphasis will be placed on following appropriate style guides, such as MLA, APA, and Associated Press. Students will be given various activities and writing assignments to aid in their verbal and written expression for academic and professional contexts.

MCOM 501. Media Mgmt/Leadership Society. (3 Credits)
This seminar is designed to introduce students to the broad range of issues that face media managers. It specifically addresses management and leadership topics related to cultural diversity. The course will include introductory material on media economics, research, theory and criticism. It will also address current management issues and those related to emerging technologies.

MCOM 502. Media Economics. (3 Credits)
This seminar surveys the economic environment in which media operate and discusses the forces that shape media, market and consumer behavior. Topics covered will include the economic structure and performance of mass media industries; media ownership; impact of new technologies on the media industry and media firms; the use of economic analysis to explain/predict media and industry behaviors; and historical trends in competition, concentration and convergence.

MCOM 503. Media Research Methods. (3 Credits)
This seminar is an introduction to research for media professionals. Various methods of data collection -- including experiments, survey methods, qualitative research, historical and legal methodology -- will be introduced. Students will also learn to analyze and interpret the results of mass media research as well as develop their own media research proposals.

MCOM 504. Communicati Theory & Criticism. (3 Credits)
This seminar is designed to investigate theoretical and critical approaches to the study of mass media. Students will explore theories about the impact of media on society as well as the variety of critical methodologies that can be used to address the relationship between media and culture.

MCOM 505. Media Convergence. (3 Credits)
This course examines global implications of media convergence, the challenges media outlets face in a converging media universe, new technologies in news gathering and news reporting and how they will affect audiences.

MCOM 506. Media Law. (3 Credits)
This course examines the various laws that affect media professions, including the First Amendment, the Freedom of Information Act, libel, copyright, privacy telecommunication regulations and obscenity laws. This course is designed to introduce students to legal concepts pertinent to the communication industries. It will investigate the dynamic nature of the First Amendment through the evaluation of precedence and legal proceedings.

MCOM 507. Media Ethics. (3 Credits)
This course investigates the conflicting responsibilities facing communication professionals. Using a case study approach, this course will focus on the craft of ethical decision-making within current media guidelines. Topics of discussion will include the historical roots of limitations on the media, changing social expectations for information dissemination, and editorial leadership. Cases involving conflicts of value in print, broadcasting, advertising, and public relations will be analyzed.

MCOM 508. Process and Effecs of MCOM. (3 Credits)
A study of the major areas of mass communications research literature, emphasizing mass communications' effects on research.

MCOM 511. Hist Print Media & Tech Develo. (3 Credits)
This course will survey the history of the American print media from the colonial era to the present. It will include key moments, movements and people, as well as the growth of African American and other minority-owned media organizations. The course will trace the history of media ownership, the advent of broadcasting and the growth of the internet.

MCOM 512. International Journalism. (3 Credits)
This course is a cross-cultural study of journalism and communication in the "global village." It compares media practices in democracies and under state-run media. It will look at how the news media and communication professions are affected by technology such as the internet and satellite transmissions that allow the flow of uncensored information across national borders. It will look at the effects of the new "information world-order" on cultures, politics and economics.

MCOM 513. Newspaper Management. (3 Credits)
This course prepares students for future management positions with newspapers through the study of how newspapers function today and through the application of management principles.

MCOM 514. Independent Sudy in Print. (1-3 Credits)
This course is designed to meet the needs of the print media student who wishes to conduct independent research, develop a special academic project or fulfill other department requirements outside of the usual class structure. Prerequisites: Approval of a faculty sponsor to oversee the independent study.

MCOM 521. Broadcast Journalism. (3 Credits)
An overview of the broadcast media, with emphasis on news gathering, preparation, writing and delivery techniques, as well as the rules and regulations that apply to broadcast journalism.

MCOM 522. History of Electronic Media. (3 Credits)
A study of the history and technological advancements in electronic media in the United States.

MCOM 523. Broadcast Management. (3 Credits)
This course examines how media companies function today and provides a study of the concepts and principles of broadcast management.

MCOM 524. Independent Study Broadcasting. (1-3 Credits)
This course is designed to meet the needs of the public relations student who wishes to conduct independent research, develop a special academic project or fulfill other department requirements outside the usual class structure. Prerequisites: Approval of a faculty sponsor to oversee the independent study.

MCOM 527. Documentary Production. (3 Credits)
This course is a hands-on workshop that takes advanced graduate students through the entire process of producing a short video documentary. It assumes previous training in video or film production. As students work through the preproduction, production, and postproduction stages, they will explore topics such as budget development, topic research and fact checking, screenwriting, interview preparation, equipment requirements, and editing. The course will emphasize effective crew communication, teamwork, individual responsibility, and other intangibles that go into producing a documentary work. Prerequisite: Graduate student status and previous coursework or training.

MCOM 528. Children, Adolescents & Media. (3 Credits)
An introduction to the major debates and effects of the media on children and adolescents. It will also examine how various age groups process and make sense of media content. Students will discuss complex issues, theories and find solutions via research.

MCOM 531. Contemporary Public Relations. (3 Credits)
An overview of the practice of public relations, ethics of the public relations profession, and the history of public relations in the United States.

MCOM 532. Public Relations Campaign. (3 Credits)
This seminar enables students to research and design complete public relations campaigns. Emphasis is on strategic planning based on research.

MCOM 533. Crisis Communication. (3 Credits)
This course examines case studies of organizations' communication needs and dilemmas in emergencies and crises. Students will look at the role of the public relations practitioner in preventing and managing such problems as scandals, natural disasters and negative public image. Students will examine case studies such as the Tylenol and Pepsi tampering cases and the Denny's and Texaco discrimination cases.

MCOM 534. Independent Study Public Relat. (1-3 Credits)
This course is designed to meet the needs of the public relations student who wishes to conduct independent research, develop a special academic project or fulfill other department requirements outside of the usual class structure. Prerequisites: Approval of a faculty sponsor to oversee the independent study.

MCOM 598. Thesis. (3 Credits)

MCOM 599. Professional Project. (3 Credits)

MCOM 606. Entertainment Law. (3 Credits)
Entertainment and popular culture are two major facets of Mass Communications. Students will examine the specialized legal and regulatory framework relevant to mass media entertainment, including legal regulation and limitations on content, intellectual property rights, talent contracts, and other related media law topics.

MCOM 670. Special Topics in Media. (3 Credits)
This seminar allows an instructor to guide students through specific issues related to mass communications and media management. Can be repeated once for credit if the special topic has changed. Prerequisite: Taken only by permission of the graduate program academic advisor.

MCOM 681. Graduate Media Internship I. (3 Credits)
This is a placement in a professional setting for students to gain advanced-level experience in media production and management. An internship typically requires at least 120 contact hours on the job site. Students are expected to report weekly to the graduate academic advisor, detailing activities and accomplishments. The student will produce a professional portfolio documenting work samples and explaining what the student did to produce them. The job site supervisor will also evaluate the student's performance and recommend a grade for the course. Prerequisites: Graduate status and permission of the Media Management academic advisor.

MCOM 690. Readings & Research in Media. (3 Credits)
Students preparing for either MCOM-695 Professional Project or MCOM-699 Master's Thesis are strongly encouraged to conduct extensive readings of scholarly and professional literature in support of their capstone project or thesis. The student will write and defend a formal research proposal. If the student is proposing to conduct research on human subjects, the research proposal must take the form of an Institutional Review Board proposal, which must be successfully defended and approved before the VSU IRB panel. This course is recommended for the semester before the thesis or professional project but it may be taken concurrently if no IRB approval is involved. Prerequisite: Must have completed at least 18 hours in the graduate program.

MCOM 695. Professional Project. (3 Credits)
The professional project must be taken during the final semester. The professional project includes an academic paper similar to a thesis, plus the student produces a significant creative work. It may consist of a film, video, screenplay or television script, a book, a major public relations campaign or press kit package, or an exhibition portfolio of photographs, audio or video productions, or other project. Students who plan to do a professional project should begin planning early in the master's program. The project must be arranged in advance, incorporating the sponsorship of a faculty member with appropriate expertise to oversee the project, and with the permission of the department chair. The department will retain a copy of the project and supporting paper in its archives. Students doing a professional project should expect to defend it before a review committee. A graduate student may not take both MCOM-695 Professional Project and MCOM-699 Master's Thesis. Prerequisite: Must have been granted candidacy status by the Graduate School, and be enrolling for the final semester of master's studies.

MCOM 699. Master's Thesis. (3 Credits)
The thesis topic must be approved by the major advisor and filed with the Dean of the Graduate Studies office at least six months before the candidate expects to graduate. The thesis is a major research paper. Students anticipating doing a thesis should begin planning early, such as the first semester of the master's program. A thesis must be arranged in advance, incorporating the sponsorship of a faculty member with appropriate expertise to oversee the project, and with the permission of the department chair. Depending on the nature of the research, it may also need to go before the Institutional Review Board the semester before the student enrolls in MCOM-699 Thesis – that means IRB approval is required a semester in advance. The thesis must be completed around mid-term to allow time for the defense by department faculty and the required review by the Graduate School office staff. The department will retain a copy of the thesis in its archives. Students doing a thesis will defend it before a review committee of faculty members. Students must register for MCOM-699 Master's Thesis every term until the project is completed. A graduate student may not take both MCOM-695 Professional Project and MCOM-699 Master's Thesis. Prerequisite: Must have been granted candidacy status by the Graduate School, and be enrolling for the final semester of master's studies.

PESM: Sports Management (PESM)

PESM 502. Planning Program Develop & Eva. (3 Credits)
This course examines how to conduct an effective needs assessment and apply the data to develop and implement appropriate programs to meet the needs of the public. This course also focuses on conducting effective evaluation using statistical applications.

PESM 503. Appl Assess Methods Sport Admi. (3 Credits)
This course is designed to provide students with a basic knowledge of the field of sport management through study course also provides a critical analysis of the different types of research and the various methods of acceptable styles for reporting data.

PESM 504. Sports Finance. (3 Credits)
This course will investigate fund raising activities and the appropriate use of financial resources within the sports industry.

PESM 505. Facility And Event Management. (3 Credits)
This course focuses on the evaluation of problems relating to programming of equipment and facilities, including visits to and evaluation of surrounding facilities.

PESM 510. Readings In Physical Education. (3 Credits)
This course identifies issues arising from current problems in sport management; exploration of points of view and possible solutions.

PESM 523. Sport and Entertainment MGMT. (3 Credits)
The course identifies and evaluates entertainment business opportunities and projects using financial principles, while also learning how to raise the necessary finances to fund a company and/or project. Students will discuss how the digital revolution has impacted the entertainment industry and learn strategies for protecting and exploiting rights within the digital domain.

PESM 529. Sports Entrepreneurship. (3 Credits)
This course focuses on the entrepreneurial opportunities in the sports industry, to include sports management, sports franchise, sports agency, and small sports business management professions and programs. The course focuses heavily on the business plan, financial, and planning issues associated with entrepreneurial and small business ventures. Students will develop their own entrepreneurial sports plan as an independent research project for this course.

PESM 530. Sport And Marketing. (3 Credits)
This course provides an evaluation of sport marketing, including applications of mainstream marketing which include a historical overview of sport marketing, collegiate and professional sporting events, commercial and public organizations, sporting goods, and the sport enterprise.

PESM 531. Sport Seminar. (3 Credits)
This course examines research and discussion of critical topics in sport management. Subjects to be studied will vary according to the concerns of seminar students.

PESM 532. Legal Issues In Sport. (3 Credits)
This course is designed to address ethics from a legal standpoint. This course will focus on research for specific legal issue cases and how to apply them to practical situations.

PESM 534. Sport Psychology. (3 Credits)
This course focuses on personality, aggression, attitudes, competition stress, social facilitation, and small group research as related to athletes and individuals involved in sport. This course will focus on specific sport psychology objectives and how to apply them to practical situations.

PESM 535. Ethics in Sports. (3 Credits)
This course offers an introduction to ethics within the sporting context. The values promoted within sport will be examined along with common ethical dilemmas faced by those involved in sport. The course will cover issues ranging from fair play to sportsmanship to other current ethical issues.

PESM 536. Media and Sport. (3 Credits)
The course is designed to introduce students to the broadcasting and reporting of sports in the media. The relationship between sports and the media, particularly mass media platforms such as television, radio, newspapers, and online news agencies will be explored. The career opportunities, responsibilities, and current trends will be examined. Topics include sports journalism and sports communications, ethics, issues related to race, gender and sexual orientation, sports and data and emerging media.

PESM 538. Organization/Mgmt of Athletics. (3 Credits)
This course is designed to provide an understanding of the aims, objectives, principles, policies, procedures and requirements for a successful career as a sport administrator. This course also focuses on specific athletic management objectives and how to apply them to practical situations.

PESM 566. Special Topics. (3 Credits)
This course is designed to provide an examination of selected topics in Physical Education. This course will focus on consideration of the sources, characteristics, and significance of the subject treated.

PESM 570. Directed Research In Sport. (3 Credits)
This course is a supervised research project in an area applicable to the field of study and agreed upon by the student and major advisor.

PESM 571. Sport Management Internship. (3-6 Credits)
This course includes on-the-job learning in a sport management setting. Field experience involving supervised contact with Sport administrators. Fifteen contact hours per semester credit hour is required (90 total contact hours). Prerequisite: Completion of all requirements of the program and permission of the program coordinator.

PESM 599. Oral And Written Comp Exam. (0 Credits)
This course provides an oral and written examination to assess the candidate's program, and his/her ability to apply this knowledge to overall knowledge of course work pursued in the graduate designated sets of circumstances. Prerequisite: Satisfactory completion of all other requirements for degree completion, and the permission of the program coordinator.

PMGT: Project Management (PMGT)

PMGT 509. Project Management Systems. (3 Credits)
Fundamental elements of project management including project planning, organizing, team building, and effective control mechanisms. Critical factors for project success, organizational support systems; appropriate application of project management software to planning, control, and execution. The project management body of knowledge including professional and social responsibilities.

PMGT 511. Quality Management. (3 Credits)
Investigation of emerging principles of industrial quality and its implementation. Emphasis on the quality function, implementation, cost, and management in construction, manufacturing, and service industries. The course provides participants with a set of quality concepts, tools, and knowledge required for their application in quality planning, quality improvement, quality assurance and quality control.

PMGT 519. Project Planning & Scheduling. (3 Credits)
Project management skills needed to define, plan, monitor, and complete projects as well as to identify the tools and techniques to resolve problems. Scheduling fundamentals and methods of scheduling; network schedules and diagrams; scheduling calculations and the critical path.

PMGT 520. Project Communications. (3 Credits)
The processes associated with project communications management —communications planning, information distribution, performance reporting, and administrative closure to ensure "timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project information" (PMBOK).

PMGT 521. Estimating & Cost Mgmt. (3 Credits)
Processes utilized to acquire and/or purchase products, services or results needed from outside the project team to perform the activities/ work. Tools and techniques for purchases and acquisitions; contract management, administration, and closure. Seller selection and responses. The legal rules/regulations pertaining to effective operation of projects.

PMGT 525. Contract & Procurement Mgmt. (3 Credits)
Using project scope statement, historical data and personal expertise to predict resource expenditure, total cost and duration of a project. Identification of constituent physical elements and related activities necessary to meet project objectives. Computation of elemental project cost; establishing project budget on the basis of the project estimate. Prerequisite: PMGT 519.

PMGT 527. Project Leadership & Hum Relat. (3 Credits)
The human side of project leadership; communication and conflict management issues; motivating, organizing, and managing project teams. Emphasis on experiential skill development, its purpose in helping participants to understand, analyze, and develop effectiveness in leading and managing others in project-based activities.

PMGT 532. Risk Mgmt and Analysis. (3 Credits)
Typology of risk exposures. Inputs to risk identification and management. Risk management stages in the project life cycle. Quantitative and qualitative risk analyses; risk response planning and management; risk monitoring and control. Prerequisite: PMGT 519.

PMGT 535. Change Management. (3 Credits)
Theories, principles, and forces of change in business, industry, service establishments. Perspectives on change—behavioral, psychodynamic, cognitive, and humanistic-psychology approaches; change management approaches, techniques, tools, process, strategy, and activities. The leadership of change and making change happen.

PMGT 570. Integrated Project Mgmt. (3 Credits)
This course must be taken in the student's final semester and will focus on integrating project management body of knowledge, skills and tools developed in previous courses. Emphasis on analysis, synthesis, and evaluation of theories and application of project management strategies. This course prepares students with the foundational knowledge and competencies necessary to pursue the Certified Associate in Project Management (CAPM) certification examination.

PSYC: Psychology (PSYC)

PSYC 508. Psychotherapy I: Theories Psyc. (3 Credits)
An overview of the major theories in psychology. Emphasis on the application of theories to the conceptualization of psychological disorders and practice of therapy. Prerequisite: Admission into the graduate psychology program or permission of instructor.

PSYC 510. Pro-Seminar. (3 Credits)
Designed to give students an orientation to graduate study in psychology and to introduce them to the professional problems of the field. Required of all graduate students in psychology.

PSYC 511. Advanced General Psychology. (3 Credits)
A seminar in general-theoretical psychology designed to assist the student in developing basic psychological concepts and orientations. Students are required to read extensively and to report on research literature with the aim of developing skill in writing reviews of literature in the various areas of psychology.

PSYC 512. Human Growth And Development. (3 Credits)
This course provides an in-depth examination of human development from infancy through adolescence using a theory-based approach. We will explore chronologically the learning and growth processes, paying particular attention to the ways in which growth across the various domains of development (physical, cognitive, social and personality) is intertwined. An emphasis will be placed on recognizing, articulating and critically evaluating the application of developmental theories in research and practice. Emphasis will also be placed on understanding the role of culture in shaping basic psychological processes as well as the universal and culture-specific nature of research observations. The study of the principles of physical, mental, emotional and social growth of the individual and their implications for the learning process.

PSYC 513. Educational Psychology. (3 Credits)
The application of psychological principles to teaching, learning, and classroom management. Review and analysis of research on learning, motivation, and assessment of pupil progress. A unit on test construction is included.

PSYC 514. Experimental Social Psychology. (3 Credits)
Exploration of group dynamics and interpersonal influence. Mass communication, social attitudes, conformity, obedience, leadership, and normative behavior. Research projects on these and similar topics.

PSYC 515. Cognitive and Affective Psych. (3 Credits)
The course content will address concepts, principles and theories of cognitive and affective psychology and their applications in the clinical and educational environments. In addition, current research will be used to evaluate course content. Topics of study will include cognitive neuroscience, attention, perception, memory, language, visual imagery, decision making, problem-solving, judgment, reasoning, motivation, learning and emotions.

PSYC 517. Basic Psychopathology. (3 Credits)
This course teaches students the scientific and theoretical basis for understanding and treating psychological disorders. The underlying causes and courses of the disorders, as well as various treatment methods, are explored. Prerequisite: Undergraduate Abnormal Psychology Course or permission of the instructor.

PSYC 518. Psychopathology Of Childhood. (3 Credits)
A study of deficits, injuries, learning disabilities, developmental difficulties as well as qualities of interpersonal relationships associated with disordered behavior in children.

PSYC 519. Psychotherapy II: Techniques. (3 Credits)
Develop skills in intake interviewing, mental status exams, diagnostic interviewing, and other therapeutic techniques in psychotherapy. Role playing and other exercises are used to facilitate the student's understanding the theories underlying the therapeutic practices. Prerequisites: PSYC 517, Advanced Psychopathology; PSYC 508, Psychotherapy I.

PSYC 520. Psychological Assessmnt I. (3 Credits)
Focuses on supervised intellectual and achievement assessment of children and adults. Relevant literature on the concepts of intelligence and test construction is required reading. Practice in report writing is required. Prerequisite: Admission into the graduate clinical or educational psychology program or permission of instructor.

PSYC 521. Psychological Assessmnt II. (3 Credits)
A study of the administration, scoring, and interpretation of personality and projective assessment instruments, and the rationale underlying the construction of each. Prerequisite: PSYC 520, Psychological Assessment I.

PSYC 522. Practicum I. (3 Credits)

PSYC 523. Practicum II. (3 Credits)

PSYC 524. Practicum III. (3 Credits)

PSYC 525. Intro Community-Clinical Pych. (3 Credits)
History and social implications of the de-hospitalization movement. Nature, organization, and delivery of community-based mental health services.

PSYC 526. Motivation. (3 Credits)
A study of the dynamics behavior as viewed from various theoretical standpoints. Analysis of such concepts as instinct, need, value, conscious and unconscious motive.

PSYC 527. Personality Theory. (3 Credits)
A critical analysis of the major theories of personality development.

PSYC 528. Exp Design & Data Analysis Psy. (3 Credits)
A course providing a broad survey of methodologies and special problems in psychological research. The focus on selection and application of techniques and interpretations of results, rather than on computational procedures per se. Topics covered include experimental and quasi-experimental design, nonparametric statistics, psychological tests, statistics and selected multivariate methods. The course also allows the student to develop competency in the use of mainframe and microcomputer statistical packages. Prerequisite: The equivalent of one course in undergraduate statistics.

PSYC 529. Crisis Intervention Strategies. (3 Credits)
A course designed to primarily give students an opportunity to learn how to select and utilize psychological knowledge for the determination of appropriate strategies for crisis intervention situations. Students are expected to demonstrate the strategies learned. The course is supplemented by field work in selected agencies. Prerequisite: Admission into the graduate psychology program or permission of instructor.

PSYC 530. Ethics/Prof Standards of Pract. (3 Credits)
Seminar reviews ethical principles and practice issues relevant to psychology. Prerequisite: Admission into the graduate psychology program or permission of instructor.

PSYC 531. Intro to Group Therapy. (3 Credits)
A review of basic group psychotherapy. Prerequisite: Admission into the graduate psychology program or permission of instructor.

PSYC 532. Diagnosis/Treatment of Substan. (3 Credits)
Basic diagnostic and treatment practices for treating persons with substance abuse disorders. A review of the major categories of psychoactive drugs, as well as the medical, psychological and social impact of each substance use. Prerequisite: Admission into the graduate psychology program or permission of instructor.

PSYC 533. Introduction to Neuroscience. (3 Credits)
An introduction to the research methodology of neuroscience, and an investigation of the neural basis of sensation, cognition, learning, and psychological disorders.

PSYC 580. Stat Methods in Health Psyc I. (3 Credits)
Quantitative methods for graduate students in psychology. Collection, storage, retrieval, analysis and interpretation of health data. Design and analysis of health-related surveys and experiments. Emphasizes inferential techniques and focuses on the application of these methods to health psychology research. Students learn to manipulate data using statistical software.

PSYC 581. Stat Methods in Health Psyc II. (3 Credits)
An introduction to multivariate tests, such as MANOVA and multiple regression.

PSYC 597. Teaching of Psychology. (3 Credits)

PSYC 599. Research and Thesis. (1-6 Credits)
PSYC 599 Research and Thesis - 1 to 6 semester hours Prerequisite(s): For all 600+level courses: Admission into the doctoral psychology program or permission of instructor.

PSYC 603. Health Psychology. (3 Credits)
An introduction to health psychology that provides a general overview of the discipline of health psychology, including its origins, concepts and methods. A number of types of intervention efforts will be explored, including risk factor modification, secondary preventive/rehabilitative efforts for chronic illness and community/ public health interventions. Some of the major areas and topics in health psychology are explored. Students will acquire skills and knowledge that should enhance their critical thinking and their understanding of the relationship of cognition, emotion, motivation, and behavior on health.

PSYC 609. History and Systems. (3 Credits)
Covers the history and various systematic theories of psychology. Explores the conceptual foundations of psychology from its inception to the present day.

PSYC 612. Resr Meth Clinical/Health Psyc. (3 Credits)
Analysis of the role of research in clinical and health psychology and experimental design issues in psychotherapy research. Students are expected to be familiar with research methodology designs and ethics in psychological research. Prepare individual research proposals for critical evaluation. Prerequisites: PSYC581 - Statistical Methods I; PSYC582 – Statistical Methods II.

PSYC 620. Clinical Practicum I. (1 Credit)
This course is the first doctoral level practicum. It prepares students for the first external practicum placement in the Counseling Center and subsequent community practica as well as introduces them to the practical side of Clinical Health Psychology.

PSYC 621. Clinical Practium II. (2 Credits)
Students will develop skills in individual psychotherapy with children and/ or adult clients/patients.

PSYC 701. Hlth Psyc: Psycother Meth/Inte. (3 Credits)
An introduction to health psychology that provides a general overview of the discipline of health psychology, including its origins, concepts, and methods. A number of types of intervention efforts will be examined, including risk factor modification, secondary preventive/rehabilitative efforts for chronic illness, and community/ public health interventions. Major areas and topics in health psychology will be explored.

PSYC 702. Neuropsychological Assessment. (3 Credits)
This course covers the theory and practical use of major neuropsychological assessment devices. Students are taught to administer and interpret major neuropsychological tests and batteries. The focus of the course is on practical knowledge, report writing and neuropsychological clinical practice.

PSYC 703. Assess & Eval Comm Health Prog. (3 Credits)
The student will focus on community needs assessment and evaluating changes in community services, programs, and community status. Establishes a scope of evaluation efforts and methods for designing and conducting program evaluation and research in community settings. Analyzes parameters of effective consultative relationships. The use of community and behavioral analysis as a basis for establishing objectives, determining appropriate methods for interventions, carrying out planned programs and evaluating behavioral change outcomes.

PSYC 704. Clinical Psychopharmacology. (3 Credits)
This course covers the general principles underlying the use of drugs to treat the major classes of mental illness. This will include antipsychotics (conventional and atypical), antidepressants, anxiolytics, mood stabilizers, and other psychotropic medications. Mechanism of action, drug interactions, and pertinent aspects of differential diagnosis will be discussed. Psychiatric aspects of general medical conditions will be presented.

PSYC 705. Health Ed & Behavioral Science. (3 Credits)
An introduction to the underlying principles and theories of health education and behavior change for public health.

PSYC 706. Prof Issues Behavioral Med Con. (3 Credits)
The objective of this course is to focus on issues facing clinical health providers and other health consultants in traditional and non-traditional health care settings. Themes focus on malpractice risks related to health services, including managed health care; privacy, consent and access to hospital records; quality assurance, quality control and mechanisms of review; interdisciplinary relationships, hospital privileges, multiple codes of ethics/legal constraints and hierarchical levels of professional responsibility for medical regimens; consultation services with diverse and under-served populations; and anticipating future directions in behavioral health and illness.

PSYC 707. Theories Superv & Consult Psyc. (3 Credits)
This course focuses on clinical supervision and consultation, as well as the applications of both. It provides an overview of various dimensions of supervision and consultation, including theoretical models, the supervisory relationship, supervisory modalities, the consultation relationship, issues of diversity, gender, and power in supervision and consultation, developmental issues, and ethical and legal issues. The course requires students to have a supervisory experience with students in lower-level intervention courses. Prerequisite: PSYC 530: Ethics and Professional Standards of Practice.

PSYC 711. Research Health Psyc -Seminar. (3 Credits)
Lecture series - The student will interact with professionals in the field and discuss relevant topics in health psychology. Each guest speaker will discuss the impact of behavior and the influence of health and disease in relation to their topic area. Emphasis will be placed on analyzing current research and programs in health psychology and communicating effectively with health professionals.

PSYC 713. Health Services Administration. (3 Credits)
This course focuses on planning, organization, administration, management and policy analysis of health care systems and health programs. Long range strategic planning, reporting program performance, promoting programs, reviewing policy and recognizing appropriate laws and regulations relating to public health. Emphasis on management tasks and styles, decision making and building effective coalitions and teams.

PSYC 714. Epidemiology Hlth Behav/Com Ep. (3 Credits)
Distribution and determinants of disease, disabilities and death in human populations; the characteristics and dynamics of human populations, and the natural history of disease and the biologic basis of health. Prerequisite: PSYC 603 - Health Psychology.

PSYC 715. Social/Cultural Aspect Hth Ill. (3 Credits)
Investigate physical, social, emotional and intellectual factors influencing health behaviors. Identify major responsibilities of the health educator in the practice of health education. Assessment of psychosocial, cultural and situational factors in the voluntary behavior change process. Analysis of communication pathways, influence and power, social norms and social marketing, coordinating provisions of health education services, and roles of institutions in relation to learning and the behavior change process. Special attention will be given to addressing cultural competence in healthcare settings.

PSYC 720. Health Psychology Practicum. (3 Credits)
Practicum training is designed to provide students with a practical application of their skills and training. Supervised experiences range from assessment, consultation, and intervention in a health care setting to applied community based participatory experience in a variety of settings.

PSYC 721. Advanced Clinical Practicum. (3 Credits)
Students choose specialized training experiences from a variety of community settings. This practicum can be taken more than once.

STAT: Statistics (STAT)

STAT 510. Stat Procedures In Ed & PSYC. (3 Credits)
This is a general terminal course designed primarily for graduate students enrolled in professional education research, psychology, guidance, or other behavior sciences. It is defined as an applications approach to methodology of modern research. This course will help prepare individuals to comprehend, interpret, and report statistical results for use in educational research, thesis presentation, and publication in research journals. Elementary and advanced statistical methods will be discussed. Statistical software will be used to analyze and interpret large databases occurring in real life situations.

STAT 511. Biometry. (3 Credits)
The main techniques of statistical analysis as applied in the biological sciences are discussed. This course is of interest to students in social sciences as well. Probability, Binomial, Poisson and normal distributions, estimation and hypothesis testing, Analysis of variance, regression and analysis of covariance. Prerequisite: STAT 480 or equivalent.

STAT 520. Advanced Stat Methods Ed Resea. (3 Credits)
Only for students in Mathematics Education or Science Education. Descriptive statistics, normal, binomial, t, Chi-square and F distributions. Estimation and hypothesis testing, Parametric and nonparametric tests: z-test, t-test, one-way and two-way analysis of variance, analysis of covariance, chi-square tests of goodness-of-fit and independence for categorical data, linear correlation and regression, multiple regression. Statistical results from mathematics education research journals will be studied and real data from educational sources will be analyzed using statistical software. Prerequisite: STAT 330 or equivalent.

STAT 521. Statistics for Teachers. (3 Credits)
Exploring data, planning a study, anticipating patterns and statistical inference. Course is designed to make connections between statistics topics and the teaching of statistics in elementary, middle and high school. This course does not satisfy the requirements of STAT 520.

STAT 562. Mathematical Statistics IV. (3 Credits)
Univariate and multivariate distribution theory; moment generating function; inequalities in statistics; order statistics; estimation theory; likelihood; sufficiency; efficiency; maximum likelihood; testing hypotheses; likelihood ratio; confidence and prediction interval; Bayesian estimation and testing; basic decision theory. Prerequisites: MATH 261, STAT 480 or equivalent.

STAT 565. Nonparametric Statistics II. (3 Credits)
Rank correlations, linear and monotonic regression, several related samples, balanced incomplete block design, randomization, rank transformation and goodness-of-fit tests. Prerequisite: STAT 481 or equivalent.

STAT 568. Design of Experiments. (3 Credits)
General linear model; fixed, random and mixed effects models; randomized block, incomplete block and Latin square designs; factorial designs; analysis of covariance. Prerequisite: STAT 480 or equivalent.

STAT 570. Stochastic Processes. (3 Credits)
Random walks; Markov chains; Poisson processes; Wiener processes; queuing and inventory analysis; reliability theory. Prerequisites: STAT 480, STAT 490 or equivalent.

STAT 572. Categorical Data Analysis. (3 Credits)
Two-way and three-way contingency tables; measures of association; log-linear, logit and hierarchical models; inferences based on multinomial, Poisson and Chi-Square distributions and residual analysis. Prerequisite: STAT 480 or equivalent.

STAT 575. Regression Analysis. (3 Credits)
Linear and multiple regression; analysis of residuals; variable and model selection including stepwise regression; transformations, weighting and diagnostics to correct model inadequacies. Prerequisite: STAT 480 or equivalent.

STAT 578. Multivariate Analysis. (3 Credits)
Statistical theory associated with multivariate normal distribution; Wishart and related distributions; partial and multiple correlations; Hotelling's statistic; multivariate linear models; classification and discriminant analysis; principal components. Prerequisites: MATH 325, STAT 480 or equivalent.

STAT 583. Sampling Theory II. (3 Credits)
Estimation, relative precision, optimum allocation and stratum sizes in stratified random sampling; quota sampling; ratio and regression estimates; systematic and cluster sampling. Prerequisite: STAT 382 or equivalent.

STAT 599. Research and Thesis. (3 Credits)
General linear model; fixed, random and mixed effects models; randomized block, incomplete block and Latin square designs; factorial designs; analysis of covariance. Prerequisites: Instructor's or graduate program coordinator permission.

STAT 601. Introduction to Predictive Ana. (3 Credits)
This course focuses on building computational abilities, inferential thinking, and practical skills for tackling core data scientific challenges, and covers predictive modeling methods, approaches and tools.

STAT 610. Bayesian Statistics. (3 Credits)
This class introduces the Bayesian approach to statistics. The course compares the Bayesian approach to the more commonly-taught Frequentist approach.

SOWK: Social Work

SOWK 601. Prin & Prac of Gen SOWK Prac. (3 Credits)
This course is designed to introduce students to the basic concepts, values, and assumptions of the social work profession and to provide a general overview of theories and models of social work practice. Students will focus on the initial phase of the social work intervention process that includes the development of effective helping relationships characterized by the ability to demonstrate genuineness, empathic caring and respect that leads to trustworthiness in social work practice. Students will apply social work concepts in collaborative experiential learning course activities and exercises. Prerequisite(s): N/A Co-requisite(s): SOWK 602, 603, 604 & 605.

SOWK 602. Human Behavior & Soc Envrin I. (3 Credits)
This course is designed to provide a broad and essential human behavior framework that introduces evidence-based multi-theoretical and multidimensional behavioral perspectives for understanding the biological, psychological, spiritual, aspects of human behavior. Included will be content on the economic, political and complex sociocultural interactive factors that also impact and help shape the lives of individuals, families and groups in multicultural environments. Prerequisite(s): N/A Co-requisite(s): SOWK 601, 603, 604 & 605.

SOWK 603. Gen SOWK Prac w/Ind. & Groups. (3 Credits)
This course builds on the introductory content in SOWK 601 and continues with presentation of the basic knowledge, assumptions, skills and values necessary to provide a range of social work intervention skill sets that help to maintain, enhance, restore, rehabilitate human services needs among client populations. This course introduces selected theories and practice models to guide intervention in social work practice with individuals and groups while emphasizing the multidimensional and diverse contexts in which problems and needs are assessed and in which interventions occur. Prerequisite(s): N/A Co-requisite(s): SOWK 601, 602, 604 & 605.

SOWK 604. Gen SOWK Prac with Families. (3 Credits)
This course is designed to provide graduate level MSW students with the family theory/therapy practice models utilized for family therapy assessment and intervention in social work practice with families. The course will focus on the family as a natural social system in context and on strengths-based perspectives in family functioning while attending to cultural diversity as well as the differences in family structure and developmental tasks among various populations groups. Prerequisite(s): N/A Co-requisite(s): SOWK 601, 602, 603 & 605.

SOWK 605. Fou Field Prac I & Int Seminar. (3 Credits)
Students are assigned for two days (15 field hours) per week for 15 weeks (200+ field hours), in program-assigned social work field practice settings. This field practicum provides the required program curriculum practice opportunities for students to apply and master essential social work generalist practice knowledge, values and skills under the direction of an agency-based field instructor, and monitored by an assigned program faculty field liaison. The field practicum emphasizes integration of content from all areas of the foundation curriculum and includes an on-campus weekly 60 minute required integrative field seminar group session for all registered students in SOWK 605. Prerequisite(s): N/A Co-Requisite(s): SOWK 601, 602, 603 & 604.

SOWK 607. ADVSTD SOWK Practice II. (3 Credits)
This course focuses on the phases of the social work intervention process and reviews the basic concepts, values, assumptions, and skill sets of the social work practice that help to maintain, restore, rehabilitate human services needs among diverse client populations. The course reviews selected social work theories and practice models to guide intervention in social work practice with individuals, families and groups while also emphasizing the multidimensional and diverse contexts in which problems and needs are assessed and in which interventions occur. Prerequisite(s): N/A Co-Requisite(s): SOWK 608, 609 & 610.

SOWK 608. ADVSTD SOWK Research Methods. (3 Credits)
This course reviews the methods of social work research including problem formulation, research designs, measurement, data collection and sampling. Students will work with the research instructor to complete a trauma-focused research proposal, the first phase of a required research project that will be finalized and presented in SOWK 638, the program specialization research capstone course. The completed research project paper is the benchmark trauma-focused assignment. The date of submission and presentation is to be determine by the Program. Students must earn a grade of "B" or better for this competency-based capstone assignment. Prerequisite(s): N/A Co-Requisite(s): SOWK 607, 609 & 610.

SOWK 609. ADVSTD Cult Div Soc Wel Pol Pr. (3 Credits)
This course provides generalist practice students with the historical evolutionary background of social policy, and current policy practice approaches in social welfare services, organizations and communities. The course introduces the value-based role of social workers as advocates and change agents in policy formulation, in social and economic justice methods, and in legislative, community and organizational arenas. The course introduces and emphasizes the application of socio-behavioral intervention models and analytical frameworks for assessing program organizational and policy efficacy. Prerequisite(s): N/A Co-Requisite(s): SOWK 607, 608 & 610.

SOWK 610. ADVSTD Field Prac I & Inte Sem. (3 Credits)
Students are assigned for two days (15 field hours) per week for 15 weeks (200 field hours) in program-assigned social work field practice settings. This field practicum provides the required program curriculum practice opportunities for students to apply and master essential social work generalist practice knowledge, values and skills under the direction of an agency-based field instructor, and monitored by an assigned program faculty field liaison. The field practicum emphasizes integration of content from all areas of the foundation curriculum and includes an on-campus weekly 60 minute required integrative field seminar group session for all registered students in SOWK 610. Prerequisite(s): N/A Co-Requisite(s): SOWK 607, 608 & 609.

SOWK 615. Hum Behav in the Soc Env II. (3 Credits)
This course that covers content on critical life course human development theories beginning with conception and following development through adolescence, middle and late adulthood. In addition, students will examine the significant influence, roles, functions and identified traumatic effects of oppressive environmental factors on individual biological, psychological, social and spiritual coping and adaptation. Prerequisite(s): SOWK 605 Co-Requisite(s): SOWK 616, 617, 618 & 619.

SOWK 616. Social Science Res Methods. (3 Credits)
This course introduces the methods of social work research, including problem formulation, research designs, measurement, data collection and sampling. The course focuses on the application of critical thinking skills, diversity and effective research methods for clinical social work practice. This course also covers evaluation of social work programs and services. Prerequisite(s): SOWK 605 Co-Requisite(s): SOWK 615, 617, 618 & 619.

SOWK 617. Div & Cul Comp in SOWK Prac. (3 Credits)
This course covers content designed to enhance student self-awareness, recognition, understanding and appreciation of diversity among societal population groups as well as recognize and appreciate the many forms of multicultural differences in society as a whole. The course also helps students identify and analyze oppression resulting from persisting social, educational, political, economic, religious and legal inequalities. The course provides a focus on the experiences of oppressed groups in the United States to help increase student competency in both recognition and understanding of the strengths, needs and responses to oppressive societal conditions and experiences. Prerequisite(s): SOWK 605 Co-Requisite(s): SOWK 615, 616, 618 & 619.

SOWK 618. Gen Prac II- Comm & Org. (3 Credits)
This course presents social work theory and practice that focuses on social policy, communities, agencies and organizations and the related social and economic justice principles in macro practice. Course content introduces and analyzes the specific skill sets in social work policy practice and provides skill building in advocacy, planned change and policy and organizational analysis. Prerequisite(s): SOWK 605 Co-Requisite(s): SOWK 615, 616, 617 & 619.

SOWK 619. Field Prac II & Int Sem II. (3 Credits)
Students are assigned for two days (14 hours per week for 15 weeks – 200+ field hours) in program-assigned social work field practice settings. This field practicum provides the required program curriculum practice opportunities for students to apply and master essential social work generalist practice knowledge, values and skills under the direction of an agency-based field instructor, monitored by an assigned program faculty field liaison. The field practicum emphasizes integration of content from all areas of the foundation curriculum and includes an on-campus weekly 60 minute required integrative field seminar group session for all registered students in SOWK 619. Prerequisite(s): SOWK 605 Co-Requisite(s): SOWK 615, 616, 617 & 618.

SOWK 644. SOWK in the Soc Serv Environ. (3 Credits)
This course is designed to focus on the recognition and identification of the special needs as well as the ethnicity and diversity of underrepresented, economically insecure and/or other marginalized client groups such as bisexual and transgender individuals, single-parent, gay and lesbian families and other differences when providing social work services in private and public social services environments. An important focus of this course is the backdrop of public service politics and service characteristics that may be identified in public social services environments. Prerequisite(s): SOWK 619 Co-Requisite(s): N/A.

SOWK 645. Trauma and Substance Use. (3 Credits)
This elective course is designed to examine theory-based approaches to recognize, identify and address the significant impact of substance use on bio-psychosocial functioning of individual and families in their environments. The content identifies the evidence-based multidimensional correlations between developmental trauma and other types of trauma experiences and substance use based on the DSM 5 assessment of substance use impairments. Important for student social work practice are the substance use screening, assessment and intervention strategies provided for work with clients challenged by substance use impairments. Prerequisite(s): SOWK 619 Co-Requisite(s): N/A.

SOWK 646. Tra-Inf Care in Org Settings. (3 Credits)
This course is designed to introduce the trauma-informed care and resilience approach/paradigm for organizational settings. The course correlates with content in SOWK 648 and 649 and focuses on a broad ecological explanatory perspective to explain individual and family developmental responses to biopsychosocial environmental stressors and the impact on organizational and community development. The course specifically identifies and underscores the influence of trauma on neurological and socio-emotional behavioral responses of individuals and groups in organizations and the effects of trauma on emotional dysregulation behavioral responses. The course introduces the seven significant principles of trauma-informed care changes and advocacy intervention strategies that define a trauma-informed organizational paradigm and principles of resiliency. Prerequisite(s): SOWK 619 Co-Requisite(s): N/A.

SOWK 648. Tra-Inf Clinical SOWK Sch Sett. (3 Credits)
This course is designed to introduce the trauma-informed care and resilience approach/paradigm for clinical social work in school settings. The course correlates with content in SOWK 649 and focuses on a broad ecological explanatory perspective to explain the interdependence of school, family and community and identifies and underscores the influence of trauma on neurological and socio-emotional behavioral responses of children in school settings. The course introduces the seven overriding principles of trauma-informed care and advocacy strategies that may be utilized in the school setting to assist with the development of trauma-informed care intervention principles. Prerequisite(s): SOWK 619 Co-Requisite(s): N/A.

SOWK 720. Tra & Resiliency in SOWK Prac. (3 Credits)
This course provides a clinical definition and overview of the concept of trauma, the types of trauma, the broad range of traumatic experiences and the effects of trauma on biopsychosocial development at the individual, family, community and institutional levels. Relatedly, the accompanying focus on resilience, including an overview of factors that promote resilience over the course of trauma and life after trauma, will be introduced to students as a concept central for understanding and intervention with client populations who are survivors of various types of traumatic experiences. Prerequisite(s): Two Year Program - SOWK 619 Prerequisite(s): Advanced Standing Program - SOWK 610 Co-Requisite(s): SOWK 725, 726, 727 & 728.

SOWK 725. DSM-5:Diff Ass & Dia Clin SOWK. (3 Credits)
This course covers a range of mental, emotional and behavioral disorders that are diagnosed from childhood through the adulthood life span. The course examines the etiology and classification of these conditions and the significance of biopsychosocial spiritual and cultural differential diagnostic assessment in clinical social work practice. Additionally, the course introduces basic knowledge of the most common psychopharmacologic agents as they are commonly prescribed to treat and manage the most frequently diagnosed mental, emotional and behavioral disorders. Prerequisite(s): Two Year Program - SOWK 619 Prerequisite(s): Advanced Standing Program - SOWK 610 Co-Requisite(s): SOWK 720, 726, 727 & 728.

SOWK 726. Neuroscience & SOWK Practice. (3 Credits)
This course is designed to provide MSW students with the neurobiological perspective that supports the human development process. The course emphasizes the neurobiological contribution to the person-in-environment self-regulatory capacity that includes emotional reactivity (dysregulation, auto-regulation and co-regulation), all requisite for differential bio-psychosocial assessment and practice application in social work intervention. The course emphasizes the knowledge and understanding of theoretical perspectives of the transactions between the biologic individual and environment that help shape and condition cognition, emotions and behavior as significant factors during differential assessment and intervention planning with diverse individuals and families in clinical social work practice. Prerequisite(s): Two Year Program - SOWK 619 Prerequisite(s): Advanced Standing Program - SOWK 610 Co-Requisite(s): SOWK 720, 725, 727 & 728.

SOWK 727. Tra-Inf Clinic SOWK Prac w/Fam. (3 Credits)
This graduate level trauma-informed course is designed to provide clinical students with advanced multi-theoretical family therapy perspectives including specialized research and theory-based family therapy trauma focused interventions. The course will focus on the family as a natural social system in context and on strengths-based perspectives in family functioning while attending to the effects of trauma on family structure and developmental tasks. Primary emphasis is on the mastery of family theory/therapy-based assessment principles and intervention strategies inclusive of trauma-informed treatment strategies for effective intervention outcomes. Prerequisite(s): Two Year Program - SOWK 619 Prerequisite(s): Advanced Standing Program - SOWK 610 Co-Requisite(s): SOWK 720, 725, 726 & 728.

SOWK 728. Spe Field Prac & Integ Semin I. (3 Credits)
Students spend 21 hours per week in the field (250+ field hours). This is the initial course of a two-course sequence that is designed to provide agency-based field practice instruction with planned opportunities to master advanced social work application of theory knowledge, values, and skills and including a focus on trauma-informed intervention skills. Students assigned to the field practicum placement practice under the direction of the program-approved agency-based field instructor, monitored by a program faculty field liaison. The course emphasizes integration of content from all areas of the specialization curriculum and includes an on-campus weekly 60 minute required integrative field seminar group session for all registered students in SOWK 728. Prerequisite(s): Two Year Program - SOWK 619 Prerequisite(s): Advanced Standing Program - SOWK 610 Co-Requisite(s): SOWK 720, 725, 726 & 727.

SOWK 735. Trauma & Attachment Theory. (3 Credits)
This course provides an in-depth coverage of attachment theory and the relationship between childhood trauma and types of attachment and the predictive role of childhood trauma on types of attachment. Specifically, the course examines the theoretical perspectives of attachment and evidence-based trauma correlations between early loss or absence of consistent caregiving. Early negative childhood experiences such as emotional, physical or sexual abuse and various forms of neglect are examined as primary types of early childhood experiences that create vulnerability to trauma and childhood developmental disorders that extend well into adulthood. Prerequisite(s): SOWK 728 Co-Requisite(s): SOWK 736, 737 & 738.

SOWK 736. Tra-Inf Clinic SOWK Prac w/Grp. (3 Credits)
This advanced specialization course includes and builds on generalist social group work theory and intervention skills. The course is designed to provide research-based group theory perspectives and intervention strategies that focus on group experiential application/practice interventions and clinical skill sets for social work practice with diverse group client systems. Trauma-informed group theory perspectives and related trauma-informed clinical group practice skill will be identified and utilized in collaborative learning experiential group applications with in-class student-assigned group client systems. Prerequisite(s): SOWK 728 Co-Requisite(s): SOWK 735, 737 & 738.

SOWK 737. Trama-Focus Research Capstone. (3 Credits)
This is the second and final research course in the MSW program. It builds on SOWK 616 in which students completed and submitted a trauma-focused research proposal. Program faculty were assigned individual students during the summer and fall semesters to continue with work with students on each student's research project. In this course, students complete the research project, write and submit the report to the course instructor for a final course grade The completed research project paper is the capstone benchmark trauma-focused assignment. The date of submission is to be determined by the Program. Students must earn a B or better for this assignment. Prerequisite(s): SOWK 728 Co-Requisite(s): SOWK 735, 736 & 738.

SOWK 738. Spec Field Prac & Integ Sem II. (3 Credits)
This is the second and a continuation of a two course field instruction course sequence. Students spend 21 hours per week (250+ field hours) in agency-based field practice instruction with planned opportunities to master advanced social work application of theory knowledge, values, and skills that includes a focus on trauma-informed intervention skills. Students are assigned to the field practicum placement course and practice under the direction of the program-approved agency-based field instructor and are monitored by a program faculty field liaison. The course emphasizes integration of content from all areas of the specialization curriculum and includes an on-campus weekly 60 minute required integrative field seminar group session for all registered students in SOWK 738. Prerequisite(s): SOWK 728 Co-Requisite(s): SOWK 735, 736 & 738.

SOWK 740. Financ Capability & Asset Bldg. (3 Credits)
The course provides an introduction to the field of financial capability and asset-building practice. The course also includes core content about economics. Financial capability and asset-building practice include content about wealth, poverty, personal household finance, financial access, and related economic concepts. Discussion is focused on economic and financial concepts as related individuals and families across the life-cycle and communities, with special attention financially fragile communities experiencing poverty and near-poverty. Social policy and policy change efforts related to these areas are also examined.

SOWK 741. Child Welfare & Social Work Po. (3 Credits)
This course is open to an array of students/majors in the University. This course is an elective for Master's Social Work students; and as a general elective for all other graduate students. This course focuses on selected public policies that support the basic needs of families as well as policies that drives the child welfare system and specific policies that govern the juvenile and adult criminal justice systems, the educational and the various emotional and mental health systems. Students will learn about the impact of the policies' cultural, historical, mental health, and political aspects through lectures, videos, PowerPoint presentation, role plays, and other student-centered activities.

SOWK 747. Trauma in the Military. (3 Credits)
This course covers the multiple situations that military personnel experience which are identified as traumatizing events and experiences that independently or together, are major contributors for the development of Post-traumatic Stress Disorders in the military, as defined and described in the DSM 5 Statistical Manual of Mental Disorders (APA, 2013). Multiple deployments, witnessing death or dismemberment or injury of fellow warriors, separation from family, conflict between civilian and military culture and military sexual trauma are some of the factors that will be explored as precipitants of trauma for male and female military personnel. Prerequisite(s): SOWK 728 Co-Requisite(s): N/A.

SOWK 749. Admn & Sup in Tra-Inf Sys Care. (3 Credits)
This course presents knowledge of organizational theories and provides strategies for problem-solving in the internal and external environments of organizations and programs and provides strategies for analyzing problems internal and external to the organization and program. The course also examines the tasks and responsibilities in supervision of the social worker and presents a trauma-informed theoretical framework for supervision in an organization with a focus on methods and skill sets for trauma-informed administrative and supervisory intervention and practice. Prerequisite(s): SOWK 728 Co-Requisite(s): N/A.

SOWK 750. Tra-Inf Ldrshp:Advoc & Pol Pra. (3 Credits)
This course presents a trauma-informed knowledge base and the attendant related skills for social work leadership in the administration, development and advocacy skill sets required in offering human social services programs that are socially and economically just. The course provides a specific focus on trauma-informed advocacy based on the traumatizing events that have occurred in the lives of individuals that underscore effective intervention and leadership processes. The course also explores underlying assumptions, political, and value-based ethical consideration in advocacy and policy practice planning and assists students in analyzing the sociopolitical context for effective leadership in policy practice settings. Prerequisite(s): SOWK 728 Co-Requisite(s): N/A.

Programs A-Z

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Academic Requirements for Graduate Study at VSU

Virginia State University (VSU) is committed to fostering academic excellence and professional growth through its graduate degree programs. The policies and procedures outlined in this section provide a

framework for prospective and current graduate students as they pursue advanced degrees across various disciplines.

Graduate students are expected to understand and comply with the academic regulations outlined in this section, including, but not limited to course registration, academic performance standards, grading policies, degree requirements, transfer credit, time-to-degree limits, and procedures for appeals or petitions.

In addition to these institutional guidelines, each academic program may establish its own requirements and standards specific to the discipline. Where program-specific policies exceed the university's minimum standards, the more rigorous requirements apply. Students are therefore encouraged to consult both the university catalog and their academic program for comprehensive guidance on expectations and procedures.

Together, these policies provide the foundation for Graduate Studies at Virginia State University, ensuring academic rigor, preserving institutional integrity, and upholding the value of every graduate degree conferred.

Academic Credit and Classification

Academic Credit

The semester hour is the unit of academic credit and represents one hour of lecture or recitation or a minimum of two hours of laboratory work each week for one semester or the equivalent.

Course Load

The normal load for a full-time graduate student enrolled during a semester is nine semester hours; a maximum class load is 12 semester hours. To be considered in full-time study, the student must be registered for not less than nine semester hours of work. Non-traditional students who are enrolled in an Alternative Program may enroll in 12 semester hours.

The academic load of a graduate student cannot always be measured in terms of formal courses. Frequently, his/her assignment will consist largely or entirely of research. The Chair and Graduate Program Coordinator in the student's department/program will determine the extent to which these assignments are the equivalent of a full academic load through the use of variable credit research and thesis or dissertation courses.

Part-time graduate students, in-service teachers, and other employed personnel are advised not to carry a load in excess of two graduate courses, except by special permission of the Dean of the College of Graduate Studies on the recommendation of the major advisor. Without special permission, the course load for part-time students may not exceed six credit hours.

During summer school, graduate students can carry six semester hours during both four-and-a-half week sessions. Thus, a student may earn 12 semester hours of credit by attending two sessions of summer school.

Course Numbers

Courses numbered at the 500, 600, and 700 levels are primarily for graduate students. These courses may be taken by other students with the permission of the instructor and department chair. Courses with numbers below 500 will not be applied to graduate degrees.

Continuing Education Credit

The CNED prefix and the 90 to 99 endings denote the off-campus education courses. Degree-seeking students can take CNED courses if they are included on their approved program card. Courses taken for credit through continuing education programs of other institutions must have prior approval from the major professor, the Dean of the College of Graduate Studies, and the Dean of the College.

Independent Study

An advanced graduate student may be allowed to pursue a course through independent study with the approval of his or her advisor, the instructor of the course, the Dean of the College of Graduate Studies, and the Provost. Approval will not be given when the regular course is available.

Auditing Courses

Students enrolled in a full program of study, or its equivalent, may audit a course that contributes to that program provided the student's advisor approves and the instructor of the course agrees. Credit or grades are not assigned for auditing. Audit courses are not accepted in seminars, practica, research courses, field courses, clinical courses, workshops, or similar courses. (See auditing fees under "Special Fees.")

Graduate Degree Requirements

Degree Requirements

Graduate programs lead to the **Doctor of Education (Ed.D.)** in ***Educational Administration and Supervision***; the **Doctor of Philosophy (Ph.D.)** in ***Health Psychology***; the **Master of Arts (M.A.)** in ***Economics*** or ***Media Management***; the **Master of Business Administration (M.B.A.)** in ***Business Administration***; **Master of Science (M.S.)** in ***Biology***, ***Computer Science***, ***Counselor Education***, ***Criminal Justice***, **Data** *Analytics*, ***Educational Administration and Supervision***, ***Mathematics***, ***Psychology***, or **Sport** *Management*; the **Master of Interdisciplinary Studies (M.I.S.)**, the **Master of Social Work (M.S.W.)** in ***Social Work***; or the **Master of Education (M.Ed.)** in ***Counselor Education***, ***Educational Administration and Supervision***, or ***Education***.

Graduate degrees at Virginia State University are awarded based on the specific academic focus and culminating requirements of each program. The *Master of Arts (M.A.), Master of Business Administration (M.B.A.), Master of Education (M.Ed.), Master of Interdisciplinary Studies (MIS), Master of Science (M.S.), and Master of Social Work (MSW)* degrees are conferred in alignment with the nature of the discipline and the type of final project or thesis required. Each program establishes its own general degree requirements, which may include a thesis, action research project, or other approved capstone experience.

The *Doctor of Education (Ed.D.)* and the *Doctor of Philosophy (Ph.D.)* degrees are awarded upon completion of all program-specific requirements, including the prescribed credit hours, comprehensive examinations, and a successfully defended dissertation or equivalent culminating project.

Second Master's Degree

A student with a master's degree from Virginia State University who pursues a second master's degree at the University is exempted from the GRE requirements. Students with master's degrees from other schools who have not taken the GRE must take and pass the GRE if required by the program. VSU courses that apply to both master's degree programs do not have to be repeated, at the advisor's discretion, but the student must take electives to count toward the total semester-hour requirement of the program: 30, 33, 36, or other. Courses used for one degree cannot be used for another degree whether taken at VSU or elsewhere.

Completion Prior to Commencement

Graduate students must complete all degree requirements (including final approval of thesis/dissertations, projects, and internships) and have final grades submitted to the Registrar no less than one (1) week before commencement activities in order for the student to participate in commencement.

Summary Procedures for the Master's Degree

1. Submit the application (with a fee, if applicable) to the Graduate Office.
2. Have two official copies of transcripts from previous undergraduate and graduate studies submitted by colleges/universities sent directly to the Graduate Office. Graduates of Virginia State University only need one copy of their transcript.
3. Have recent scores on the Graduate Record Examination sent to the Graduate Office by the Educational Testing Service, prior to registration; or obtain application from the Graduate Office and register for the GRE during the first semester of enrollment. Foreign students must submit TOEFL scores, in addition to the above, prior to admission.
4. After receiving notice of admission from the Director of Graduate Admissions on behalf of the program and Graduate Studies, the Student Program and Data Card must be completed and submitted to the Graduate Office. Plan the program with your advisor.
5. Candidates for a master's degree, where applicable, will file a thesis title card approved by the advisor at least six months before the candidate expects to complete all requirements for the degree. Candidates for a degree that requires the defense of the master's project (if accepting that option) or the oral/written comprehensive examination will apply at the beginning of the last term of study.
6. Comply with the Schedule of Important Dates for Graduate Studies (available through the College of Graduate Studies Office) for the last semester of study. File an application for the degree for the appropriate commencement by the deadline set in the University Calendar using VSU Banner system.

Program Area Requirements

In addition to the general requirements of the College of Graduate Studies listed, specific requirements of individual programs are listed under Programs of Study, where applicable. Where no discipline specific requirements are indicated, the general admission requirements pertain. Program assessment requirements must be submitted with the application to ensure prompt response for admission.

Program Cards

A student's program of studies is not official until approved by the student's advisor. The official program of courses for the master's degree must include a minimum of 50 percent of the total program in major area courses.

Residency Requirements

A minimum of 21 semester hours in a 30-hour program or 24 semester hours in a 36-hour program must be completed through the offerings at Virginia State University. Although full-time study is desirable, it is not required and many of the programs can be completed through part-time study. Some programs have special stipulations concerning part-time study, which should be carefully followed.

Academic Performance Standards

Academic Standards

A graduate student who is a candidate for a degree must earn a cumulative grade point average (GPA) of 3.0 or higher in all courses applicable to his/her degree. Only courses with grades of "A," "B," "C," "S," or "P" may be applied to semester-hour requirements for the degree.

Students may receive no more than 2 "C's" in courses taken at the graduate level. Courses with "C" grades in excess of this number will not count toward the degree but will be figured in the total cumulative average. A prerequisite undergraduate course taken in conjunction with a graduate program must be completed with a grade of "B" or better.

Graduate students in non-degree programs are expected to meet and maintain the same academic standards as students in degree programs.

Because Virginia State University encourages a maximum of student responsibility, with a minimum of administrative regulation, it expects each student to maintain appropriate standards in his/her academic program. The University reserves the right to terminate the registration of any student who does not meet acceptable standards. Academically, a student whose record falls below standard or otherwise indicates a lack of ability or effort needed to succeed in graduate study will be denied permission for further study.

Probation/Dismissal

Graduate students are expected to maintain high academic standards. Graduate students will be placed on academic probation under the following conditions:

- their cumulative or term GPA is below 3.00 for 1 semester
- they receive 2 grades of C
- they receive 1 grade of D, F, or U.

Graduate students will be suspended from their program for a minimum of 1 year, under the following conditions:

- their cumulative or term GPA is below 3.00 for 2 semesters (these semesters do not have to be consecutive)
- they receive 3 grades of C
- they receive 2 grades of D, F, or U.

Graduate students will receive written notification of their probation or suspension from the Dean of the College of Graduate Studies.

Grading Systems

The approved grade symbols and grade symbol definitions are as follows:

Grade	Definition	Quality Points
A	Superior Performance	4
B	Good Performance	3
C	Average Performance	2
D	Below Average Performance	1
F	Failure	0

The following symbols are also used and have no quality point value, thereby being neutral in grade point average determination.

Grade Symbol Definition

All grades earned are included in the determination of the cumulative average.

P	The Pass/Fail grade is used for the Comprehensive Examination.
S	The student who registers for the research and thesis course or the master's project course and has demonstrated satisfactory progress at the end of the semester or summer session, but has not completed the thesis or project, will receive an "S". After the work has been completed, a final grade of "P" will be given.
U	The student has not demonstrated satisfactory progress in Research and Thesis.
AU	Audit
W	Withdrawn
NG	No grade given. (Used for graduate students only)

Reinstatement

Graduate students suspended for academic reasons are never automatically reinstated. After suspension for one year, a student may appeal to the Policies and Petitions Committee to be given a chance to gain reinstatement, provided it is mathematically possible to bring their cumulative GPA above 3.0 in one semester. If the Committee approves, the student is allowed to enroll for one semester only to repeat the course or courses that pulled the average below 3.00 or in which a grade of less than a B was received.

No new coursework may be taken while the student is seeking to be reinstated. If the student succeeds that semester in raising the average to 3.00 and/or receives grades of B or above in all courses they previously had grades of C or below, the student must then appeal to the committee for full reinstatement. If, after reinstatement, the grade-point average falls below 3.00 again or another grade of C or below is received, the student will not be permitted to continue graduate study at Virginia State University.

Time Limit for the Completion of Master's and Doctoral Degree Requirements and Transfer of Credits

All requirements for master's degree programs must be completed within six (6) years from the date of initial enrollment in the graduate program; excluding periods of military service. All requirements for doctoral degree programs must be completed within eight (8) years from the date of initial enrollment in the graduate program; excluding periods of military service. Students who encounter unique problems which prevent compliance with this regulation may address an appeal to the Chairperson, Policies and Petitions Committee, in care of the College of Graduate Studies.

Under compelling circumstances, master's students may be awarded extensions, totaling not more than two years, to the present limit of six years. This provision restricts the period for completion of the degree to a maximum of eight years. Under compelling circumstances, doctoral students may be awarded extensions, totaling not more than two years, to the present limit of eight years. This provision restricts the period for completion of the degree to a maximum of ten years.

Transfer of credits applies to course credits transferred from other institutions. The University is not obligated to accept any course(s) for transfer credit. However, for a course to be transferred, it must have been earned at a regionally accredited, or otherwise approved, university with a grade of "B" or higher. Courses that have been graded on a Pass, Fail, Satisfactory and Unsatisfactory basis will not be accepted for transfer. Grades for course work taken at VSU, either as a nondegree-seeking student or in a previous graduate matriculation for which a degree was never awarded, are included in the calculation of the VSU graduate grade-point average and all other graduate statistics.

Recommendations regarding transfer credit are initiated at the academic program, department and college levels and reviewed and approved by the Graduate School. Individual programs, departments and colleges may have more stringent requirements. Requests for transfer of course work must include an official copy of the transcript from the college or university where the course work was taken and a VSU Graduate School transfer equivalency form. Transferred courses must be graduate-level courses relevant to the graduate degree being sought. Each graduate program will recommend transfer credits based on an evaluation of the course description.

VSU will not accept credits that do not apply to a graduate degree at the offering institution for transfer, nor will it accept credits from unaccredited institutions for transfer. These conditions apply to all domestic and international institutions.

Duplicate Credit

Any course used as credit toward another degree (a bachelor's degree or earlier master's degree at VSU or elsewhere) will not be used again as credit in a master's degree program at Virginia State University. A course may be used only once; no duplicate credit is allowed. This also applies to master's degrees being pursued simultaneously at VSU and another institution.

Transfer Credit from Another Institution

In a 30-hour program, nine semester hours earned at another accredited graduate school may be accepted toward the master's degree at Virginia State University. In a 36-semester hour program, 12 semester hours may be accepted. In any case, transfer credit from another institution must be approved by the department and must be of "B" quality or higher. Transfer of credit in the core courses is not permitted. The core courses are Foundations of Education, Statistical Procedures in Education and Psychology, and Educational Research.

All transfer credit will be applied after the student's application for advancement to candidacy. Transfer credit cannot be over six years old by the date of graduation; this limit cannot be extended.

Concurrent Enrollment

When the need exists, a student enrolled as a degree student may take graduate courses at another accredited institution. Prior approval of the advisor, Chair, Program Dean, and the Dean of the College of Graduate Studies is necessary. It is the student's responsibility to request credit for such courses and upon completion and have an official transcript submitted to the Registrar and Graduate Office. Permission is not ordinarily given for a student to take a course elsewhere for transfer credit during the semester in which the degree is to be awarded.

Examinations and Evaluations

Final Examinations

In addition to the regularly scheduled course examinations, a candidate for the master's degree must pass, satisfactorily, a formal examination arranged by the chairperson of his/her committee. This examination may be oral or written or both and will cover the field of the student's major and minor work, as well as, the specialized area of the student's thesis if his/her program includes one. The student's special committee will report the results of his/her performance on the examination to the Graduate Office within twenty-four hours.

A student who fails his/her final examination for the master's degree may, at the discretion of the Examining Committee, be allowed another examination not earlier than one semester after his/her failure. The Examining Committee, however, may recommend that the student take a course or courses before he/she is allowed a reexamination.

Proficiency Examinations

Graduate students are not eligible to earn academic credit through proficiency examinations.

Thesis and Dissertation Committee Guidelines

All graduate students completing a thesis or dissertation are required to form an approved advisory committee to guide their research and evaluate their final work. The committee plays a central role in mentoring, assessment, and academic oversight. The following standards govern the formation and operation of thesis and dissertation committees at the University:

- **Committee Composition**
- **Chairperson**: Each committee must be chaired by a full-time faculty member from the student's academic department or program. The chair must hold graduate faculty status and serve as the principal advisor.
- **Committee Members**:
- Master's thesis committees and Doctoral dissertations committees must consist of at least three (3) members, including the chair, with one member from outside the student's department.
- All committee members must hold terminal degrees (i.e., Ph.D. Ed.D.) in the relevant field and be approved by the student's program/department.
- A majority of the committee must hold graduate faculty status at the university.
- **External Member**
- Doctoral committees must include at least one member external to the student's department or academic unit. This individual ensures disciplinary diversity and academic objectivity.
- External members from outside the university may serve with prior approval from the student's department.
- **Eligibility and Approval**
- All committee appointments must be submitted for approval to the student's program.
- Faculty who are not regular members of the graduate faculty (i.e., adjuncts, clinical faculty, or external professionals) may serve with appropriate approvals from the program Chair and Dean.
- If a committee member resigns or is replaced, the student must notify the program coordinator and chair to approve the change.
- **Responsibilities of the Committee**
- Assist the student in developing the thesis or dissertation topic and research plan.
- Provide expertise and critical feedback throughout the research and writing process.
- Ensure the project meets the academic standards of the program and the University.
- Conduct the final defense and determine the outcome of the student's thesis or dissertation.

Thesis and Project Standards

Standards for the thesis and project have been adopted by the Graduate Council. The bulletin which includes these regulations may be obtained from the Graduate Office. The thesis must be satisfactory to the student's Examining Committee in both scholarship and literary quality.

The subject of the thesis approved by the major advisor of the student must be filed with the Dean of the College of Graduate Studies at least six months before the candidate expects to complete all requirements for the degree for which he/she is a candidate.

The thesis advisor for every graduate student is his/her major professor unless the major professor approves the student to develop a thesis under another professor.

The maximum credit assigned under Research and Thesis is three semester hours for all candidates who have credit in a formal research course such as EDUC 513, Educational Research; and ENGL 517, Problems and Methods of Research. Students in departments which do not require a formal course in research techniques may receive a maximum of six semester hours for research and thesis. Each program offering a major for the master's degree has an assigned number for Research and Thesis.

Those programs which offer the option of a project have a similarly assigned number.

Students must register for the Research and Thesis course every semester or term until the thesis is completed. Those who progress satisfactorily will receive a grade of "S" at the end of each semester or term. After the thesis has been completed and approved, the student will receive a final grade for his/her work. A student who registers in Research and Thesis and whose performance is deemed unsatisfactory by the major professor will receive a grade of "U" at the end of the semester or term.

A written form of the thesis, accompanied by an abstract of not over 1,500 words, approved by the major professor, must be deposited in the Graduate Office for submission to the library.

Project standards will vary according to program requirements and the nature of the project. Students will be guided very closely by their advisors in the preparation of the projects and are expected to adhere to program requirements. The student must also register for the master's project course every semester or term until the project is completed. The grade of "S" will be given at the end of each semester or term if satisfactory progress is made. The student will receive a formal grade for his/her work once the project has been completed and approved.

Advising and Instruction

Faculty Advisors

Each student admitted to graduate study in a specific program is assigned a faculty advisor by the Chair of the student's major program

area. Special students may also be assigned faculty advisors by the Dean. The advisor of the degree-seeking student is the major professor whose responsibilities are to:

1. Aid the student in planning a program of study,
2. Advise the student regarding his/her progress toward the degree or certificate,
3. Advise on student petitions, and
4. Aid the Dean in observance of the University policies on graduate study.

Graduate Instruction

Graduate instruction is delivered by:

1. Members of the graduate faculty;
2. Other members of the program faculty whose level of training can provide the student expert guidance in specific areas in which such instructors possess special competence;
3. Certain instructors, not members of the regular Virginia State University faculty, who have been approved to teach specific courses based on preparation comparable to that of the graduate faculty.

In general, approval to teach specific graduate courses is given to instructors holding a doctoral degree and possessing experience and competence in the courses to be taught.

Course Syllabus

Faculty members must provide students with a current course syllabus by the second meeting of the class. The course syllabus must be comprehensive and shall include, but not be limited to, the following:

- Instructor's first and last name;
- Semester and year the course is being offered;
- Office location and hours the instructor will be available to students;
- Email and Office Telephone contact number;
- Americans with Disabilities Act Policy;
- Description of course content;
- Course objectives;
- Special assignments and examination schedules;
- Current bibliography, as appropriate;
- Classroom decorum and attendance policies; and
- Grading system and other pertinent information.

Academic Integrity and Conduct

Plagiarism

Part of the college experience is the discovery of one's own voice. The Virginia State University teaching community is committed to helping each student find their voice. Plagiarism contradicts this end.

Plagiarism is the presentation of others' ideas or written works as one's own. Written works can take the form of electronic or print media and could include - among other items - opinions, facts, and statistics. The following guidelines may be applied to reduce the likelihood of plagiarism:

1. Citing a source is necessary when an idea or written work can be attributed in any way to someone else.
2. Direct copying requires a very specific acknowledgment, either using quotation marks or a clear statement describing how that material was reproduced.
3. An indication of how a source is used is necessary if unique words or phrases from the source are one's work. Words or phrases are considered unique if they would not be spoken or expressed the same way coincidentally. The use of unique language requires the incorporation of quotation marks or a direct statement about who is responsible for the word, phrase, sentence, or group of sentences.
4. Finally, one should always acknowledge the contribution of any person who is a significant contributor to a work through discussion or any other such collaboration. Although common knowledge does not require a reference, one may not be aware of what constitutes common knowledge. The golden rule is, when in doubt, cite.

Classroom Conduct

Each instructor is responsible for maintaining a classroom environment that facilitates effective teaching and learning. The classroom environment should be such that it prepares students for behavior that is expected in a civil society.

Disruptive and disrespectful behavior on the part of any student should not be tolerated by the instructor. Instructors may evict students who disrupt the class, and, when students are consistently disruptive, instructors may recommend to the chair that the student be dropped from the course. The

instructor should always be in charge and has the right to determine appropriate standards of behavior in the classroom if the requirement does not infringe upon the individual's rights. Appropriate classroom decorum should be described in the course syllabus.

Release of Records

The University reserves the right to withhold transcripts, certificates, registration materials, or any other information about a student whose record for financial obligations has not been cleared by appropriate University officials.

Attendance and Enrollment

Class Attendance

Graduate students are responsible for maintaining regular attendance in all registered courses. Attendance policies are determined by the course instructor and must be clearly stated in the course syllabus. The University reserves the right to administratively withdraw a student from a course, program, or final examination if the student's attendance is deemed unsatisfactory by the instructor.

Schedule Changes

All schedule changes must be approved by the student's academic advisor. Courses may be added with the approval of both the advisor and the course instructor, provided the request is submitted no later than the close of the second day of classes. Courses may be dropped without academic penalty and recorded with a grade of "W" (Withdrawn) up to two weeks following the mid-semester date, as published in the University Academic Calendar.

Withdrawal from Graduate Study

Students who officially withdraw from the University in accordance with established procedures will receive a grade of "W" in all courses for which they are currently registered. Students who fail to complete the official withdrawal process may be assigned the final grade earned in each course, which may include a failing grade ("F") as reported by the course instructor.

Official Method of Communication

All graduate students are required to activate and maintain an official Virginia State University (VSU) student email account within one week of the start of their first semester of enrollment. This email account serves as the primary means of communication between the University and its students.

Students are expected to check their VSU email regularly and are responsible for reviewing and responding to all official university communications in a timely manner. The College of Graduate Studies uses this platform to disseminate important information, including updates on academic deadlines, enrollment status, and policy changes.

Instructions for activating a VSU email account can be found on the **Information Technology Services** website.

Graduation and Certification

Application for Graduation

Candidates for a graduate degree or Certificate of Graduate Studies must submit an official ***Application for Graduation*** by the deadline published in the University's Academic Calendar for the semester in which they intend to graduate. Applications must be submitted electronically through the **VSU Banner** system. It is the student's responsibility to ensure timely submission in order to participate in the appropriate Commencement exercise and to allow for degree clearance processing.

Certification of Degree Completion

Upon written request from the student, the Office of the Registrar will provide official verification of degree completion to an employer. The request must include the full name, title, mailing address, and ZIP code of the individual to whom the certification should be sent.

Only the Office of the Registrar is authorized to verify the number of credit hours completed and the fulfillment of all degree requirements for employment or professional purposes.

Appeals and Petitions

Student Petitions and requests for exception

A student who believes that a regulation of the College of Graduate Studies has adversely affected their academic progress may seek relief by submitting a written petition. The petition must clearly outline the circumstances and must be endorsed by the student's academic advisor.

All petitions should be directed to the **Policies and Petitions Committee (PPC)**, submitted in care of the Dean of the College of Graduate Studies. The PPC is composed of six graduate faculty members and is chaired by the Dean, who serves as a non-voting member except in cases requiring a tie-breaking vote.

Grade Appeals

Faculty members are expected to assign grades with accuracy, fairness, and due consideration of all relevant academic factors. Final grades should reflect the student's performance in accordance with clearly defined course requirements, and instructors are responsible for thoroughly reviewing all grading components prior to submission. Requests to change a final grade are considered only under exceptional circumstances.

Grounds for Appeal

Students may appeal a final grade when there is documented evidence that:

- The instructor did not have access to relevant information or documentation at the time the grade was assigned.
- A miscalculation or clerical error occurred in the assignment of the grade.
- A grade of "I" (Incomplete) was issued, and the student has completed the required coursework in accordance with University policy.

Grade appeals must be initiated within **one year** of the semester in which the grade was awarded.

Procedure for Filing a Grade Appeal

1. **Initial Contact**
   The student must first consult with the instructor who assigned the grade, presenting any relevant documentation to support the appeal. If the instructor is no longer employed by the University, the student may contact the department chair for assistance.

2. **Department Review**
   If the issue is not resolved at the faculty level, the student may escalate the matter to the instructor's department chairperson.

3. **College Appeal**
   If resolution is not achieved at the department level, the student may submit a formal written appeal to the **Dean of the College** in which the course was offered. The appeal must include a detailed explanation and supporting documentation. The Dean will refer the appeal to the **College Grade Appeal Committee** for review.

4. **Committee Recommendation and Dean's Decision**
   The College Grade Appeal Committee will review the case and make a recommendation to the Dean. The Dean will issue one of the following dispositions:

   - **Appeal Denied:** The original grade remains unchanged.
   - **Appeal Upheld:** The matter is remanded to the instructor and department chair for reconsideration. The final decision at that level will be reported to the Dean and considered final.

5. **University-Level Review (if unresolved)**
   If the student remains dissatisfied after the College-level review, a final written appeal may be submitted to the **Policies and Petitions Committee (PPC)**, chaired by the Dean of the College of Graduate Studies. The PPC will conduct a review and render a final decision.

Policies and Petitions Committee (PPC) Policies and Procedures

I. PURPOSE AND DUTIES

Purpose

The purpose of the Policies and Petitions Committee (PPC) is to deliberate requests for exceptions to academic policies for graduate students in the areas of academic suspensions, time limits for the completion of degree requirements, and general student appeals. Both the Academic Credits Committee (ACC) and the PPC will provide a report on the types and dispositions of cases to the Provost/Vice President for Academic Affairs.

Duties

The PPC is charged with the following duties and responsibilities:

1. Providing adjudication and disposition on academic suspensions, and other academic matters, including (but not limited to) the following:
2. The time limit for the completion of degree requirements [1]
3. Reinstatement of students
4. Admission to Candidacy
5. Removal of "I" grades
6. Transfer Credit
7. Monitoring and making recommendations to the Provost/Vice President for Academic Affairs (VPAA) relative to academic policy and procedure.

II. COMPOSITION

PPC is a group organized under the auspices of the Graduate Dean and Office of the Provost and Vice President for Academic Affairs. The Committee is composed of two graduate faculty members from each of the colleges that has a graduate program. The Dean of the College of Graduate Studies serves as Chairperson of this Committee. The Dean, as chairperson, votes on cases and issues only to break a tie vote.

III. MEETINGS

The PCC meetings are held at least twice during the semester; however, on certain issues, the Committee members are sent electronic information and are requested to vote on the matter. All members are informed of the decision prior to informing the student. Minutes of the meetings are housed in the Office of the Graduate Dean.

IV. DISPOSITIONS

The PPC renders dispositions based on students' appeals for exceptions to established University policy. Each appeal is considered based on its individual merit, and exceptions are granted only if documentation clearly demonstrates at least one of the following:

1. Sanctions or other negative decisions based on incorrect or missing information;
2. Extraordinary circumstances beyond the student's control; or
3. Situations where there is malfeasance on the part of the University.

The dispositions of PPC are the final recourse for students, i.e., students may not appeal to any other authority at the University. However, PPC decisions may be reviewed by the Provost, who has the authority to reconvene PPC if additional information relative to a case becomes available after a disposition is rendered. PPC decisions are communicated to students via a letter from the Dean of Graduate Studies with copies to the student's dean and department chairperson as well as the Office of the Registrar.

Members of the PPC must recuse themselves from deliberation on any case in which they have direct or indirect involvement, including familial relationships, personal ties to the appellant, or any other connection which might pose a conflict of interest.

Minutes of the proceedings of the PPC are completed by the committee's recorder; hard copies are maintained in the Office of the Graduate Dean in accordance with the University's record retention policy. A summary of dispositions of the PPC shall be submitted annually to the Provost/Vice President for Academic Affairs.

Standardized Testing Requirements

Graduate Record Examination (GRE)

At Virginia State University, all individuals seeking master's and post-master degrees must submit test scores from the Graduate Record Examination (GRE). The GRE scores must be no more than six (6) years old when the student is admitted to the Graduate College. If the GRE was taken earlier, the student must take it again and submit new scores. The GRE is to be taken prior to enrollment.

A computer-based administration of the GRE is given at many locations throughout the state and the country on a year-round basis. The GRE Information and Registration Bulletin is available in the Graduate Office. Students must take the General Test.

GRE scores vary by program. Refer to your program curriculum for the GRE requirement.

For Foreign Students

Language Proficiency

An applicant from a country where English is not the native language is required to demonstrate a proficiency in English by submitting scores on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Service (IELTS). Students must achieve a 5.5 or better on the overall band score.

Graduate Admissions

Virginia State University (VSU) is committed to fostering academic excellence and professional growth through its graduate degree programs. The policies and procedures outlined in this section provide a framework for prospective and current graduate students as they pursue advanced degrees across various disciplines.

All prospective graduate students apply for admission either:

(1) to a program leading to a degree

or

(2) to a non-degree program for certification, in-service training, or for professional or personal improvement.

Each student applying for admission should specify on the application the program to which he/she is applying and make sure that he/she is meeting the specific program criteria as determined by the respective program.

All applications should be completed and submitted online. All supporting credentials, scores, and references should be mailed or sent electronically from the original source to the Office of Graduate Admissions. *Final admission determination will be made by the program to which the student has applied.*

The application *deadline* for admission to graduate varies by program. Please review the section summarizing application deadlines to find the date for each program.

Application Procedures

APPLICATION PROCEDURES FOR STUDENTS SEEKING A DEGREE

1. Submit a completed online application form to the Office of Graduate Admissions.

2. Have two official transcripts from the school(s) granting the degree(s) sent to the Office of Graduate Admissions. To be considered official, a transcript must be received DIRECTLY from the institution concerned. Graduates of Virginia State University must comply with this requirement.

3. An applicant must have taken the GRE by the time she/he applies. GRE requirements differ by program. Applicants who do not meet GRE program requirements can be admitted on a conditional basis (for one semester only). Students admitted on a conditional basis can only take a total of nine credit hours of coursework until they have met the GRE requirements of their respective program.

After the first semester, the student must meet the specific GRE program requirements.

4. Requests for transfer credit for graduate courses already completed must be submitted to the Chair of the program with evidence that it is a graduate-level course; a catalog description for the course is necessary to determine its equivalency to offerings at this University.

5. Applicants whose native language is not English are required to present a minimum score of 500 on the Test of English as a Foreign Language (TOEFL). Exceptions are made for transfer students from other U.S. colleges who have completed at least one semester of coursework with a grade point average of "C" or better.

APPLICATION PROCEDURES FOR NON-DEGREE STUDY

1. Submit a completed online application to the Office of Graduate Admissions.

2. Attach a statement of study objectives.

3. Have two official transcripts of the record leading to the most advanced degree attained sent to the Office of Graduate Admissions. To be considered official, a transcript must be received directly from the institution. Graduates of Virginia State University must comply with this requirement (with the exception that only one transcript is needed).

4. An applicant who is a candidate for a degree at another institution should also submit a statement from an appropriate official certifying such status and authorizing study here.

TYPES OF ADMISSION

The College of Graduate Studies offers graduate students the following types of admission– unconditional, conditional, and special. In addition to the general admission requirements for graduate study at Virginia State University, academic program requirements must be satisfied. The specific requirements for each program are found under the description of the program.

UNCONDITIONAL ADMISSION

1. Graduates of a regionally accredited college, with a minimum grade-point average of 2.6 (on a 4- point scale) may be granted unconditional admission provided all other prerequisites have been met. The grade-point average is based on either the last two years of college or the entire undergraduate record, whichever is better, except that the grade-point average of a student who attended more than one college is based on the entire record.

2. Applicants must meet the requirements for admission to the program of their proposed majors. (See program descriptions.)

CONDITIONAL ADMISSION

Students are granted conditional admission to the College program under the following guidelines:

1. A graduate of an institution approved as a four-year college by the State Department of Education in the state where it is located, but not accredited by its regional accrediting agency, may be admitted conditionally; however, he/she must have an undergraduate average of at least 2.5.
2. An applicant who is a graduate of a college fully accredited by its regional accrediting agency, but whose academic average is lower than 2.6 will only be considered on an individual basis.

3. Applicants who have met the general admission requirements of the Graduate College but who have not cleared program area admissions requirements may be admitted conditionally, pending program area action.

REMOVAL OF CONDITIONAL STATUS

The student must remove his/her conditional status and attain unconditional status by:

1. Earning an average of 3.0 in the first nine hours of courses in an approved program of study.

2. Meeting all program area requirements for unconditional admission, and

3. Earning an average of 3.0 in all undergraduate prerequisites listed in the approved program of study.

SPECIAL ADMISSION FOR NON-MATRICULATING STUDENTS

Students who possess baccalaureate degrees and wish to study for their own personal growth may be allowed to take coursework as non-matriculating "special" students.

Students admitted to resident workshops and institutes and approved off-campus graduate courses, but who are not pursuing a program of study, will be considered special students.

A visiting student pursuing graduate work at another institution may, with the approval of the appropriate official(s) of that institution, take courses at Virginia State University for credit to be transferred to the graduate school in which the student is enrolled. Such a student has special status at Virginia State University.

TRANSFER TO A DEGREE PROGRAM

A special student who wishes to become a degree-seeking student may have his/her classification changed by presenting his/her request to the Chair of the department and submitting all required credentials. Not more

than nine (9) semester hours of credit earned by a special student may be credited toward the master's degree.

OFFER OF ADMISSION TO GRADUATE STUDY

A written acceptance or rejection of the offer of admission should be sent to the Graduate Office as soon as a decision on graduate study has been made by the student.

A student who enrolls at another institution is considered to have rejected the University's offer of admission.

An individual whose offer of admission has lapsed must submit a new online application to be reconsidered for admission at a later date.

RE-APPLICATION

Students who are accepted but do not enroll within a one-year period from the semester date for which they were accepted must submit a new online application and initiate the application process the same as new students.

REACTIVATION

Records of students who have enrolled previously but have taken no coursework during a two-year interval will be deactivated. Once records are deactivated, a student must reapply, submitting a new online application to continue with graduate studies. Transcripts of any coursework taken during the two-year interval from any other college or university will also be required.

REGISTRATION

Dates of registration are listed in the University Calendar. Registration is done via the VSU Banner website. Prior to registration, graduate students who are already enrolled in a program should consult with their advisors and work out programs for the ensuing term. For this purpose, the students should bring with them their Student Program and Data card and copies of their most recent grade reports.

Graduate faculty from program areas and the Dean of the College of Graduate Studies are available in their office during registration to assist students. A late registration fee is charged after the date specified in the University Calendar. The amount charged is listed under Special Fees. Registration is not completed until all financial obligations pertaining to it are met.

OTHER ACADEMIC REQUIREMENTS

Note: All guidelines and regulations outlined in this section represent the minimum standards for VSU. Where departmental/program standards are more rigorous than these minimums, the program standards supersede. Students should consult their program's section in the catalog for specific guidance regarding their program.

ACADEMIC CREDIT

The semester hour is the unit of academic credit and represents one hour of lecture or recitation or a minimum of two hours of laboratory work each week for one semester or the equivalent.

ACADEMIC STANDARDS

A graduate student who is a candidate for a degree must earn an average of 3.0 or higher in all courses applicable to his/her degree. Only courses with grades of "A," "B," "C," "S," or "P" may be applied to semester-hour requirements for the degree.

Students may receive no more than two (2) “C’s” in courses taken at the graduate level. Courses with "C" grades in excess of this number will not count toward the degree but will be figured in the total cumulative average. A prerequisite undergraduate course taken in conjunction with a graduate program must be completed with a grade of "B" or better.

Graduate students in non-degree programs are expected to meet and maintain the same academic standards as students in degree programs.

Because Virginia State University encourages a maximum of student responsibility, with a minimum of administrative regulation, it expects each student to maintain appropriate standards in his/her academic program. The University reserves the right to terminate the registration of any student who does not meet acceptable standards. A student whose record falls below standard or otherwise indicates a lack of ability or effort needed to succeed in graduate study will be denied permission for further study.

APPLICATION FOR GRADUATION

A candidate for the graduate degree or Certificate of Graduate Studies should file an Application for Graduation in the Registrar’s Office by dates published in the official academic year calendar prior to the appropriate Commencement Exercise. It is the student’s responsibility to obtain all required signatures in advance of this date.

ATTENDANCE

Responsibility for regular class attendance rests with the student. Regulations concerning attendance in a course are at the discretion of the instructor and should be present in the course syllabus. The University reserves the right to exclude from a graduate program, course, or final examination a student whose attendance in classes is unsatisfactory to the instructor of the class.

AUDITING COURSES

Students enrolled in a full program of study, or its equivalent, may audit a course that contributes to that particular program provided the student’s advisor approves and the instructor of the course agrees. Credit or grades are not assigned for auditing. Audit courses are not accepted in seminars, practica, research courses, field courses, clinical courses, workshops, or similar courses. (See auditing fees under "Special Fees.")

CERTIFYING HOURS AND COMPLETION OF REQUIREMENTS

The Dean will certify the completion of degree requirements to an employer upon written request from the student. The request should include the full name, title, address, and zip code of the persons to whom the student wants such certification made. Only the Dean of Graduate Studies is authorized to certify the number of hours completed and the completion of degree requirements to an employer.

CHANGE OF DEGREE PROGRAM

Admission to the Graduate College in one program does not entitle a student to transfer to another program without applying for and being accepted by the new program as a new student. Any student wishing to change from one program to another must complete a Change of Major form (which requires a number of signatures including those of the original advisor and the chairperson of the department to which the student wishes to transfer). The forms are available on the University's website under Registrar.

CONCURRENT ENROLLMENT

When the need exists, a student enrolled as a degree student may take graduate courses at another accredited institution. Prior approval of the advisor, Chair, Program Director, and the Dean of the College of Graduate Studies is necessary. It is the student's responsibility to request credit for such courses and upon completion and have an official transcript submitted to the Registrar and Graduate Office. Permission is not

ordinarily given for a student to take a course elsewhere for transfer credit during the semester in which the degree is to be awarded.

CONTINUING EDUCATION CREDIT

The CNED prefix and the 90 to 99 endings denote the off-campus education courses. Degree-seeking students can take CNED courses if they are included on their approved program card. Courses taken for credit through continuing education programs of other institutions must have prior approval from the major professor, the Dean of the College of Graduate Studies, and the Dean of the College.

COURSE LOAD

The normal load for a full-time graduate student enrolled during a semester is nine semester hours; a maximum class load is 12 semester hours. To be considered in full-time study the student must be registered for no less than nine semester hours of work. Non-traditional students who are enrolled in an Alternative Program may enroll in 12 semester hours.

The academic load of a graduate student cannot always be measured in terms of formal courses. Frequently, his/her assignment will consist largely or entirely of research. The Chair and Graduate Program Coordinator in the student's department will determine the extent to which these assignments are the equivalent of a full academic load through the use of variable credit research and thesis or dissertation courses.

Part-time graduate students, in-service teachers, and other employed personnel are advised not to carry a load in excess of two graduate courses, except by special permission of the Dean of the College of Graduate Studies on recommendation of the major advisor. Without special permission, the course load for part-time students may not exceed six credit hours.

During summer school, graduate students can carry 6 semester hours during both four and a half week sessions. Thus, a student may earn 12 semester hours of credit by attending two sessions of summer school.

General Student Appeals: A student who considers any of the regulations of the College of Graduate Studies, to have adverse effect upon his/her academic progress may request relief by addressing a written petition setting forth the particulars of the situation with approval of his /her advisor. The request should be addressed to the Policies and Petitions Committee in care of the Dean of the College of Graduate Studies. The Committee is composed of two graduate faculty members from each of college that has a graduate program, plus the graduate dean.

Grade Appeal: College Grade Appeal Committees consisting of at least three (3) faculty members from various programs shall deliberate requests for grade appeals and recommend an action to the college dean. The dean shall review the recommendation and make a decision on the outcome of the appeal. The dean shall serve as the final arbiter on the matter. At the end of each semester, the dean shall submit to the Policies and Petitions Committee a summary report of the dispositions of grade appeals handled at the college level. Only if circumstances warrant further deliberation should a grade appeal be referred to the PPC.

The appeal procedure for a student with a complaint about grading requires initial contact with the instructor involved and further contact with the instructor's department chairperson if the matter is not resolved between the instructor and student. If the matter is not resolved at the departmental level, a grade appeal should be submitted to the dean of the college in which the instructor teaches. The dean shall then forward the request to the grade appeal committee for deliberation.

Normally, students may appeal final grades based upon documented evidence that a grade was incorrectly awarded. Typically, grade changes are warranted based upon the following:

• The Professor did not have information or documentation at the time the grade was awarded;
• The Professor made an error of calculation or other error or entry of a grade;
• A grade of "I" (incomplete) was entered and the student completed the necessary work for the course.

The student will follow the steps below:

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1. Make his/her case (with documentation) to the faculty member who awarded the grade. If the faculty member is no longer employed by the University, the student may approach the Department Chairperson for the unit through which the course was offered.
2. If the student is not satisfied with the disposition of the faculty member, he/she may repeat this process with the Department Chairperson.
3. If the student remains dissatisfied, he/she may appeal to the college grade appeal committee via a letter which states the student's case with supporting documentation appended.
4. After deliberation, the college grade appeal committee makes a positive or negative recommendation to the dean.
5. The dean will consider the appeal, entering one of two dispositions:

• The appeal has no merit and the faculty member's grade stands as entered;
• The appeal has merit and is remanded to the department chairperson and faculty member for reconsideration. In these cases, the disposition of the faculty member is reported to the dean and is final.

COURSE NUMBERS

Courses numbered at the 500, 600, and 700 levels are primarily for graduate students. These courses may be taken by other students with the permission of the instructor and department chair. Courses with numbers below 500 will not be applied to graduate degrees.

DEGREE REQUIREMENTS

Graduate programs lead to the Doctor of Education (Ed.D.) in Educational Administration and Supervision, Doctor of Philosophy (Ph.D.) in Health Psychology, Master of Arts (M.A.), Master of Science (M.S.) or Master of Education (M.Ed.) degree. The M.A. degree is conferred when the major is in Economics or Media Management. The M.S. degree is conferred in all other majors that also include the preparation of a thesis. The M.Ed. degree is conferred in those professional teacher education programs which include an Action Research Project.

MASTER OF ARTS, MASTER OF SCIENCE AND MASTER OF EDUCATION, MASTER OF INTERDISCIPLINARY STUDIES

Each program determines general requirements for the Master of Arts, Master of Science, Master of Education, and Master of Interdisciplinary Studies

DOCTORAL PROGRAMS

The Doctor of Education and Doctor of Philosophy degrees require the hours determined by the programs.

DUPLICATE CREDIT

Any course used as credit toward another degree (a bachelor's degree or earlier master's degree at VSU or elsewhere) will not be used again as credit in a master's degree program at Virginia State University. A course may be used only once; no duplicate credit is allowed. This applies also to master's degrees being pursued simultaneously at VSU and another institution.

FACULTY ADVISORS

Each student admitted to graduate study in a specific program is assigned a faculty advisor by the Chair of the student's major program area. Special students may also be assigned faculty advisors by the Dean. The advisor of the degree-seeking student is the major professor whose responsibilities are to (1) aid thestudent in planning a program

of study, (2) advise the student regarding his/her progress toward the degree or certificate, (3) advise on student petitions, and (4) aid the Dean in observance of the University policies on graduate study.

FINAL EXAMINATIONS

In addition to the regularly scheduled course examinations, a candidate for the master's degree must pass satisfactorily a formal examination arranged by the chairman of his /her committee. This examination may be oral or written or both, and will cover the field of the student's major and minor work as well as the specialized area of the student's thesis if his/her program includes one. The student's special committee will report the results of his /her performance on the examination to the Graduate Office within twenty-four hours.

A student who fails his/her final examination for the master's degree may, at the discretion of the Examining Committee, be allowed another examination not earlier than one semester after his/her failure. The Examining Committee, however, may recommend that the student take a course or courses before he/she is allowed a reexamination.

PROFICIENCY EXAMINATIONS

Graduate students are not eligible to earn academic credit through proficiency examinations.

GENERAL STUDENT APPEALS

A student who considers any of the regulations of the College of Graduate Studies, to have adverse effect upon his/her academic progress may request relief by addressing a written petition setting forth the particulars of the situation with approval of his /her advisor. The request should be addressed to the Policies and Petitions Committee in care of the Dean of the College of Graduate Studies. The Committee is composed of six graduate faculty members, plus the graduate dean.

GRADE APPEAL

The College Grade Appeal Committees consisting of at least three (3) faculty members from various programs shall deliberate requests for grade appeals and recommend an action to the college dean. The dean shall review the recommendation and make a decision on the outcome of the appeal. The dean shall serve as the final arbiter on the matter.

At the end of each semester, the dean shall submit to the Policies and Petitions Committee a summary report of the dispositions of grade appeals handled at the college level. Only if circumstances warrant further deliberation should a grade appeal be referred to the PPC.

The appeal procedure for a student with a complaint about grading requires initial contact with the instructor involved and further contact with the instructor's department chairperson if the matter is not resolved between the instructor and student. If the matter is not resolved at the departmental level, a grade appeal should be submitted to the dean of the college in which the instructor teaches. The dean shall then forward the request to the grade appeal committee for deliberation.

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• The Professor made an error of calculation or other error or entry of a grade;
• A grade of "I" (incomplete) was entered and the student completed the necessary work for the course.

The student will follow the steps below:

1. Make his/her case (with documentation) to the faculty member who awarded the grade. If the faculty member is no longer employed by the University, the student may approach the Department Chairperson for the unit through which the course was offered.
2. If the student is not satisfied with the disposition of the faculty member, he/she may repeat this process with the Department Chairperson.
3. If the student remains dissatisfied, he/she may appeal to the college grade appeal committee via a letter which states the student's case with supporting documentation appended.
4. After deliberation, the college grade appeal committee makes a positive or negative recommendation to the dean.
5. The dean will consider the appeal, entering one of two dispositions:

a. The appeal has no merit and the faculty member's grade stands as entered;
b. The appeal has merit and is remanded to the department chairperson and faculty member for reconsideration. In these cases, the disposition of the faculty member is reported to the dean and is final.

POLICIES AND PETITIONS COMMITTEE (PPC) POLICIES AND PROCEDURES

I. PURPOSE AND DUTIES

Purpose

The purpose of the Policies and Petitions Committee (PPC) is to deliberate requests for exceptions to academic policies for graduate students in the areas of academic suspensions, time limit for the completion of degree requirements, and general student appeals. Both the ACC and the PPC will provide a report of the types and disposition of cases to the Provost/Vice President for Academic Affairs.

DUTIES

The PCC is charged with the following duties and responsibilities:

A. Providing adjudication and disposition on students' academic suspensions, and other academic matters, including (but not limited to) the following:

• Time limit for the completion of degree requirements1
• Reinstatement of students
• Admission to Candidacy
• Removal of "I" grades
• Transfer Credit

B. Monitoring and making recommendations to the Provost/Vice President for Academic Affairs (VPAA) relative to academic policy and procedure

II. COMPOSITION

The PCC is a group organized under the auspices of the Graduate Dean and Office of the Provost/Vice President for Academic Affairs. The Committee is convened and facilitated by the Dean of the Graduate College. The Committee is composed of two graduate faculty members from each of college that has a graduate program. The Dean of the College of Graduate Studies serves as Chairperson of this Committee. The Dean, as chairperson, votes on cases and issues only to break a tie vote.

III. MEETINGS

The PPC meetings are held at least twice during the semester; however, on certain issues, the Committee members are sent electronic information and are requested to vote on the matter. All members are informed of the decision prior to informing the student. Minutes of the meetings are housed in the Office of the Graduate Dean.

IV. DISPOSITIONS

The PPC renders dispositions based upon students' appeals for exceptions to established University policy. Each appeal is considered based on its individual merit, and exceptions are granted only if documentation clearly demonstrates at least one of the following:

A. Sanctions or other negative decisions based on incorrect or missing information;
B. Extraordinary circumstances beyond the student's control; or

C. Situations where there is malfeasance on the part of the University.

The dispositions of PPC are the final recourse for students, i.e., students may not appeal to any other authority at the University. However, PPC decisions may be reviewed by the Provost, who has the authority to reconvene PPC if additional information relative to a case becomes available after a disposition is rendered. PPC decisions are communicated to students via letter from the Dean of Graduate Studies with copies to the student's dean and department chairperson as well as the Office of the Registrar.
Members of the PPC must recuse themselves from deliberation on any case in which they have direct or indirect involvement, including familial relationships, personal ties to the appellant, or any other connection which might pose a conflict of interest.
Minutes of the proceedings of the PPC are completed by the committee's recorder; hard copies are maintained in the Office of the Graduate Dean in accordance with the University's record retention policy. A summary of dispositions of the PPC shall be submitted annually to the Provost/Vice President for Academic Affairs.
Probation/Dismissal: Graduate students are expected to maintain high academic standards. Graduate students will be placed on academic probation under the following conditions:
• their cumulative or term GPA is below 3.00 for 1 semester,
• they receive 2 grades of C,
• they receive 1 grade of D, F, or U.
Graduate students will be suspended from their program for a minimum of 1 year, under the following conditions:
• their cumulative or term GPA is below 3.00 for 2 semesters (these semesters do not have to be consecutive),
• they receive 3 grades of C or lower,
• they receive 2 grades of D, F, or U.
Graduate students will receive written notification of their probation or suspension from the Dean of the College of Graduate Studies

Types of Admission

The College of Graduate Studies offers graduate students the following types of admission– unconditional, conditional, and special. In addition to the general admission requirements for graduate study at Virginia State University, academic program requirements must be satisfied. The specific requirements for each program are found under the description of the program.

Unconditional Admission

1. Graduates of a regionally accredited college, with a minimum grade-point average of 2.6 (on a 4- point scale) may be granted unconditional admission provided all other prerequisites have been met. The grade-point average is based on either the last two years of college or the entire undergraduate record, whichever is better, except that the grade-point average of a student who attended more than one college is based on the entire record.

2. Applicants must meet the requirements for admission to the program of their proposed majors. (See program descriptions.)

Conditional Admission

Students are granted conditional admission to the College program under the following guidelines:

1. A graduate of an institution approved as a four-year college by the State Department of Education in the state where it is located, but not accredited by its regional accrediting agency, may be admitted conditionally; however, he/she must have an undergraduate average of at least 2.5. 38

2. An applicant who is a graduate of a college fully accredited by its regional accrediting agency, but whose academic average is lower than 2.6 will only be considered on an individual basis.

3. Applicants who have met the general admission requirements of the Graduate College but who have not cleared program area admissions requirements may be admitted conditionally, pending program area action.

Removal of Conditional Status

The student must remove his/her conditional status and attain unconditional status by

1. Earning an average of 3.0 in the first nine hours of courses in an approved program of study.

2. Meeting all program area requirements for unconditional admission, and

3. Earning an average of 3.0 in all undergraduate prerequisites listed in the approved program of study.

Special Admissions for Non-Matriculating Students

Students who possess baccalaureate degrees and wish to study for their own personal growth may be allowed to take course work as non-matriculating "special" students.

Students admitted to resident workshops and institutes and approved off-campus graduate courses, but who are not pursuing a program of study, will be considered special students.

A visiting student pursuing graduate work at another institution may, with the approval of the appropriate official(s) of that institution, take courses at Virginia State University for credit to be transferred to the graduate school in which the student is enrolled. Such a student has special status at Virginia State University.

Transfer to a Degree Program

A special student who wishes to become a degree-seeking student may have his/her classification changed by presenting his/her request to the Chair of the department and submitting all required credentials. Not more than nine (9) semester hours of credit earned by a special student may be credited toward the master's degree.

Offer Admission to Graduate Study

A written acceptance or rejection of the offer of admission should be sent to the Graduate Office as soon as a decision on graduate study has been made by the student.

A student who enrolls at another institution is considered to have rejected the University's offer of admission.

An individual whose offer of admission has lapsed must submit a new application and fee to be reconsidered for admission at a later date.

Re-Application

Students who are accepted but do not enroll within a one-year period from the semester date for which they were accepted must obtain new application forms from the Office of Graduate Admissions, initiate the application process the same as new students, and pay all fees as required in the application process.

Reactivation

Records of students who have enrolled previously but have taken no course work during a two-year interval will be deactivated. Once records are deactivated, a student must reapply, submitting a new online application to continue with graduate studies. Transcripts of any course work taken during the two-year interval from any other college or university will also be required.

Registration

Dates of registration are listed in the University Calendar. Registration is done via the VSU Banner website. Prior to registration, graduate students who are already enrolled in a program should consult with their advisors and work out programs for the ensuing term. For this purpose, the students should bring with them their Student Program and Data card and copies of their most recent grade reports.

Graduate faculty from program areas and the Dean of the College of Graduate Studies are available in their office during registration to assist students. A late registration fee is charged after the date specified in the University Calendar. The amount charged is listed under *Special Fees*. Registration is not completed until all financial obligations pertaining to it are met.

Financial Information

Graduate Tuition and Fees

Any student who already holds a bachelor's degree is considered a graduate student for purposes of assessing tuition fees. For any course, undergraduate or graduate, taken by a student who has graduated from college with a bachelor's degree, the fee charged is the graduate tuition fee.

For information, see the current Tuition and Fee Guide, available at http://www.vsu.edu/student-accounts/tuition-fees.php.

AUDITING FEES: Students approved to audit a course will be charged at the same rate as for credited semester hours.

TRANSCRIPT FEE: The Registrar's Office is the source for all University transcripts. A nominal fee is charged for each transcript requested.

COMPREHENSIVE EXAMINATION FEE: The comprehensive examination fee will be charged when a student enrolls in the comprehensive exam course and is not enrolled in any other courses.

THESIS FEE: This fee will be charged when the student enrolls in Thesis in Absentia (no credit hours) during any semester.

LATE REGISTRATION FEE: Registration dates for the first and second semesters are provided in the University Calendar and Course Schedule Bulletins. A late fee is assessed after the open registration period ends.

GRADUATION FEE: Students are required to file for graduation and pay the applicable administrative fee for processing the master's diploma. Additional fees are assessed for keepsake caps, gowns, and hoods necessary for University graduation ceremonies.

Financial Assistance

Qualified students requiring financial assistance can apply for loans, scholarships, grants, and part-time employment through Virginia State University's Office of Financial Aid. Federal-guaranteed loans are available to graduate students, whether they have full-time jobs or not. The maximum loan (currently $8,500 per year for two (2) years) is available to full-time students. Half of the amount of the maximum loan amount is available to part-time graduate students who are carrying at least six (6) hours per semester.

Virginia State University awards graduate assistantships each semester to students who have demonstrated exceptional promise and achievement. These assistantships provide a stipend to students each semester towards their tuition and fees for up to four (4) semesters. Graduate assistants may be required to work 25 hours per week. After acceptance, students may contact the Graduate Studies Office at gradstudies@vsu.edu or (804) 524-3692 to inquire about the application process for the Graduate Fellowship/Assistantship.

Guaranteed Student Loan Applications are obtained from the Financial Aid Office. The Financial Aid Form (FAF), also obtained from the Financial Aid Office, must be filed each year to establish eligibility for loans and work-study assistantships. To find more information, please visit the Financial Aid page on the VSU website or contact the Financial Aid Office at (804) 524-5990 **or** (800) 823-7214.

The Office of Sponsored Research may offer information about assistantships to graduate students whose interests correlate with the goals of research projects. Applicants should consult with the chief investigator.

Several positions as resident hall assistants are open to graduate students. Inquiries for these positions should be made to the Director of Residence Life and Housing.

Occasionally, graduate students may be selected for part-time jobs by offices and other non-teaching departments of the University to which graduate assistant funds do not apply. Graduate students may consult the Director of Financial Aid and/or the Director of Career Services.

Governance and History of Graduate Studies at VSU

ADMINISTRATION OF GRADUATE PROGRAMS

The Dean of the College of Graduate Studies exercises general responsibility for administration of graduate study and for university-wide policies, requirements, procedures and standards of graduate study. However, within this framework, the development, promotion, and delivery of instruction are the primary responsibility of graduate faculty members in individual program areas in collaboration with departmental Chairs and Deans of the perspective colleges.

Much of the work of the Graduate College is accomplished through three subcommittees:

(1) Policies and Petitions,

(2) Graduate Curriculum, and

(3) Admissions Policy.

The Policies and Petitions Committee has responsibility for decisions on written appeals from students seeking exceptions to policy, recommendations for suggested policy changes, and nominations to membership on the Graduate Faculty. The Graduate Curriculum Committee is responsible for approval of graduate curricular changes and proposals. The Admissions Policy Committee reviews policy, makes recommendations for exceptions, and designs procedures for admission to the College of Graduate Studies.

Graduate programs follow a general and flexible pattern which emphasizes an area of specialization. In keeping with the policy of individualizing programs, each student will pursue a program consistent with his/her previous preparation and experience and directed toward his/her personal and professional objectives. Programs leading to the doctorate degree, master's degree, or to the certificate of advanced graduate study may be completed during the regular sessions in all fields of study. They may be completed also during the summer sessions or, in many fields, through study in the evenings, in the late afternoons, and on Saturday mornings. Military, school, and industrial personnel find the scheduling flexible.

History and Philosophy of Graduate Study at Virginia State University

During the summer of 1937, Virginia State offered graduate courses for the first time in two fields–elementary education and secondary education in English, history, and social sciences. In 1939, most departments of the institution offered one or more graduate courses, and the Division of Graduate Studies was established. As a result of continued growth and expansion, the Board of Visitors raised the status of the advanced studies areas to the Graduate School in September 1968.

Prior to September 1968, the Graduate Faculty was assigned all responsibilities related to graduate studies; the programs were coordinated by the Director of the Division of Graduate Studies and Research. The first director, J. McNeile Hunter, was later appointed Dean of the College and served in both capacities after that, until his retirement from administration in 1966. In September 1966, the second director was appointed, and the Graduate Faculty established a Graduate Committee and three sub-committees to provide leadership for, recommend policy to, and execute policies of the Graduate Faculty. In September 1968, a Graduate Council was established and made responsible to the Educational Council of the College. The duties of the Council were assigned in 1969 to the Education Committee of the Graduate Faculty.

The School of Graduate Studies and the School of Continuing Education were merged in July 1993 to form the School of Graduate Studies and Continuing Education. The school changed its name in September 2012 to the College of Graduate Studies. It is one of six colleges headed by a Dean. The College of Graduate Studies does not have a separate faculty. The members of the Graduate Faculty are highly qualified persons who may also teach undergraduate courses. They are nominated by the graduate faculty of affected program areas and are approved by the Policies and Petitions Committee of the Graduate Council.

The philosophy central to all graduate programs in the University includes the following views. First, graduate programs take as a principal purpose, the development and extension of significant specialization in a major academic discipline, interdisciplinary area, or profession. Second, each program has sufficient breadth to include important study in supporting areas and disciplines. As a corollary, programs in the professions include study in the basic academic disciplines from which they are derived or on which they rest and, in addition, include necessary study in supporting areas and disciplines. Third, each program takes as an objective, the development of habits of scholarship and understanding and competence in research consistent with the level and nature of the program. Fourth, each program in the professions takes as an objective, the development of skills and competencies essential to responsible practice.

Graduate education is centered in academic program areas. The primary purpose of the graduate program is to offer capable students an opportunity for advanced study and research in their fields of specialization. One of its aims is to assist students in achieving an advanced level of understanding and competence necessary for successful professional careers.

Food and Nutrition Science, Graduate Certificate (CERT)

The Graduate Certificate Program in Food and Nutrition Science fulfills the Accreditation Council for Education in Nutrition and Dietetics (ACEND) Eligibility Requirements and Accreditation Standards for Dietetic Internships. The program blends theoretical and practical principles of Dietetics in didactic and supervised practice settings. Students will gain experience in all areas of Dietetics Practice, including Food Service Systems and Management, Community and Public Health Nutrition, Clinical Dietetics, and Research. Students who successfully complete the program will be issued a Verification Statement and will be eligible to sit for the national credentialing exam for Registered Dietitians. The Verification Statement is the eligibility document that allows one to apply to take the Registered Dietitian national credentialing examination. Admittance into the VSU Dietetics Internship Program does not guarantee that a Verification Statement will be issued. As entry-level practitioners, graduates of the program provide quality nutrition services to clients and show sensitivity and responsiveness to the community.

Admission

Admission into the Graduate Certificate Program in Food and Nutrition Science requires that applicants successfully match to Virginia State University's Dietetic Internship. The following minimum qualifications are required for admission into VSU'S Dietetic Internship;

- Baccalaureate degree from a U.S. regionally accredited college/university or a foreign degree equivalent to at least a U.S. baccalaureate degree. The degree must meet requirements as identified by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).
- A valid verification statement signed by the Program Director of an accredited Didactic Program in Dietetics.
- A minimum cumulative grade point average from the baccalaureate degree of 3.0 on a 4.0 scale.

- Completion of GRE within the past 5 years is required. (Possessing a Master's Degree may waive the GRE requirement.)
- Complete Dietetic Internship Centralized Application System (DICAS) Application Packet and D&D Digital Computer matching application. Use program code 448.
- Evidence of dietetic-related work or volunteer experiences.
- $50.00 non-refundable application fee.

Applicants who successfully match to Virginia State University's Dietetic Internship Program will be required to notify the Program Director within 24 hours to confirm their appointment. All applicants who successfully match to Virginia State University's Dietetic Internship Program will be enrolled in the Graduate Certificate Program in Food and Nutrition Science via Continuing Education.

Time to Completion
Students will enroll in this program on a full time basis and complete the program within 15 months. No students will be allowed to enroll on a part time basis.

Code	Title	Credit Hours
FANS 501	Adv Practice in Dietetics	3
FANS 540	Clin Food/Comm Srvc Dietet I	5
FANS 550	Clin Food/Comm Srvc Dietet II	5
FANS 570	Food Nurt Sci Resr Methodology	3
Total Credit Hours		**16**

Students must earn a grade of "B" or better in all courses and supervised practice rotation evaluations and maintain a minimum GPA of 3.0. Students have one year to complete all program requirements..

Students are involved in supervised practice rotations in the areas of Clinical, Foodservice, and Community Nutrition simultaneously with coursework.

Students will complete at least 1200 practice hours (equivalent to 42 weeks) supervised by qualified professionals. Rotation sites will be assigned by the Program Director. The majority of sites are in Petersburg, VA and its vicinities (Richmond, South Hill, Farmville, Chesterfield, Virginia Beach, Chesapeake, Williamsburg and Fredericksburg). Travel of over 70 miles from campus may be required for some rotations.

College of Education

Dean
Willis Walter
Location
alfred w. harris academic commons building, 2nd floor
Contact Information
804-524-5742 | wwalter@vsu.edu

overview of the college of education graduate programs

The College of Education at Virginia State University serves as the academic and administrative hub for all graduate programs preparing educators, counselors, and leaders in the field of education. Committed to excellence in teaching, research, and service, the College equips graduate students with the knowledge, skills, and ethical foundation necessary to foster positive educational outcomes across diverse learning environments. Graduate programs emphasize evidence-based practices, cultural responsiveness, and leadership development, preparing candidates for impactful roles in classrooms, counseling centers, schools, and communities.

Graduate students have opportunities to engage in professional development and scholarly enrichment through active participation in student organizations, including:

- **Chi Sigma Iota**
- **Kappa Delta Pi International Honor Society in Education (KDP)**

Mission of the college for graduate programs

Creating a positive learning environment for all students and using evidence-based performance standards to develop reflective practitioners are central to the College of Education's mission. The College of Education promotes and maintains academic programs with research-based pedagogy, technology-based learning, and reflective practices that integrate service to the community, ever mindful of the students' diverse cultural backgrounds.

Accreditation Information of the college

The programs in the College are approved by the Virginia Department of Education and accredited by the National Council for the Accreditation of Teacher Education (NCATE).

objectives of the college for graduate programs

The overall goal of the College of Education at Virginia State University, given its underlying vision, mission, and philosophy, is to facilitate the development of reflective practitioners who create positive learning environments for all students. This goal undergirds the development of successful candidates who are competent, caring, and effective. Through reflective inquiry, candidates use professional knowledge to enhance learning for all students.

- **Competent**: Understanding the central concepts, tools of inquiry, and structures of the content area(s). Understanding ways to enhance the learning process and learning environment through effective use of technology. Creating learning experiences and environments that make the subject matter meaningful for learners.
- **Caring**: Showing respect to all learners and empowering them to set achievable goals while maintaining high standards. Demonstrating a commitment to professionalism, continuous reflection, and application of research-based best practices.
- **Effective**: Using research-based best practices and performance assessments to guide the learning process and positively impact the learning environment to ensure that all students acquire the

knowledge and skills to face the global challenges of the 21st century.

- **Reflective**: Reflecting upon and evaluating research and the success of past decisions in an effort to make better decisions in the future.

Special Policies
The College of Education reserves the right to make changes to any requirements for its endorsement programs according to the policies and regulations of the Virginia Department of Education.

Graduate Program Listings

Educational Administration and Supervision (Doctor of Education)

Chairperson: Dr. Tracy Walker (Interim)
Location: Alfred W. Harris Academic Commons Building, 2nd Floor
Contact Information: (804) 524-2444 | twalker@vsu.edu

Counselor Education with Concentrations in [PreK-12] and Community Counseling [Non-School Setting] (Master of Education or Master of Science)

Chairperson: Dr. Alishea Rowley (Interim)
Location: Alfred W. Harris Academic Commons Building, 2nd Floor
Contact Information: (804) 524-5554 | asrowley@vsu.edu

Education with Concentrations in Curriculum and Instruction, Elementary Education [PreK-6][1], or Special Education [K-12][1] (Master of Education)

Chairperson: Dr. C. Adrainne Thomas
Location: Alfred W. Harris Academic Commons Building, Room 2215
Contact Information: (804) 524-6917 | cathomas@vsu.edu

Educational Administration and Supervision with Concentrations in [PreK-12] and Organizational Leadership [Non-Endorsed] (Master of Education | Master of Science)

Chairperson: Dr. Tracy Walker (Interim)
Location: Alfred W. Harris Academic Commons Building, 2nd Floor
Contact Information: (804) 524-2444 | twalker@vsu.edu

Interdisciplinary Studies (Master of Interdisciplinary Studies)

Chairperson: Dr. G. Michele Jolivette
Location: Alfred W. Harris Academic Commons Building, 2nd Floor
Contact Information: (804) 524-6355 | gjolivette (gjolivette@vsu.edu)@vsu.edu (cathomas@vsu.edu)

Sport Management (Master of Science)

Chairperson: Tracy Lynne Jackson, Esq.
Location: Alfred W. Harris Academic Commons Building, 2301
Contact Information: (804) 524-5777 | tljackson@vsu.edu

Educational Administration and Supervision (Graduate Certificate)

Chairperson: Dr. Tracy Walker (Interim)
Location: Alfred W. Harris Academic Commons Building, 2nd Floor
Contact Information: (804) 524-2444 | twalker@vsu.edu

[1] Initial teacher preparation programs only.

Counselor Education PreK-12, Master of Education (M.Ed.)

The School Counseling PreK-12 track prepares candidates for careers in school counseling at grade levels Pre K-12, in the elementary, middle and high school settings. The School Counseling program leads to a Master of Education (M.Ed.) or a Master of Science (M.S.) Degree. The primary distinction between the degree programs is the M.Ed. is more practice and application oriented, while the M.S. places greater emphasis on research and evaluation. The M.S. requires candidates to complete a quantitatively based, data-driven, research thesis and take an additional research course.

The M.Ed. requires a minimum of 48 hours of academic credit hours, which includes a written and oral comprehensive examination. The M.S. requires a minimum of 54 credit hours, which includes a thesis defense examination. No more than six (6) credit hours can be transferred from another university, which may not be more than six (6) years old. All program courses require a grade of "B" or higher.

The outcomes of the School Counseling Prek-12 program have been aligned with the Professional Education Program Unit's Conceptual Framework outcomes to support the development of Competent, Caring, Effective, and Reflective Professional School Counselors who are committed to addressing the challenges of educating all students for diverse and global learning communities. As Competent Counselors, candidates will understand the central knowledge, concepts and skills necessary in the counseling field. As Caring Counselors, candidates will show respect for all learners and empower them to set achievable goals while maintaining high standards. As Effective Counselors, candidates will use research-based best practices and performance assessments to guide the learning process and positively impact the educational environment to ensure that all students acquire the knowledge and skills to face the global challenges of the 21st century. Finally, as Reflective Counselors, candidates will reflect upon and evaluate research and the success of past decisions in an effort to make better decisions in the future.

Admission Requirements

Admission will be competitive, and candidates will be selected based on the following criteria:

I. Criteria for Departmental Unconditional Admissions:

1. Competitive scores on the Graduate Record Examination according to University policy. Official scores should be forwarded to the College of Graduate Studies.
2. Minimum undergraduate academic performance of 2.75 (4.0 GPA scale) Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.
3. A descriptive statement describing:
   a. personal development,
   b. reasons for seeking this degree,
   c. personal and professional experiences that influenced you to pursue counseling, and
   d. attributes you possess which would contribute to your effectiveness as a counselor.
4. Three (3) Professional Recommendations on letterhead addressing character.
5. Resume of work experience and education

6. Official Transcripts from all colleges attended.
7. Professional personal disposition team interview and a writing sample of 700 words or more with the Department of School and Community Counseling faculty prior to being formally admitted to the program.

Program Admission and Pre-Candidacy

Summary Requirements

Candidates transferring into the Department of School and Community Counseling will have to adhere to the same program admission criteria as new applicants.

All requirements for the master's degree program must be completed within 6 years from the initial admission into the department.

Candidates must:

PHASE I: ADMISSION TO THE PROGRAM

- Submitted completed graduate and supplemental application for admission
- A minimum of a 2.75 GPA
- Competitive score on the GRE
- Completion of a required essay
- Admissions interview

PHASE II: CANDIDACY

- Submit University Program Cards
- Complete a minimum of 12 hours of course work with advisement
- Maintain a B average or above in all content and core course
- Complete the Disposition Interview
- Submit an application for candidacy
- Join state and national professional counseling associations

PHASE III: CLINICAL PRACTICE

- Submit clinical practice application
- Apply for counseling liability insurance, a background check and fingerprinting maybe required by a school division and provide TB screening results
- Complete practicum experience
- Complete internship experience
- Complete all required course work
- Candidates are requested to complete all licensure documents required by the Virginia Department of Health Professions
- Submit practicum and internship electronic portfolio for evaluation
- Receive a B or better on-site supervisor evaluation in clinical practice practicums and internships.
- Receive a B or better on the university supervisor evaluation in all clinical practice experiences.

PHASE IV: PROGRAM COMPLETION

- Successfully complete the oral and written comprehensive exam or thesis defense
- Complete a candidate exit survey.

PHASE V: GRADUATE FOLLOW-UP

- Participate in a graduate and employer follow-up survey

Courses are restricted to graduate students who have been formally accepted into the counseling program.

Code	Title	Credit Hours
Core Courses (42 Credit Hours)		
COUN 524	Prof Orient & Ethical Practice	3
COUN 526	Measurement & Evaluation Couns	3
COUN 527	Career Development & Counselin	3
COUN 528	Human Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques Coun & Psychotherap	3
COUN 532	Counsel Children & Spec Popula	3
COUN 533	Abnormal Behavior & Psychopath	3
COUN 540	Trauma Inform Care/Crisis Inte	3
COUN 550	Research Design Meth & Eval	3
COUN 553	Multicultural Counseling	3
COUN 554	Diagnosis and Treatment	3
COUN 555	Marriage and Family Systems	3
COUN 599	Comprehensive Examination	0
STAT 510	Stat Procedures In Ed & PSYC	3
School Counseling PreK-12 Courses (18 Credit Hours)		
COUN 523	School Coun/Leadership (PreK12	3
COUN 538	Practicum in School Counseling	3
COUN 549	Internship in School Counselin	6
COUN 557	Classroom Mgmt/Tech Counselors	3
COUN 559		3
Total Credit Hours		**60**

[1] **Clinical Practice** *(6 credit hours)* **requires:** Candidacy status; Completion of 12 **program core courses** *(36 credit hours)* and one **University Core Course** *(3 credit hours)* Total 39 Credit Hours before Clinical Practice

Counselor Education PreK-12, Master of Science (M.S.)

The School Counseling PreK-12 track prepares candidates for careers in school counseling at grade levels Pre K-12, in the elementary, middle and high school settings. The School Counseling program leads to a Master of Education (M.Ed.) or a Master of Science (M.S.) Degree. The primary distinction between the degree programs is the M.Ed. is more practice and application oriented, while the M.S. places greater emphasis on research and evaluation. The M.S. requires candidates to complete a quantitatively based, data-driven, research thesis and take an additional research course.

The M.Ed. requires a minimum of 48 hours of academic credit hours, which includes a written and oral comprehensive examination. The M.S. requires a minimum of 54 credit hours, which includes a thesis defense examination. No more than six (6) credit hours can be transferred from another university, which may not be more than six (6) years old. All program courses require a grade of "B" or higher.

The outcomes of the School Counseling Prek-12 program have been aligned with the Professional Education Program Unit's Conceptual Framework outcomes to support the development of Competent, Caring,

Effective, and Reflective Professional School Counselors who are committed to addressing the challenges of educating all students for diverse and global learning communities. As Competent Counselors, candidates will understand the central knowledge, concepts and skills necessary in the counseling field. As Caring Counselors, candidates will show respect for all learners and empower them to set achievable goals while maintaining high standards. As Effective Counselors, candidates will use research-based best practices and performance assessments to guide the learning process and positively impact the educational environment to ensure that all students acquire the knowledge and skills to face the global challenges of the 21st century. Finally, as Reflective Counselors, candidates will reflect upon and evaluate research and the success of past decisions in an effort to make better decisions in the future.

Admission Requirements

Admission will be competitive, and candidates will be selected based on the following criteria:

I. Criteria for Departmental Unconditional Admissions:

1. Competitive scores on the Graduate Record Examination according to University policy. Official scores should be forwarded to the College of Graduate Studies.
2. Minimum undergraduate academic performance of 2.75 (4.0 GPA scale) Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.
3. A descriptive statement describing:
   a. personal development,
   b. reasons for seeking this degree,
   c. personal and professional experiences that influenced you to pursue counseling, and
   d. attributes you possess which would contribute to your effectiveness as a counselor.
4. Three (3) Professional Recommendations on letterhead addressing character.
5. Resume of work experience and education
6. Official Transcripts from all colleges attended.
7. Professional personal disposition team interview and a writing sample of 700 words or more with the Department of School and Community Counseling faculty prior to being formally admitted to the program.

Program Admission and Pre-Candidacy

Summary Requirements

Candidates transferring into the Department of School and Community Counseling will have to adhere to the same program admission criteria as new applicants.

All requirements for the master's degree program must be completed within 6 years from the initial admission into the department.

Candidates must:

PHASE I: ADMISSION TO THE PROGRAM

- Submitted completed graduate and supplemental application for admission
- A minimum of a 2.75 GPA
- Competitive score on the GRE
- Completion of a required essay
- Admissions interview

PHASE II: CANDIDACY

- Submit University Program Cards
- Complete a minimum of 12 hours of course work with advisement
- Maintain a B average or above in all content and core course
- Complete the Disposition Interview
- Submit an application for candidacy
- Join state and national professional counseling associations

PHASE III: CLINICAL PRACTICE

- Submit clinical practice application
- Apply for counseling liability insurance, a background check and fingerprinting may be required by a school division and provide TB screening results
- Complete practicum experience
- Complete internship experience
- Complete all required course work
- Candidates are requested to complete all licensure documents required by the Virginia Department of Health Professions
- Submit practicum and internship electronic portfolio for evaluation
- Receive a B or better on-site supervisor evaluation in clinical practice practicums and internships.
- Receive a B or better on the university supervisor evaluation in all clinical practice experiences.

PHASE IV: PROGRAM COMPLETION

- Successfully complete the oral and written comprehensive exam or thesis defense
- Complete a candidate exit survey.

PHASE V: GRADUATE FOLLOW-UP

- Participate in a graduate and employer follow-up survey

Courses are restricted to graduate students who have been formally accepted into the counseling program.

Code	Title	Credit Hours
Core Courses (42 Credit Hours)		
COUN 524	Prof Orient & Ethical Practice	3
COUN 525	Principles of Counseling	3
COUN 526	Measurement & Evaluation Couns	3
COUN 527	Career Development & Counselin	3
COUN 528	Human Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques Coun & Psychotherap	3
COUN 531	Group Procedures in Counseling	3
COUN 533	Abnormal Behavior & Psychopath	3
COUN 539	Research and Thesis	3
COUN 550	Research Design Meth & Eval	3
COUN 553	Multicultural Counseling	3
EDUC 513	Educational Research	3
STAT 510	Stat Procedures In Ed & PSYC	3
School Counseling PreK-12 Courses (18 Credit Hours) Courses		

COUN 523	School Coun/Leadership (PreK12	3
COUN 532	Counsel Children & Spec Popula	3
COUN 538	Practicum in School Counseling	3
COUN 541	Counseling Children	3
COUN 549	Internship in School Counselin	6
Total Credit Hours		**60**

Footnotes

1

Clinical Practice *(6 credit hours)* **requires:** Candidacy status; Completion of 12 **program core courses** *(36 credit hours)* and one **University Core Course** *(3 credit hours)* Total 39 Credit Hours before Clinical Practice

Counselor Education, Clinical Mental Health, Master of Education (M.Ed.)

Admission Requirements

Admission will be competitive, and candidates will be selected based on the following criteria:

I. Criteria for Departmental Unconditional Admissions:

1. Competitive scores on the Graduate Record Examination according to University policy. Official scores should be forwarded to the College of Graduate Studies.
2. Minimum undergraduate academic performance of 2.75 (4.0 GPA scale) Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.
3. A descriptive statement describing:
   a. personal development,
   b. reasons for seeking this degree,
   c. personal and professional experiences that influenced you to pursue counseling, and
   d. attributes you possess which would contribute to your effectiveness as a counselor.
4. Three (3) Professional Recommendations on letterhead addressing character.
5. Resume of work experience and education
6. Official Transcripts from all colleges attended.
7. Professional personal disposition team interview and a writing sample of 700 words or more with the Department of School and Community Counseling faculty prior to being formally admitted to the program.

Program Admission and Pre-Candidacy

Summary Requirements

Candidates transferring into the Department of School and Community Counseling will have to adhere to the same program admission criteria as new applicants.

All requirements for the master's degree program must be completed within 6 years from the initial admission into the department.

Candidates must:

PHASE I: ADMISSION TO THE PROGRAM

- Submitted completed graduate and supplemental application for admission
- A minimum of a 2.75 GPA
- Competitive score on the GRE
- Completion of a required essay
- Admissions interview

PHASE II: CANDIDACY

- Submit University Program Cards
- Complete a minimum of 12 hours of course work with advisement
- Maintain a B average or above in all content and core course
- Complete the Disposition Interview
- Submit an application for candidacy
- Join state and national professional counseling associations

PHASE III: CLINICAL PRACTICE

- Submit clinical practice application
- Apply for counseling liability insurance, a background check and fingerprinting maybe required by a school division and provide TB screening results
- Complete practicum experience
- Complete internship experience
- Complete all required course work
- Candidates are requested to complete all licensure documents required by the Virginia Department of Health Professions
- Submit practicum and internship electronic portfolio for evaluation
- Receive a B or better on-site supervisor evaluation in clinical practice practicums and internships.
- Receive a B or better on the university supervisor evaluation in all clinical practice experiences.

PHASE IV: PROGRAM COMPLETION

- Successfully complete the oral and written comprehensive exam or thesis defense
- Complete a candidate exit survey.

PHASE V: GRADUATE FOLLOW-UP

- Participate in a graduate and employer follow-up survey

Courses are restricted to graduate students who have been formally accepted into the counseling program.

Code	Title	Credit Hours
Core Courses (42 Credit Hours)		
COUN 524	Prof Orient & Ethical Practice	3
COUN 526	Measurement & Evaluation Couns	3
COUN 527	Career Development & Counselin	3
COUN 528	Human Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques Coun & Psychotherap	3
COUN 532	Counsel Children & Spec Popula	3
COUN 533	Abnormal Behavior & Psychopath	3
COUN 540	Trauma Inform Care/Crisis Inte	3
COUN 550	Research Design Meth & Eval	3

COUN 553	Multicultural Counseling	3
COUN 554	Diagnosis and Treatment	3
COUN 555	Marriage and Family Systems	3
COUN 599	Comprehensive Examination	0
STAT 510	Stat Procedures In Ed & PSYC	3
Clinical Mental Health Courses (18 Credit Hours)		
COUN 536	Found Mental Health Counseling	3
COUN 537	Internship Clinical Mental Hlt	6
COUN 556	Play Therapy	3
COUN 570	Practicum/Clinical Mental Hth	3
Total Credit Hours		**57**

Counselor Education, Clinical Mental Health, Master of Science (M.S.)

Admission Requirements

Admission will be competitive, and candidates will be selected based on the following criteria:

I. Criteria for Departmental Unconditional Admissions:

1. Competitive scores on the Graduate Record Examination according to University policy. Official scores should be forwarded to the College of Graduate Studies.
2. Minimum undergraduate academic performance of 2.75 (4.0 GPA scale) Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.
3. A descriptive statement describing:
   a. personal development,
   b. reasons for seeking this degree,
   c. personal and professional experiences that influenced you to pursue counseling, and
   d. attributes you possess which would contribute to your effectiveness as a counselor.
4. Three (3) Professional Recommendations on letterhead addressing character.
5. Resume of work experience and education
6. Official Transcripts from all colleges attended.
7. Professional personal disposition team interview and a writing sample of 700 words or more with the Department of School and Community Counseling faculty prior to being formally admitted to the program.

Program Admission and Pre-Candidacy

Summary Requirements

Candidates transferring into the Department of School and Community Counseling will have to adhere to the same program admission criteria as new applicants.

All requirements for the master's degree program must be completed within 6 years from the initial admission into the department.

Candidates must:

PHASE I: ADMISSION TO THE PROGRAM

- Submitted completed graduate and supplemental application for admission
- A minimum of a 2.75 GPA
- Competitive score on the GRE
- Completion of a required essay
- Admissions interview

PHASE II: CANDIDACY

- Submit University Program Cards
- Complete a minimum of 12 hours of course work with advisement
- Maintain a B average or above in all content and core course
- Complete the Disposition Interview
- Submit an application for candidacy
- Join state and national professional counseling associations

PHASE III: CLINICAL PRACTICE

- Submit clinical practice application
- Apply for counseling liability insurance, a background check and fingerprinting maybe required by a school division and provide TB screening results
- Complete practicum experience
- Complete internship experience
- Complete all required course work
- Candidates are requested to complete all licensure documents required by the Virginia Department of Health Professions
- Submit practicum and internship electronic portfolio for evaluation
- Receive a B or better on-site supervisor evaluation in clinical practice practicums and internships.
- Receive a B or better on the university supervisor evaluation in all clinical practice experiences.

PHASE IV: PROGRAM COMPLETION

- Successfully complete the oral and written comprehensive exam or thesis defense
- Complete a candidate exit survey.

PHASE V: GRADUATE FOLLOW-UP

- Participate in a graduate and employer follow-up survey

Courses are restricted to graduate students who have been formally accepted into the counseling program.

Code	Title	Credit Hours
Core Courses (42 Credit Hours)		
COUN 524	Prof Orient & Ethical Practice	3
COUN 525	Principles of Counseling	3
COUN 526	Measurement & Evaluation Couns	3
COUN 527	Career Development & Counselin	3
COUN 528	Human Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques Coun & Psychotherap	3
COUN 531	Group Procedures in Counseling	3
COUN 533	Abnormal Behavior & Psychopath	3
COUN 539	Research and Thesis	3
COUN 550	Research Design Meth & Eval	3
COUN 553	Multicultural Counseling	3
EDUC 513	Educational Research	3

STAT 510	Stat Procedures In Ed & PSYC	3
Clinical Mental Health Courses (18 Credit Hours)		
COUN 536	Found Mental Health Counseling	3
COUN 537	Internship Clinical Mental Hlt	6
COUN 554	Diagnosis and Treatment	3
COUN 555	Marriage and Family Systems	3
Total Credit Hours		**57**

Curriculum and Instruction, Master of Education (M.Ed.)

The graduate program in Curriculum and Instruction offers a program of study that leads to a Master of Education degree. The program has been aligned with the Unit's Conceptual Framework proficiencies to support the development of preparing effective reflective practitioners that are competent, caring and culturally responsive. As competent educators, candidates will understand the central concepts, knowledge, tools of inquiry, and structures of their content area(s) to create engaging and meaningful learning experiences for all. As caring educators, candidates will display kindness, concern, and respect for all learners, while empowering learners to set achievable goals. As culturally responsive educators, candidates will use research-based, student centered methodology with culturally relevant performance assessments to promote student learning and high academic skills. Finally, as reflective practitioners, candidates will insightfully examine all aspects of teaching and learning using essential dispositions to create positive, unbiased learning environments and educational justice for all.

The College of Education has developed phases that serve as transition points for graduates to follow as they matriculate through the program: Admission, Midpoint - Advance to Candidacy, Candidacy, Program completion, and Graduate Follow-up.

Program Requirements and Transition Points
Phase I: Admission Candidates must:

1. Have a grade point average of 2.7 or better (cumulative at the end of the final semester of undergraduate work)

2. Have taken the GRE (Graduate Record Examination), the score must be no more than 5 years old at the time of admission to the Graduate Elementary Education Program. The candidate has to score no less than 400 on the verbal and no less than 400 on the quantitative portions of the GRE.

The Program Admissions Committee reviews applications for admission and makes recommendations to the Graduate Admissions Committee.

Phase II: Midpoint - Advance to Candidacy Candidates must:

1. Complete a minimum of 12 hours of coursework

2. Maintain a 3.0 GPA at the graduate level in order to remain in the program. If candidates fail to maintain the 3.0 GPA, they will be placed on probation until this criterion is met.

Phase III: Candidacy Candidates must:

1. Complete all Graduate Curriculum and Instruction Core courses

2. Participate in an Internship

3. Receive a clinical site supervisor evaluation

Phase IV: Program Completion Candidates must:

1. Complete a Master's Project

2. Complete the Candidate Exit Survey

Phase V: Graduate Follow-up 1. Participate in a graduate and employer follow-up survey

All requirements for the master's degree program must be completed within 6 years from the initial admission into the graduate program, excluding periods of military service.

Code	Title	Credit Hours
Core Courses		
EDUC 501	Foundation Of Education	3
EDUC 511	Guidelines Plan Conduct Curr E	3
EDUC 512	Strategies Implem Mult-Cult Ed	3
EDUC 513	Educational Research	3
EDUC 522	Infor Proc,CySpace Internet We	3
EDUC 528	Teaching Curriculum Developmen	3
EDUC 547	Stud w/ Except: Curr & Instruc	3
PSYC 512	Human Growth And Development	3
STAT 510	Stat Procedures In Ed & PSYC	3
Additional Requirements		
EDUC 537	Independent Study Curr Instruc	3
EDUC 580	Action Research	3
Total Credit Hours		**33**

Educational Administration and Supervision, Graduate Certificate (CERT)

Code	Title	Credit Hours
EDAS 520	Foundations of Educ Leadership	3
EDAS 583	Legal & Ethical Iss for Sch Le	3
EDAS 589	School Community Relations	3
EDAS 590	Introduction Organ & Adm	3
EDAS 591	Instructional Leadership	3
EDAS 592	Human Resource & Fiscal Mgmt	3
Practicum Requirement		
EDAS 679	Internship	3
Total Credit Hours		**21**

Educational Administration and Supervision PreK-12, Master of Education (M.Ed.)

The course of study in this major leads to a Master of Education degree. All candidates who are admitted to the program are working toward an endorsement as a school administrator. The Master of Science degree requires completion of stated required courses and a thesis. We offer the

Master of Science to anyone who chooses to write a thesis (EDAS 599) instead of taking the comprehensive exam.

The Master of Education degree requires completion of stated required courses, an internship and an oral and written comprehensive examination.

Admission Requirements

Candidates seeking admission must:

- Complete a graduate application
- Hold a professional, five-year renewable teaching license.
- Have at least 3 years of successful experiences as a teacher by the date the program is completed.
- A candidate may not enter the last 6 hours of course work until successful professional teaching experience has been satisfied.
- Present a competitive GRE score according to University policy.
- Provide a reflective personal essay describing educational leadership aspirations.
- Have an undergraduate GPA of not less than 2.8 on a 4.0 scale,
- Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
- Have three letters of recommendation from individuals familiar with the applicant's experiences as an educational professional and potential as an educational leader.

Program Requirements

Code	Title	Credit Hours
EDAS 510	STAT Procedures for Ed Leaders	3
EDAS 513	Action Research for Educ Ldrs	3
EDAS 520	Foundations of Educ Leadership	3
EDAS 530	Leadership for Spec Population	3
EDAS 579	Capstone/E-Portfolio	3
EDAS 583	Legal & Ethical Iss for Sch Le	3
EDAS 589	School Community Relations	3
EDAS 590	Introduction Organ & Adm	3
EDAS 591	Instructional Leadership	3
EDAS 592	Human Resource & Fiscal Mgmt	3
EDAS 593	Leadership Assess & Developmen	3
EDAS 679	Internship	3
Total Credit Hours		**36**

Master of Education requires an internship and comprehensive exam to complete requirements. Master of Science requires EDAS 599.

Summary Requirements

The Master of Educational Administration and Supervision PK-12 is a 36-hour program, which prepares candidates for the role of principal in school-settings. Candidates enrolled in the program must maintain a 3.0 GPA, participate in embedded fieldwork throughout the course of study and complete a full-time summer internship. Prior to graduation all candidates must take and pass the School Leaders Licensure Assessment Exam.

Requirements and Transition Points

PHASE I: ADMISSION

Candidates seeking admission must:

1. Complete a graduate application
2. Hold a professional, five-year renewable teaching license.
3. Have at least 3 years of successful experiences as a teacher by the date the program is completed. A candidate may not enter the last 6 hours of course work until successful professional teaching experience has been satisfied.
4. Present a competitive GRE score according to University policy.
5. Provide a reflective personal essay describing educational leadership aspirations.
6. Have an undergraduate GPA of not less than 2.8 on a 4.0 scale, or be granted provisional acceptance followed by a review after completion of 6 hours.
7. Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
8. Have three letters of recommendation from individuals familiar with the applicant's experience as an educational professional and potential as an educational leader.

PHASE II: MIDPOINT ADVANCE TO CANDIDACY

1. Complete a minimum of 12 hours of course work
2. Maintain a 3.0 average or above in all content and core course
3. Submit an application for candidacy
4. Complete the Professional Education Program Leadership Assessment (EDAS 593)

Other important information regarding admission to candidacy:

- Admission to candidacy must be completed no later than one semester prior to graduation
- Candidates may not apply for candidacy and graduate in the same semester
- Candidacy cannot be obtained if any admission requirements have not been fulfilled.

PHASE III: CANDIDACY

Candidates must:

1. Advance to candidacy
2. Complete all required coursework
3. Participate in a full-time internship, during the summer session
4. Receive a clinical/site supervisor evaluation
5. Receive a university supervisor evaluation

Other important information regarding candidacy phase:

- Candidates must complete all required coursework, receiving no more than 2 C's.
- Candidates, not currently in leadership roles, must arrange their internships to extend over two semesters, to include a full-time summer experience.
- Candidates must enroll in the comprehensive exam course with no more than 3 hours remaining in the program.

- Candidates must apply to participate in comprehensive exams (at the graduate office) prior to the end of the first month of the graduation semester. (see Academic calendar)
- Candidates must apply for graduation at the graduate office. Applications are due prior to the end of the first month of the graduation semester. (see Academic calendar)

PHASE IV: PROGRAM COMPLETION

1. Successfully complete three years teaching experience
2. Successfully complete all required coursework and phases of candidacy
3. Successfully apply for and complete oral and written comprehensive exam
4. Successfully complete the SLLA with a minimum of 165 and submit scores to VSU
5. Apply for graduation
6. Complete candidate exit survey Candidates must enroll in the comprehensive exam course with no more than 3 hours remaining in the program.
7. Candidates must apply to participate in comprehensive exams (at the graduate office) prior to the end of the first month of the graduation semester. (see Academic calendar)

Other important information regarding program completion:

- Candidates must apply for graduation through the graduate office by the date identified (see website).
- Candidates should complete licensure document requirement by the Virginia Department of Education, an official transcript and payment in form of MO or check and submit to the program coordinator for verification and submission to the Dean who will in turn submit forms for licensure. Licensure forms are available online at www.pen.k12.va.us (http://www.pen.k12.va.us). It is the candidates' responsibility to complete and submit the required paperwork for licensure.
- Exit surveys will be completed at the conclusion of oral exams.

PHASE V: GRADUATE FOLLOW-UP

1. Participate in a graduate follow-up survey
2. Employee follow-up survey

1.

Educational Administration and Supervision

Master of Education Program Requirements

Code	Title	Credit Hours
EDAS 510	STAT Procedures for Ed Leaders	3
EDAS 513	Action Research for Educ Ldrs	3
EDAS 520	Foundations of Educ Leadership	3
EDAS 530	Leadership for Spec Population	3
EDAS 579	Capstone/E-Portfolio	3
EDAS 583	Legal & Ethical Iss for Sch Le	3
EDAS 589	School Community Relations	3
EDAS 590	Introduction Organ & Adm	3
EDAS 591	Instructional Leadership	3
EDAS 592	Human Resource & Fiscal Mgmt	3
EDAS 593	Leadership Assess & Developmen	3
EDAS 679	Internship	3
Total Credit Hours		**36**

Master of Education requires an internship and comprehensive exam to complete requirements. Master of Science requires EDAS 599.

Educational Administration and Supervision PreK-12, Master of Science (M.S.)

The course of study in this major leads to a Master of Science degree. All candidates who are admitted to the program are working toward an endorsement as a school administrator. The Master of Science degree requires completion of stated required courses and a thesis. We offer the Master of Science to anyone who chooses to write a thesis (EDAS 599) instead of taking the comprehensive exam.

The Master of Education degree requires completion of stated required courses, an internship and an oral and written comprehensive examination.

Admission Requirements

Candidates seeking admission must:

- Complete a graduate application
- Hold a professional, five-year renewable teaching license.
- Have at least 3 years of successful experiences as a teacher by the date the program is completed.
- A candidate may not enter the last 6 hours of course work until successful professional teaching experience has been satisfied.
- Present a competitive GRE score according to University policy.
- Provide a reflective personal essay describing educational leadership aspirations.
- Have an undergraduate GPA of not less than 2.8 on a 4.0 scale,
- Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
- Have three letters of recommendation from individuals familiar with the applicant's experiences as an educational professional and potential as an educational leader.

Summary Requirements

The Master of Educational Administration and Supervision PK-12 is a 36-hour program, which prepares candidates for the role of principal in school-settings. Candidates enrolled in the program must maintain a 3.0 GPA, participate in embedded fieldwork throughout the course of study and complete a full-time summer internship. Prior to graduation all candidates must take and pass the School Leaders Licensure Assessment Exam.

Requirements and Transition Points

PHASE I: ADMISSION

Candidates seeking admission must:

1. Complete a graduate application
2. Hold a professional, five-year renewable teaching license.

3. Have at least 3 years of successful experiences as a teacher by the date the program is completed. A candidate may not enter the last 6 hours of course work until successful professional teaching experience has been satisfied.
4. Present a competitive GRE score according to University policy.
5. Provide a reflective personal essay describing educational leadership aspirations.
6. Have an undergraduate GPA of not less than 2.8 on a 4.0 scale, or be granted provisional acceptance followed by a review after completion of 6 hours.
7. Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
8. Have three letters of recommendation from individuals familiar with the applicant's experience as an educational professional and potential as an educational leader.

PHASE II: MIDPOINT ADVANCE TO CANDIDACY

1. Complete a minimum of 12 hours of course work
2. Maintain a 3.0 average or above in all content and core course
3. Submit an application for candidacy
4. Complete the Professional Education Program Leadership Assessment (EDAS 593)

Other important information regarding admission to candidacy:

- Admission to candidacy must be completed no later than one semester prior to graduation
- Candidates may not apply for candidacy and graduate in the same semester
- Candidacy cannot be obtained if any admission requirements have not been fulfilled.

PHASE III: CANDIDACY

Candidates must:

1. Advance to candidacy
2. Complete all required coursework
3. Participate in a full-time internship, during the summer session
4. Receive a clinical/site supervisor evaluation
5. Receive a university supervisor evaluation

Other important information regarding candidacy phase:

- Candidates must complete all required coursework, receiving no more than 2 C's.
- Candidates, not currently in leadership roles, must arrange their internships to extend over two semesters, to include a full-time summer experience.
- Candidates must enroll in the comprehensive exam course with no more than 3 hours remaining in the program.
- Candidates must apply to participate in comprehensive exams (at the graduate office) prior to the end of the first month of the graduation semester. (see Academic calendar)
- Candidates must apply for graduation at the graduate office. Applications are due prior to the end of the first month of the graduation semester. (see Academic calendar)

PHASE IV: PROGRAM COMPLETION

1. Successfully complete three years teaching experience
2. Successfully complete all required coursework and phases of candidacy
3. Successfully apply for and complete oral and written comprehensive exam
4. Successfully complete the SLLA with a minimum of 165 and submit scores to VSU
5. Apply for graduation
6. Complete candidate exit survey Candidates must enroll in the comprehensive exam course with no more than 3 hours remaining in the program.
7. Candidates must apply to participate in comprehensive exams (at the graduate office) prior to the end of the first month of the graduation semester. (see Academic calendar)

Other important information regarding program completion:

- Candidates must apply for graduation through the graduate office by the date identified (see website).
- Candidates should complete licensure document requirement by the Virginia Department of Education, an official transcript and payment in form of MO or check and submit to the program coordinator for verification and submission to the Dean who will in turn submit forms for licensure. Licensure forms are available online at www.pen.k12.va.us (http://www.pen.k12.va.us). It is the candidates' responsibility to complete and submit the required paperwork for licensure.
- Exit surveys will be completed at the conclusion of oral exams.

PHASE V: GRADUATE FOLLOW-UP

1. Participate in a graduate follow-up survey
2. Employee follow-up survey

1.

Code	Title	Credit Hours
EDAS 510	STAT Procedures for Ed Leaders	3
EDAS 513	Action Research for Educ Ldrs	3
EDAS 520	Foundations of Educ Leadership	3
EDAS 530	Leadership for Spec Population	3
EDAS 579	Capstone/E-Portfolio	3
EDAS 583	Legal & Ethical Iss for Sch Le	3
EDAS 589	School Community Relations	3
EDAS 590	Introduction Organ & Adm	3
EDAS 591	Instructional Leadership	3
EDAS 592	Human Resource & Fiscal Mgmt	3
EDAS 593	Leadership Assess & Developmen	3
EDAS 679	Internship	3
Total Credit Hours		**36**

Master of Education requires an internship and comprehensive exam to complete requirements. Master of Science requires EDAS 599.

Educational Administration and Supervision, Doctor of Education (Ed.D.)

Graduate study in Educational Administration and Supervision is designed to prepare candidates for careers in senior level educational administration. Graduate study in Educational Administration and Supervision leads to the Doctor of Education (Ed.D.) degree in Educational Administration and Supervision.

Admission Requirements

Persons seeking admission to the program in educational administration and supervision should meet the following criteria:

- A master's degree in education or in a related field from an accredited institution of higher education;
- A minimum of three (3) years of documented leadership experience;
- Demonstrate educational leadership potential and skills including successful leadership experience in diverse settings;
- Demonstrate ability to conceptualize the use of technology for learning in educational settings;
- Have a grade point average of at least 3.0 in all graduate work previously attempted;
- Have three (3) letters of reference from individuals familiar with the applicant's potential for advanced professional studies; one letter must be from an employer and one letter must be from a professor who has known the applicant as a student;
- Submission of official transcripts of ***all*** previous undergraduate and graduate credits;
- Submission of scores on the Graduate Record Examination according to University policy.
- International students must submit TOEFL scores meeting University guideline prior to consideration of application.

Application Procedures

The processing procedures for application will be as follows:

- Applications for admission to the doctoral program will be considered when all required materials have been submitted by the applicant. Applications should be submitted on or before March 31st, of each year;
- The Recruitment and Admissions Committee for the Department of Educational Leadership will review all applications and interview top candidates for admission;
- Applicants' acceptance into the program will be recommended by the Chair of the Department of Educational Leadership to the College of Education Dean. The Dean of the College of Education will forward the recommendations of the top candidates who satisfy all the requirements to the Dean of the College of Graduate Studies;
- The Dean of the Graduate Studies, Research, and Outreach will notify the candidates of their admission or denial to the doctoral program.

Summary Requirements

The program requires a minimum of three years for completion, including two years of formal study and a minimum of one year for completion of the dissertation. For the purpose of the Ed.D, the residency requirement will be satisfied by the successful completion of two consecutive semesters of academic coursework.

Requirements and Transition Points

PHASE I: ADMISSION

1. Submitted completed and signed application form
2. Master's degree from a regionally accredited institution
3. 3 years of administrative experience in a certified position in a public or private school or equivalent leadership experience
4. A minimum of three (3) years of documented leadership experience
5. Minimum 3.0 GPA in all graduate work
6. 3 reference letters (1 from an employer, 1 from a professor)
7. Official transcripts of ***all*** undergraduate and graduate credits
8. Competitive GRE scores according to the University policy.
9. Writing Sample

PHASE II: MIDPOINT – ADVANCE TO CANDIDACY

1. Maintain a minimum 3.3 GPA in all content and course work
2. Complete the Program Progress Examination
3. Complete 12 hrs. in Areas of Academic Concentration

PHASE III: CANDIDACY

1. Complete 54 credit hours (including 6 credit hours of internship)
2. Submit an application for Comprehensive Examination
3. Earn a passing grade on the Comprehensive Exam
4. Submit an application for candidacy

PHASE IV: PROGRAM COMPLETION

1. Successfully complete oral dissertation proposal defense
2. Successfully complete oral dissertation defense
3. Earn a passing grade for 6 credit hours for the dissertation

PHASE V: GRADUATE FOLLOW-UP

1. Graduate follow-up survey
2. Employee follow-up survey

APPLICATION DEADLINES:

March 31st for fall admission

To initiate and maintain a rigorous doctoral program in Educational Administration and Supervision, a minimum of sixty (60) semester hours beyond an acceptable master's degree program is proposed.

The program components will be arrayed as follows:

1. 24 semester hours in the knowledge core;
2. 12 semester hours in research and methodology;
3. 12 semester hours in an area of academic concentration;
4. 6 semester hours in a year-long leadership internship; and
5. 6 semester hours of dissertation.

Code	Title	Credit Hours
Core (24 Semester Hours)		
EDAS 700	Hist/Philo Foundations of Educ	3
EDAS 701	Multicultural Education	3
EDAS 703	Planning & Management Finance	3

EDAS 704	Human Resources Management	3
EDAS 705	School Law & Policy Studies	3
EDAS 706	School, Comm, Public Rela Ed	3
EDAS 707	Adm & Instructional Leadership	3
EDAS 739	Dissertation Seminar	3
Research (12 Semester Hours)		
EDAS 720	Educational Statistics	3
EDAS 721	Research Design & Eval Methodo	3
EDAS 722	Qualitative Research	3
EDAS 723	Quantitative Research	3
Areas of Academic Concentration (AAC) [1]		
Select one from the following:		12
Administration and Supervision		
Applied Research		
Elementary Education		
Higher Education Leadership		
Special Education		
Others as approved by advisor		
Leadership Internship (6 Semester Hours)		
EDAS 730	Leadership Internship	6
Dissertation (6 Semester Hours)		
EDAS 740	Dissertation Educ Admin/Superv [2]	6
Total Credit Hours		**60**

[1] The purpose of this requirement is to provide opportunities for the students to develop their knowledge and skills in areas related to Educational Leadership. Typically, students will enroll in 12 hours of coursework in one area. With the permission of the Doctoral committee, variations (e.g., 9 credits in one area; 3 credits in another) may be approved. In no case will fewer than six hours in each of two areas be approved.
Prerequisite: Satisfactory completion of all other requirements for degree completion, and the permission of the program coordinator (6 hours).

[2] Students will earn only 6 credit hours for EDAS 740. However, students will take EDAS 740 as many times as necessary until the dissertation is completed.

Additional Academic Enrichment: International, national, regional & local conferences and workshops.

Note: Additional semester hours may be necessary for candidates whose background and experience need enrichment prior to being formally admitted into the doctoral program.

Elementary Education PreK-6, Master of Education (M.Ed.)

Graduate study in Elementary Education is designed to prepare candidates for careers in Elementary Education Pre-K-6 (Initial Licensure). Graduate study in Elementary Education leads to the Master of Education.

Admission Requirements:

Candidates seeking admission must:

- Complete a graduate application
- Have an undergraduate GPA of not less than 3.0 or better on a 4.0 scale (cumulative at the end of the final semester of undergraduate work).
- Candidates must successfully complete the Core Academic Skills for Educations (CASE) Mathematics and PRAXIS II (Elementary Content Knowledge) assessments, Virginia Communication and Literacy Assessment (VCLA)
- Submit official transcripts to verify core content areas for Elementary Education.

Candidates are solely responsible for meeting all requirements prior to being moved into Phase II of the program.

1. ***Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.***
2. ***Upon admission candidates must complete "program cards" in consultation with their advisor during their first semester of enrollment. Program cards will be signed by the advisor. Upon approval of the program card by the Dean of the Graduate College, the advisor and candidate will receive a copy.***

Summary Requirements

The Program in Elementary Education (PK-6) is designed for candidates who have a four- year degree and desire to teach in elementary schools. The program leads to an initial endorsement in Elementary Education and a Master of Education degree. The candidate's transcript will be evaluated to determine if the curriculum prerequisite requirements approved by the State have been completed. In addition, the Core Academic Skills for Educations (CASE) Mathematics and Praxis II (Elementary Content Knowledge) assessments, Virginia Communication and Literacy Assessment (VCLA) must be satisfied during the admission phase. The Reading for Virginia Educators (RVE) Assessment must be satisfied prior to candidacy. Assessment requirements may change according to the Virginia Department of Education licensure regulations.

PHASE I: ADMISSION

Candidates seeking admission must:

- Complete a graduate application
- Have an undergraduate GPA of not less than 3.0 or better on a 4.0 scale (cumulative at the end of the final semester of undergraduate work.
- Submit official transcripts to verify core content areas for Special Education.
- Candidates are solely responsible for meeting all requirements prior to being moved into Phase II of the program.

III. Candidates must maintain a 3.0 GPA at the graduate level to be retained in graduate school.

- ***Upon admission (conditional), candidates must complete "program cards" in consultation with their advisor during their first semester of enrollment. Program cards will be signed by the advisor. Upon approval of the program card by the Dean of the College of Graduate Studies, the advisor and candidate will receive a copy.***

PHASE II – ADMISSION TO CANDIDACY

Candidates seeking candidacy must complete "Admission to Candidacy" paperwork with their advisor and submit to the graduate office. Paperwork is in attachment section of handbook as well as online.

Candidates must:

1. Complete a minimum of 12 hours of course work
2. Maintain a B average or above in all content and core courses
3. Submit an application for candidacy
4. Candidates must pass the Praxis Teaching Reading Elementary (5205) Assessment prior to advancement to candidacy.

Other important information regarding admission to candidacy:

- Admission to candidacy must be completed no later than one semester prior to graduation
- Candidates may not apply for candidacy and graduate in the same semester

PHASE III: CANDIDACY

Upon submission and approval of candidacy paperwork to the graduate office, candidates advance to the candidacy phase of their program.

Candidates must:

1. Advance to candidacy
2. Complete all required coursework
3. Participate in a full-time internship
4. Receive a clinical/site supervisor evaluation
5. Receive a university supervisor evaluation
6. Candidates must pass the Praxis II Multiple Subjects (5001)

Other important information regarding candidacy phase:

- Candidates must complete all required coursework and maintain a cumulative GPA of 3.0.
- Candidates must apply for graduation at the graduate office. Applications are due prior to the end of the first month of the graduation semester. (see Academic calendar)

PHASE IV: PROGRAM COMPLETION

Candidates must:

1. Successfully complete all required coursework and phases of candidacy
2. Successfully complete the Action Research course (EDUC 536) that is the final course before graduation.
3. Apply for graduation
4. Complete candidate exit survey

Other important information regarding program completion:

- Candidates must apply for graduation through the graduate office by the dates identified (see website).
- It is the candidates' responsibility to complete and submit the required paperwork for licensure to the College of Education.
- Exit surveys will be completed at the conclusion of the action research project.

PHASE V: GRADUATE FOLLOW-UP

1. Participate in a graduate follow-up survey
2. Employee follow-up survey

1.

Code	Title	Credit Hours
University Core		
EDUC 501	Foundation Of Education	3
EDUC 513	Educational Research	3
STAT 510	Stat Procedures In Ed & PSYC	3
Professional Education Core		
EDUC 503	Seminar in Special Education	3
EDUC 520	Technologies of Media	3
EDUC 530	Curr Instr Materials In Elem S	3
EDUC 531	Lang Instr & Literacy Elem Sch	3
EDUC 534	Language Acquisi & Literacy II	3
EDUC 535	Data Driven Assess Instruction	3
EDUC 536	Practicum In Elementary Educat	3
EDUC 541	Assess Instr & Behavior Mgmt	3
EDUC 580	Action Research	3
PSYC 512	Human Growth And Development	3
Total Credit Hours		**39**

Interdisciplinary Studies, Master of Interdisciplinary Studies, (M.I.S.)

The Master of Interdisciplinary Studies (MIS) degree program is designed for students who prefer to pursue an interdisciplinary program of study rather than the professional or traditional graduate program. Students combine up to three areas of specialization selected from the College of Education, College of Humanities and Social Sciences, College of Engineering and Technology, and College of Natural and Health Sciences. Candidates for the MIS degree must complete a 36 semester-hour program of study. Before entering the MIS program, students must identify no more than three areas of specialization to pursue graduate study.

Upon acceptance into the program, each student will be assigned an advisor who will help the student develop the course of study that achieves the student's goals to the extent possible and fulfils the requirements for the MIS degree. Students will complete 15 credit hours of core coursework. The number of graduate courses to be completed within each chosen area of study is determined by the department, the student's advisor, and the student. After completing thirty-three (33) credit hours of course work, the student must complete three (3) credit hours of a master's project or thesis or an action research proposal.

MIS Core Courses (15 credit hours)

Code	Title	Credit Hours
STAT 510	Stat Procedures In Ed & PSYC	3
EDUC 513	Educational Research	3
EDUC 522	Infor Proc,CySpace Internet We	3
Primary Specialization Foundation/Introduction Course		3
EDUC 580	Action Research	3
or IDST 699	MIS Master Project/Thesis	

Specialization Areas

Students will complete 21 credit hours in the selected primary and secondary specialization areas. Courses can be selected from the College

of Education, College of Humanities and Social Sciences, College of Engineering and Technology, and College of Natural and Health Sciences.

Primary Specialization Area (9-12 credit hours)
Courses to be selected from the student's primary area of specialization. Students choose courses in the College of Education, College of Humanities and Social Sciences, College of Engineering and Technology, and College of Natural and Health Sciences with the help of their primary area advisor. Students will graduate with at least 18 hours in their primary specialization area.

Secondary Specialization Area (9-12 credit hours)
Students choose from courses in the College of Education, College of Humanities and Social Sciences, College of Engineering and Technology, and College of Natural and Health Sciences with the assistance of an advisor from the specialization area.

Additional Concentration Options:

Public Service Leadership
This concentration, specifically designed for public service agencies, will meet the following research-based objectives.

Provide an area of focus that will:
• Enhance the understanding of the complex social, political, cultural, and organizational environments and cultural shifts that affect public service and community relations
• Enhance leadership and management knowledge, skill, and praxis for public service field officers, customer service agents, supervisors, and administrators for agencies and agents to develop "quality leadership models" within organizations and communities
• Provide a critical and analytic awareness of power and power dynamics in relation to public service, politics, policing, and community relations
• Enhance the Cultural Actualization of Public Service employees and agencies.

MIS Core Courses (15 credit hours)

Code	Title	Credit Hours
STAT 510	Stat Procedures In Ed & PSYC	3
EDUC 513	Educational Research	3
EDUC 522	Infor Proc,CySpace Internet We	3
Primary Specialization Foundation/Introduction Course		3
EDUC 580	Action Research	3
or IDST 699	MIS Master Project/Thesis	

Required Courses (12 credit hours)

Code	Title	Credit Hours
IDST 510	Mental Health Crisis 101	3
IDST 520	Adv Social Psych for Mgmt & Pr	3
IDST 530	Trauma Informed Resp and De-es	3
IDST 540	Public Service for Mgmt & Prof	3

Restricted Electives (9 credit hours)

Code	Title	Credit Hours
IDST 541	Advanced Cult Rel in Pub Ser	3
IDST 542	Child & Adoles Dev for PS Prof	3
IDST 543	Seminar in Constitutional Law	3
IDST 544	Crime and Dev Pub Hlth Issue	3

Social Justice and Human Rights Practice
The Master of Interdisciplinary Studies with a concentration in Social Justice and Human Rights Practice is designed to prepare and enhance public service leaders' abilities to utilize theories of social justice and critical research methodologies to analyze and implement policies relating to social justice and human rights issues that arise in public service, governmental, community-based, non-profit, public policy, public health, legal/justice, corporate JEDI, and social work agencies.

MIS Core Courses (15 credit hours)

Code	Title	Credit Hours
STAT 510	Stat Procedures In Ed & PSYC	3
EDUC 513	Educational Research	3
EDUC 522	Infor Proc,CySpace Internet We	3
Primary Specialization Foundation/Introduction Course		3
EDUC 580	Action Research	3
or IDST 699	MIS Master Project/Thesis	

Required Courses (12 credit hours)

Code	Title	Credit Hours
IDST 600	Social Justice & Human Rights	3
IDST 610	Dev Theories in Social Justice	3
IDST 620	Methodologies & Epistemologies	3
IDST 630	Rights, Laws, and Legal Issues	3
IDST 680	Practicum in Social Justice	2

Restricted Electives (4 credit hours)
Students will select one class from the following specialization area:

Code	Title	Credit Hours
IDST 671	Soc Justice&Human Rights Pract	4
IDST 672	SJ&HR: Educ,Pub Serv,CJ, Sowk	4
IDST 673	SJ&HR:Immgrtn,Labor, Relig Exp	4
IDST 674	Global Soc Justice&Human Right	4

Open Elective (3 credit hours)

Students will choose 3 credit of electives from the College of Education, College of Humanities and Social Sciences, College of Engineering and Technology, and College of Natural and Health Sciences.

Organizational Leadership in Administration and Supervision, Master of Education (M.Ed.)

Graduate study in Organizational Leadership in Administration and Supervision is designed to prepare candidates for careers in community leadership. Graduate study in Organizational Leadership in Administration and Supervision leads to the Master of Education.

Admission Requirements

Candidates seeking admission must:

- Complete a graduate application
- Present a competitive GRE score according to University policy.
- Provide a reflective personal essay describing educational leadership aspirations.
- Have an undergraduate GPA of not less than 2.8 on a 4.0 scale,
- Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
- Have three letters of recommendations which speaks to candidate's potential as a future leader

Summary Requirements

The program in Educational Administration and Supervision, offers a program of study that leads to the MEd in Organizational Leadership. The Organizational Leadership degree is offered to candidates who do not seek licensure to work in schools. This MEd program is designed to enable candidates to acquire knowledge and develop competencies that will make them effective leaders at any level of an organization. All candidates will take 21 hours of core curriculum. The remaining 9 hours will be taken in EDAS 506 (3hours) and two approved electives (6 hours) at 500 level or above.

Requirements and Transition Points

PHASE I: ADMISSION

1. Submit completed application
2. Have a minimum of a 2.8 GPA
3. Present a competitive score on the GRE according to University policy
4. Submit 3 letters of recommendation
5. Completion of a required essay
6. Meet with advisor to complete program cards & plan of study

PHASE II: ADMISSION TO CANDIDACY

1. Complete a minimum of 12 hours of course work
2. Maintain a 3.0 average or above in all content and core course
3. Submit an application for candidacy (through Graduate Office)
4. Meet with advisor to sign candidacy and review plan of study

PHASE III: MIDPOINT

1. Maintain 3.0 G.P.A.
2. Complete a minimum of 15 hours of course work

PHASE IV: PROGRAM COMPLETION

1. Meet with advisor one semester prior to graduation
2. Oral and written comprehensive exam (through Graduate Office)-Must apply and enroll
3. Candidate exit survey

PHASE V: GRADUATE FOLLOW-UP

1. Graduate follow-up survey
2. Employee follow-up survey

Code	Title	Credit Hours
Program Requirements (21 Semester Hours)		
EDAS 500	Leadership Theories & Practice	3
EDAS 501	Organizational Behavior	3
EDAS 502	Organizational Communication	3
EDAS 503	Org'l Change: Change Impl & St	3
EDAS 504	Action Research for Organizati	3
EDAS 505	Capstone/Comp Exams	3
STAT 510	Stat Procedures In Ed & PSYC	3
Concentration (9 Semester Hours)		
EDAS 506	Critical Issues Seminar	3
Approved 500 level or above cognate		3
Approved 500 level or above cognate		3
Total Credit Hours		**30**

Special Education K-12, Master of Education (M.Ed.)

Graduate study in Special Education is designed to prepare students for careers in Special Education K-12 (Initial Licensure). Graduate study in Special Education leads to the Master of Education.

Admission Requirements:

Candidates seeking admission must:

- Complete a graduate application
- Have an undergraduate GPA of not less than 3.0 or better on a 4.0 scale (cumulative at the end of the final semester of undergraduate work.
- Candidates must successfully complete the Core Academic Skills for Educators Mathematics 5732 and the Virginia Communication and Literacy Assessment (VCLA)
- Submit official transcripts to verify core content areas for Special Education.

Candidates are solely responsible for meeting all requirements prior to being moved into Phase II of the program.

- ***Candidates must maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.***
- ***Upon admission, candidates must complete "program cards" in consultation with their advisor during their first semester of enrollment. Program cards will be signed by the advisor. Upon approval of the program card by the Dean of the Graduate College, the Dean of the College of Education, the advisor and candidate will receive a copy.***

Summary Requirements

The graduate program in Special Education offers a program of study that leads to a Master of Education degree with a focus on Special Education (K-12) is designed for candidates who have a four- year degree and desire to teach. The candidate's transcript will be evaluated to determine if the grade point average have been met. In addition, the PRAXIS Core Academic Skills for Educations Mathematics, and Virginia Communication and Literacy Assessment (VCLA) must be satisfied during the admission phase. The Reading for Virginia Educators (RVE) Assessment must be satisfied prior to candidacy. Assessment

requirements may change according to the Virginia Department of Education licensure regulations.

PHASE I: ADMISSION

Candidates seeking admission must:

- Complete a graduate application
- Have an undergraduate GPA of not less than 3.0 or better on a 4.0 scale (cumulative at the end of the final semester of undergraduate work.
- Candidates must successfully complete the PRAXIS CASE Mathematics and Virginia Communication and Literacy Assessment (VCLA)
- Submit official transcripts to verify core content areas for Special Education.

Candidates are solely responsible for meeting all requirements prior to being moved into Phase II of the program.

V. Candidates must maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.

- ***Upon admission, candidates must complete "program cards" in consultation with their advisor during their first semester of enrollment. Program cards will be signed by the advisor. Upon approval of the program card by the Dean of the College of Graduate Studies and the Dean of the College of Education, the advisor and candidate will receive a copy.***

PHASE II – ADMISSION TO CANDIDACY

Candidates seeking candidacy must complete "Admission to Candidacy" paperwork with their advisor and submit to the graduate office. Paperwork is in attachment section of handbook as well as online.

Candidates must:

1. Complete a minimum of 12 hours of course work
2. Maintain a B average or above in all content and core courses
3. Submit an application for candidacy

Other important information regarding admission to candidacy:

- Admission to candidacy must be completed no later than one semester prior to graduation
- Candidates may not apply for candidacy and graduate in the same semester

PHASE III: CANDIDACY

Upon submission and approval of candidacy paperwork to the graduate office, candidates advance to the candidacy phase of their program.

Candidates must:

1. Advance to candidacy
2. Complete all required coursework
3. Participate in a full-time internship
4. Receive a clinical/site supervisor evaluation
5. Receive a university supervisor evaluation

Other important information regarding candidacy phase:

- Candidates must complete all required coursework and maintain a cumulative GPA of 3.0.
- Candidates must pass the Reading for Virginia Educators (RVE) Assessment before doing their graduate internship.
- Candidates must apply for graduation at the graduate office. Applications are due prior to the end of the first month of the graduation semester. (see Academic calendar)

PHASE IV: PROGRAM COMPLETION

Candidates must:

1. Successfully complete all required coursework and phases of candidacy
2. Successfully complete the Action Research course (EDUC 580) that is the final course before graduation.
3. Apply for graduation
4. Complete candidate exit survey

Other important information regarding program completion:

- Candidates must apply for graduation through the graduate office by the dates identified (see website).
- It is the candidates' responsibility to complete and submit the required paperwork for licensure to the College of Education.
- Exit surveys will be completed at the conclusion of the action research project.

PHASE V: GRADUATE FOLLOW-UP

1. Participate in a graduate follow-up survey
2. Employee follow-up survey

Program Requirements for Masters of Education Degree in Special Education

Code	Title	Credit Hours
University Core		
EDUC 501	Foundation Of Education	3
STAT 510	Stat Procedures In Ed & PSYC	3
EDUC 513	Educational Research	3
Education Core		
EDUC 502	Collaboration & Instr with LEA	3
EDUC 503	Seminar in Special Education	3
EDUC 580	Action Research	3
Special Education Core		
EDUC 541	Assess Instr & Behavior Mgmt	3
EDUC 543	Lang Acquisition & Implementat	3
EDUC 550	Rdg Dev & Achieve Class Settin	3
EDUC 553	Graduate Internship in SPED	3
EDUC 554	Charac & Instr Learners Except	3
PSYC 512	Human Growth And Development	3
Total Credit Hours		**36**

Sport Management, Master of Science (M.S.)

Graduate study in Sport Management leads to the Master of Science. The Master of Science in Sport Management Degree requires a minimum of 36 hours of academic credit and a written/oral comprehensive

examination. Participants applying to the Sport Management degree program may be selected based upon their leadership potential, preparation, employment history, and knowledge of current professional practices.

An applicant for graduate Sport Management study is expected to hold the bachelor's degree from an accredited institution. The applicant's preparation must be appropriate to the desired program and must meet the requirements of the specific degree program pursued. Each prospective graduate Sport Management student must submit an application to the College of Graduate Studies and receive a letter of admission before registering for courses.

Phase I: Admission to Program

- Submit completed application
- A minimum of a 2.75 GPA on a 4.0 Scale
- Meet with advisor to complete program cards and plan of study
- Submit program cards to graduate Dean's office

Phase II: Admission to Candidacy

- Complete a minimum of 12 hours of course work
- Maintain a 3.0 average or above in all content and core courses
- Meet with advisor to complete and sign candidacy form and review plan of study

Phase III: Midpoint

- Maintain 3.0 G.P.A
- Complete a minimum of 15 hours of course work

Phase IV: Near Completion

- Meet with advisor one semester prior to graduation to complete, sign and submit candidacy form to Dean's Office

Phase V: Program Completion

- Meet with Advisor during last semester to complete, sign and submit the Comprehensive Examination Application for the Oral and Written Examination
- Meet with Advisor during last semester to complete, sign and submit the Graduation Application
- Complete Candidate exit survey

Phase VI: Graduate Follow-Up

- Graduate follow-up survey
- Employee follow-up survey

Culminating Examination

Comprehensive Examination Description – The oral and written comprehensive examination is designed to test comprehension of the total field of study and is not limited to specific information covered formally in classes. The examination requires that a student demonstrate in writing the ability to apply, to analyze, and to synthesize information. The examination is made up of 5 sections:

Section 1 - Administration

Management theory, personnel management, risk management and liability, public relations, marketing, finance/fund raising, budgeting and facility design.

Section 2 - Research Methodology

Types of research, current research published, literature review, instrumentation, and internal validity.

Section 3 - Problem Solving

Administration and professional problems.

Section 4 - Professional Issues

Professional association (mission, goals, code of ethics, professional development, professional preparation, current professional and legal issues) (e.g., gender equity, affirmative action, Americans with Disabilities).

Section 5 - Philosophy/Ethics

Philosophical schools of thought, philosophical and ethical issues concerning the field. Comprehensive Exam – Students take the examination after completing 30-36 credits.

Each student enrolled must complete a minimum of 36 semester hours, including all required core courses. These courses include Investigations and Research, in which students complete an independent research project. In order to complete the degree, students must pass a written and/or oral comprehensive examination. The Graduate Faculty members in the Sport Management program write the questions and evaluate candidates' answers. The examination must be successfully completed as a whole. It is possible to pass the examination in sections. If a student is unsuccessful in any part on the first attempt, the student will be given a second opportunity. If unsuccessful in the second attempt, the student will be dismissed from the program. Comprehensive Exam Schedule – Comprehensive examinations are administered twice a year on dates to be determined by the Graduate Coordinator and/or Department Chairperson. Students must apply for candidacy and complete a Program Card during the semester prior to graduation. Students must apply for the comprehensive examination and graduation at the beginning of their last semester.

The number of required course credit hours beyond the Baccalaureate: 30. The number of elective course credit hours: 6. Total course credit hours for completion of the degree: 36.

Code	Title	Credit Hours
Required Courses (30 Semester Hours)		
PESM 502	Planning Program Develop & Eva	3
PESM 503	Appl Assess Methods Sport Admi	3
STAT 510	Stat Procedures In Ed & PSYC	3
PESM 505	Facility And Event Management	3
PESM 510	Readings In Physical Education	3
PESM 530	Sport And Marketing	3
PESM 531	Sport Seminar	3
PESM 532	Legal Issues In Sport	3
PESM 538	Organization/Mgmt of Athletics	3
PESM 571	Sport Management Internship [1]	6
PESM 599	Oral And Written Comp Exam	0

Elective Courses (select 6 semester hours)		
Select two of the following:		6
PESM 534	Sport Psychology	
PESM 566	Special Topics	
PESM 570	Directed Research In Sport	

[1] All students must complete an internship. A manual will provide details of this class.

College of Engineering and Technology

Dean
Dr. Dawit Haile
Location
Engineering & Technology Building, Room 315
Contact Information
804-524-1141 | dhaile@vsu.edu

Overview of the College of Engineering and Technology Graduate programs

The College of Engineering and Technology at Virginia State University offers advanced, graduate-level programs designed to cultivate innovation, analytical expertise, and leadership in technical and quantitative fields. Through rigorous coursework and applied research, graduate students are equipped to meet the demands of a rapidly evolving global landscape. The College offers a Master of Science in Computer Science, a Master of Science in Mathematics, a Master of Arts in Economics, and a Graduate Certificate in Project Management. These programs are designed for individuals seeking to deepen their disciplinary knowledge, contribute to scholarly research, and advance in industry, academia, or government sectors.

Mission of the College for graduate programs

The mission of the College of Engineering and Technology is to deliver high-quality graduate education in engineering, computer science, mathematics, economics, and project management. The College is committed to producing highly skilled professionals and scholars who are equipped to address complex challenges, lead technological advancement, and contribute meaningfully to their disciplines through innovation, research, and professional service.

Objectives of the College for graduate programs

The College's graduate programs are guided by the following objectives:

- To maintain and continually enhance the academic rigor and relevance of graduate-level instruction.
- To prepare students for leadership roles in research, industry, and public policy, or for continued study at the doctoral level.
- To foster interdisciplinary collaboration, critical thinking, and ethical responsibility in solving real-world problems.

Graduate Program Listings

Computer Science
(Master of Science)
Chairperson: Dr. Joon-Suk Lee
Location: Hunter McDaniel Building, Room 1S
Contact Information: (804) 524-5425 | jlee@vsu.edu

Business/Managerial Economics
(Master of Arts)
Chairperson: Francis Erebholo
Location: Hunter McDaniel, Room 213S
Contact Information: (804) 524-5661| ferebholo@vsu.edu

Mathematics
(Master of Science)
Chairperson: Francis Erebholo
Location: Hunter McDaniel, Room 213S
Contact Information: (804) 524-5661| ferebholo@vsu.edu

Project Management
(Graduate Certificate)
Chairperson: Dr. Peng Cheng
Location: Engineering and Technology Building, Room 201
Contact Information: (804) 524-1210 | pcheng@vsu.edu

Business/Managerial Economics, Master of Arts (M.A.)

The areas of study available in the Mathematics & Economics Department lead to the Master of Science in or Mathematics and Master of Arts in Economics. The MS degree program in Mathematics now has two (2) general concentrations: Mathematics and Mathematics Education. In the Mathematics Concentration, there are two (2) specialties: Pure Mathematics and Applied Mathematics. In the Mathematics Education Concentration, there are also two (2) specialties: Curriculum and Instruction for Secondary Teachers and Curriculum and Instruction for K-8 Mathematics Specialists.

Economics

The Department of Mathematics and Economics offers graduate study in economics leading to the Master of Arts (M.A) degree. The program provides for the thesis and non-thesis options. Both program options provide analytical and decision-making tools appropriate for a broad range of professional careers in government, private sector, international organizations, academic and research institutions and other related fields. A core course in microeconomics, macroeconomics, quantitative methods and research methodology provide students with the foundation necessary for making rational decisions in various circumstances and environments. These knowledge and skills are further developed and consolidated in a variety of elective courses appropriate for theoretical and applied areas.

Admission Requirements:

In addition to the requirements for admission to the Graduate School, applicants must have an undergraduate degree in economics or an undergraduate degree in a related field with at least 18 semester hours of college economics, or a certificate in project management. The Master of Art Degree in Economics has three concentrations: Applied Economics, Public Administration, and Project Management.

Program Requirements:

In order to qualify for a Master of Art Degree in Economics a minimum of 30 semester hours is economics or related disciplines are required. The graduate college policy regarding transfer of credits will be applied.

Public Administration:

For students who wish to concentrate in public administration, in addition to the core courses, they must choose six electives for non-thesis option, and four electives for thesis option.

Project Management:

For students who completed the project management certificate and would like to complete the M.A. in Economics, in addition to the core courses in Economics, they must complete two additional electives in Economics for non-thesis option. For students who have not completed the project management program, in addition to the core courses in Economics, they must choose four PMGT electives and two Econ electives for non-thesis option, and four PMGT electives for thesis option.

Code	Title	Credit Hours
Core Requirements (15-18 credit hours)		
ECON 510	Advanced Microeconomics	3
ECON 513	Managerial Economics	3
ECON 520	Advanced Macroeconomics	3
ECON 530	Quantitative Methods	3
ECON 590	Research Methodology	3
Thesis Option - students must take the following course:		**3**
ECON 599	Thesis	
Non-thesis Option - students must take the following course:		**0**
ECON 598	Comprehensive Examination	
Restricted Electives **		**12 - 15**
ECON 500	Graduate Principles of Econ	
ECON 521	Monetary Economics	
ECON 523	Public Finance	
ECON 524	Public Administration Theory	
ECON 525	Personnel Administration	
ECON 526	Public Policy Process Evaluati	
ECON 538	Financial Economics	
ECON 550	Development Economics	
ECON 551	International Economics	
ECON 570	History Of Economic Thought	
ECON 585	Internship Public Administrati	
PMGT 509	Project Management Systems	
PMGT 511	Quality Management	
PMGT 519	Project Planning & Scheduling	
PMGT 520	Project Communications	
PMGT 521	Estimating & Cost Mgmt	
PMGT 525	Contract & Procurement Mgmt	
PMGT 527	Project Leadership & Hum Relat	
PMGT 532	Risk Mgmt and Analysis	
Total Credit Hours		**30-33**

**** Students completing the Thesis are required to take 12 credit hours of Restricted Electives. Students who complete the Comprehensive Exam are required to take 15 credits of Restricted Electives.**

Thesis Option:

In addition to the core courses, students must complete four electives in the selected concentration, and complete two semesters of Econ 599 research and thesis.

Non-Thesis Option:

In addition to the core courses, students must complete two electives in economics and four elective courses in the selected concentration, and pass Econ 598- Comprehensive examination.

Economics:

For students who wish to concentrate in applied economics, in addition to the core courses, they must choose six electives for non-thesis option, and four electives for thesis option from the courses listed below.

Computer Science, Master of Science (M.S.)

Admission Requirements

In addition to the Graduate Office admission requirements, criteria for non-conditional admission to the program will be set by the Departmental Computer Science Graduate Committee. Applicants are expected to have an understanding of the foundational concepts of computer science and a familiarity with data structures and their implementations in different languages. Additionally, applicants should have an understanding of computer architecture, compilers, operating systems, analysis of algorithms, networks, and programming languages and should expect to learn on their own new programming languages required for the courses in which they enroll.

Program Requirements

The Master of Science degree requires 30 graduate credit hours of course work including a thesis or 33 graduate credit hours of course work including a project. The program is intended to satisfy the need to prepare professionals with expertise using modern computing tools and cutting-edge technology as well as practical knowledge of theoretical computer science. Students will focus on such areas as data mining, scientific computing, data visualization, or state-of-the-art graphics and animation technologies. Undergraduates are prepared to learn to use the latest advanced applications, while graduates are highly-trained professionals ready to begin work using such applications.

There are two options for completing the Master's program in Computer Science. The candidates must successfully complete the requirements in either a non-thesis option or thesis option track.

Core courses

Code	Title	Credit Hours
Core Courses - Students must take the following four courses:		**12**
CSCI 545	Advanced Data Communications	3
CSCI 560	Embedded Systems	3
CSCI 588	Advanced Systems Architecture	3
CSCI 592	Advanced Algorithms	3
Thesis Option - Students must take the following courses:		**6**
CSCI 600	Thesis I	
CSCI 601	Thesis II	
Non-Thesis Option - Students must take the following courses:		**6**
CSCI 605	Master Project	
CSCI 610	Graduate Seminar I	
CSCI 611	Graduate Seminar II	
Restricted Electives **		**12-15**
CSCI 552	Scientific Visualization	
CSCI 553	Image Processing	
CSCI 554	Operating Systems	
CSCI 555	Information Assurance	
CSCI 556	Advanced Database Applications	
CSCI 570	Computer Simulation	
CSCI 602	Advanced Artificial Intelligence	
CSCI 639		
CSCI 640	Special Topics in Computer Sci	
CSCI 641	Special Topics in Computer Sci	
CSCI 642	Special Topics in Computer Sci	
CSCI 643	Special Topics in Computer Sci	
CSCI 647	Wireless Networks & Mobile Cmp	
CSCI 660	Automata and Formal Language	
CSCI 670	Computer Security	
CSCI 680	Algorithmic Graph Theory	
CSCI 682	Computer Modeling & Animation	
CSCI 685	Software Engineering	
CSCI 687	Advanced Software Development	
CSCI 689	Software Quality Assurance	
CSCI 690		
CSCI 693	Parallel Algorithms	
CSCI 694	Algorithms for VLSI	
CSCI 695	Data Mining	

**** Restricted Electives - Students who select the Thesis Option must select 12 credit hours from the options below. Students who select the Non-These Option must select 15 credit hours from the options below.**

Data Analytics, Master of Science (M.S.)

In a world where data shapes decisions, the M.S. in Data Analytics at Virginia State University empowers you to harness the power of data for real-world change. Whether you aim to drive business innovation or solve complex global problems, this program equips you with the advanced skills to lead in a rapidly evolving, data-driven world.

Program Overview

At VSU, the M.S. in Data Analytics program isn't just about numbers—it's about using data to solve challenges that matter. In partnership with the Departments of Engineering, Computer Science, and Mathematics, you'll gain the technical expertise and practical experience to make meaningful contributions across industries. This interdisciplinary program is located in the Department of Engineering within the College of Engineering Technology at VSU, ensuring you receive a well-rounded education that blends theory with hands-on practice.

Key Areas of Study:

- Data Mining: Uncover patterns in data to inform better decision-making.
- Machine Learning: Harness algorithms to predict trends and behaviors.
- Data Visualization: Transform complex data into clear, actionable insights.
- Business Analytics: Use data to drive business strategy and performance.
- Data Ethics: Encompass the moral obligations of gathering, protecting, and using Information
- Advanced Statistical Methods: Apply cutting-edge techniques to solve real-world problems.

Code	Title	Credit Hours
Core Courses (18 credit hours)		
DAAN 500	Advanced Prog. for Data Analyt	3
DAAN 510	Data Analytics I	3
DAAN 511	Data Analytics II	3
DAAN 520	Advanced Info Visualization	3
DAAN 530	Ethics in Data Analytics	3
STAT 562	Mathematical Statistics IV	3

Code	Title	Credit Hours
Restricted Electives Courses (9 credit hours):		
Students will select 9 credits hours from the list of courses. Selected coursework must be approved by an advisor.		
DAAN 545	Big Data Analytics	3
DAAN 560	Sport Data Analytics	3
DAAN 562	Financial Analytics	3
DAAN 640	Spec.Topics in Data Analytics	3
CSCI 503	Introduction to Machine Learni	3
CSCI 602	Adv Artificial Intelligence	3
CSCI 695	Data Mining	3
CSCI 810	Machine Learning with Big Data	3
CSCI 830	Introduction to Blockchain	3
STAT 601	Introduction to Predictive Ana	3
STAT 610	Bayesian Statistics	3

Career Outcomes

Graduates of the M.S. in Data Analytics program are prepared to step into high-impact roles, such as data scientists, business intelligence experts, and analytics leaders. Whether working in finance, healthcare, technology,

or government, your skills will be crucial in solving pressing challenges and driving success.

Flexible Delivery Options – Fully Online or Traditional Face to Face

We know life can be busy, so the M.S. in Data Analytics program offers maximum flexibility to fit your schedule. Choose the format that works for you, fully online or in-person classes.

The fully online degree program utilizes Canvas, our Learning Management System (LMS). Faculty are trained to teach online and the online courses meet the Quality Matters standards for instructional design.

Admission Requirements

Prospective students must meet the Graduate Office admission requirements (https://www.vsu.edu/admissions/apply/graduate-apply/) and maintain a minimum 3.0 GPA throughout the program. In addition to the Graduate Office admission requirements, criteria for non-conditional admission to the program will be set by the Departmental Computer Science Graduate Committee. Any student failing to maintain a 3.0 cumulative grade point average (GPA) in a 4.0 scale will be on academic probation for one semester. If the student's cumulative average does not return to 3.0 at the end of the probation semester, the student will be required to leave the program.

Start Dates: Applications are accepted on a rolling basis, and students can start in August (Fall term) or January (Spring term).

Code	Title	Credit Hours
Core Courses (18 credit hours)		
DAAN 500	Advanced Prog. for Data Analyt	3
DAAN 510	Data Analytics I	3
DAAN 511	Data Analytics II	3
DAAN 520	Advanced Info Visualization	3
DAAN 530	Ethics in Data Analytics	3
STAT 562	Mathematical Statistics IV	3

Mathematics, Master of Science (M.S.)

The areas of study available in the Mathematics & **Economics** Department lead to the Master of Science in or Mathematics and Master of Arts in **Economics**. The MS degree program in Mathematics now has two (2) general concentrations: Mathematics and Mathematics Education. In the Mathematics Concentration, there are two (2) specialties: Pure Mathematics and Applied Mathematics. In the Mathematics Education Concentration, there are also two (2) specialties: Curriculum and Instruction for Secondary Teachers and Curriculum and Instruction for K-8 Mathematics Specialists.

Mathematics

Admission Requirements

In addition to the requirements for admission to the College of Graduate Studies, applicants who wish to pursue a masters degree in the Department of Mathematics must have an undergraduate degree in mathematics or at least 30 undergraduate semester credits hours in mathematical sciences or closely-related field with at least 18 of these credits in upper-level mathematics beyond Calculus.

Program Requirements

The Master of Science in Mathematics has two areas of specialty: Pure Mathematics and Applied Mathematics. The Pure Mathematics includes the areas of Algebra, Analysis and Combinatorics. The Applied Mathematics specialty includes the areas of Computational Mathematics and Statistics.

In order to qualify for a Master of Science Degree in Mathematics:

1. The candidate must successfully complete 12 semesters hours of core course work in Real Analysis I (MATH 530), Algebra I (MATH 520), Numerical Analysis (MATH 540), and Discrete Mathematics (MATH 510).
2. The candidates must successfully complete the requirements in either a non-thesis option or thesis option track.
   a. Non-thesis option: In addition to the four core courses, candidates in the non-thesis option track must successfully complete six elective courses and pass a comprehensive examination. The comprehensive examination will be based on the material covered in the four core courses.
   b. Thesis option: In addition to the four core courses, candidates in the thesis option track must successfully complete four elective courses and must complete two semesters of MATH 599 – Research and Thesis course in accordance with the policy stated in the University's graduate catalog by writing a master's thesis on research topic chosen by the candidate and approved by the candidate's advisor.

Mathematics Education Concentration

Admission Requirements

The focus of the concentration in mathematics education is mathematical content with specific application to modern paradigms in curriculum and instruction. For admission to the program leading to the Master of Science degree in Mathematics with a concentration in mathematics education, the applicant must meet one of the following requirements:

1. For emphasis in secondary school mathematics, the applicant must either possess a Virginia teaching license in secondary (6 – 12) mathematics or be eligible for one.
2. For emphasis in the K – 8 Mathematics Specialists endorsement, the applicant must possess a Virginia teaching license in the elementary or middle grades. If the applicant is licensed at the middle school level, the teaching of mathematics must be their primary responsibility.

Program Requirements

Code	Title	Credit Hours
Core Courses		**15**
MATH 510	Discrete Mathematics	
MATH 525	Linear Algebra	
MATH 530	Real Analysis I	
MATH 548	Differential Equations	
MATH 592	Optimization Theory	
Required Courses		**0-6**

MATH 598	Comprehensive Exam	
MATH 599	Research & Thesis	
Restricted Electives **		**9-15**
MATH 501	Geometry	
MATH 511	Coding Theory	
MATH 512	Cryptography & Cmptr Security	
MATH 519		
MATH 520	Algebra I	
MATH 521	Algebra II	
MATH 529		
MATH 531	Real Analysis II	
MATH 532	Complex Analysis	
MATH 533	Functional Analysis	
MATH 539		
MATH 540	Numerical Analysis	
MATH 545	General Topology	
MATH 546	Difference Equations & Appl	
MATH 549		
MATH 552	Partial Differentiation Equati	
MATH 559		
MATH 560	Algebraic & Numerical Comptuta	
MATH 562	Mathematical Statistics	
MATH 569		
MATH 570	Number Theory	
MATH 578		
MATH 590	Graph Theory	
Total Credit Hours		**24-36**

Code	Title	Credit Hours
Core Courses		**15**
MATH 510	Discrete Mathematics	
MATH 525	Linear Algebra	
MATH 530	Real Analysis I	
MATH 548	Differential Equations	
MATH 592	Optimization Theory	
Required Courses		**0-6**
MATH 598	Comprehensive Exam	
MATH 599	Research & Thesis	
Restricted Electives **		**9-15**
MATH 501	Geometry	
MATH 511	Coding Theory	
MATH 512	Cryptography & Cmptr Security	
MATH 519		
MATH 520	Algebra I	
MATH 521	Algebra II	
MATH 529		
MATH 531	Real Analysis II	
MATH 532	Complex Analysis	
MATH 533	Functional Analysis	
MATH 539		
MATH 540	Numerical Analysis	
MATH 545	General Topology	
MATH 546	Difference Equations & Appl	
MATH 549		
MATH 552	Partial Differentiation Equati	
MATH 559		
MATH 560	Algebraic & Numerical Comptuta	
MATH 562	Mathematical Statistics	
MATH 569		
MATH 570	Number Theory	
MATH 578		
MATH 590	Graph Theory	
Total Credit Hours		**24-36**

**** Restricted Electives - Students who complete a Thesis must select 9 credit hours of restricted electives. Students who select the Comprehensive Exam must take 15 credit hours of restricted electives.**

Project Management, Graduate Certificate (CERT)

Project supervisors and team leaders abound in business, industry, government, and private establishments. They need certain management and professional skills in order to be effective in their various roles. The *graduate certificate in project management* is designed to meet their career needs as project team members, project supervisor, or associate project manager in industry, business or government establishment. The program is designed to provide the tools, techniques, and skills needed to effectively manage projects through appropriate learning activities and products. The curriculum covers the knowledge areas and integrates business and industry courses with the theory and practice of project management. This program will assist you to better manage your project(s) for planning and team building through quality and cost management. The program is housed in the Department of Applied Engineering Technology at VSU.

Admission

In addition to the general requirements for admission to the graduate division of the College of Graduate Studies, Research, and Outreach, a minimum of twenty-one (21) semester hours of baccalaureate preparation in requisite occupational program/field or a related discipline is required.

A total of eighteen (18) semester hours must be completed with a minimum grade point average (GPA) of B (3.00) or better.

Code	Title	Credit Hours
Required Courses		
PMGT 509	Project Management Systems	3
PMGT 511	Quality Management	3
PMGT 519	Project Planning & Scheduling	3
PMGT 521	Estimating & Cost Mgmt	3
Elective Courses (Optional)		**6**
PMGT 520	Project Communications	
PMGT 525	Contract & Procurement Mgmt	
PMGT 527	Project Leadership & Hum Relat	
PMGT 532	Risk Mgmt and Analysis	

PMGT 570	Integrated Project Mgmt
Total Credit Hours	**18**

College of Humanities and Social Sciences

Dean
Dr. Isis N. Walton
Location
Colson Hall, D1
Contact Information
804-524-5478 | iwalton@vsu.edu

Associate Dean
Dr. Jerry Crawford
Location
Hunter McDaniel, 40ND
Contact Information
804-524-5369 | jcrawford@vsu.edu

Assistant Dean
Dr. Stephen Rockenbach
Location
Colson Hall, Room #101
Contact Information
804-524-5910 | srockenbach@vsu.edu

Mission Statement of the college for graduate studies

The mission of the College of Humanities and Social Sciences Graduate Programs is to cultivate ethical, innovative, and globally conscious leaders equipped with advanced academic and professional skills in Criminal Justice, Social Work, and Media Management. Our commitment is to deliver rigorous graduate education that fosters intellectual inquiry, interdisciplinary collaboration, applied research, and a profound sense of civic and social responsibility.

Through dynamic instruction, strategic use of technology, and responsive curricular design, faculty and administrators empower graduate students to engage in critical analysis, professional practice, and transformative leadership within their respective fields. Rooted in the liberal arts tradition, the College's graduate philosophy champions the liberation of thought and the advancement of scholarship to meet the demands of an evolving global society.

Objectives of the College for graduate studies

The College's graduate programs hold to the following objectives:

- **Accountability**

  Graduate education in the 21st century must respond to a range of stakeholders—students, employers, accrediting bodies, and society at large. The College ensures institutional and programmatic accountability by aligning all graduate programs with performance-based metrics, accreditation standards, and industry-relevant outcomes.

- **Assessment**

  All graduate programs emphasize demonstrable competencies. Graduates must exhibit mastery of the knowledge, research methodologies, and applied skills specific to their discipline. Our outcomes-based framework ensures that students are equipped to lead, serve, and innovate in professional settings.

- **Authentic Engagement**

  Authentic engagement in graduate studies means fostering deep, meaningful connections between theory and practice. Students are expected to apply disciplinary knowledge to real-world challenges, engage in reflective scholarship, and pursue inquiry that aligns with both personal and professional aspirations. Faculty mentorship, collaborative projects, and experiential learning are central to this model.

- **Lifelong Learning**

  Our graduate programs are designed to instill habits of lifelong learning. In a rapidly changing technological and social landscape, professionals must remain agile and informed. We encourage graduates to continuously pursue academic, ethical, and professional excellence beyond degree completion.

- **Individual and Professional Development**

  Graduate education is a catalyst for both self-actualization and career advancement. Faculty are actively engaged in research and continuing education to model intellectual growth, while students are supported through internships, research assistantships, networking opportunities, and professional development programming.

- **Research**

  Graduate students are integrated into a tiered research ecosystem that:

  - Advances knowledge and practice in the fields of Criminal Justice, Social Work, and Media Management;
  - Provides students with opportunities to contribute to scholarship and evidence-based practice; and
  - Elevates the College's academic reputation and societal impact.

- **Access**

  As a proud Historically Black College and University (HBCU), the College remains dedicated to access, equity, and excellence in graduate education. We are committed to supporting students who demonstrate potential for advanced scholarship and professional growth, particularly those from historically underrepresented backgrounds.

- **Collaboration**

Graduate programs thrive on interdisciplinary collaboration and strategic partnerships. The College maintains robust connections with governmental agencies, nonprofit organizations, media institutions, and community partners to ensure that curriculum, research, and student experiences are relevant and impactful.

Graduate Program Listings

Criminal Justice
(Master of Science)
Chairperson: Stephen Rockenbach (Interim)
Location: Colson Hall, Room 202
Contact Information: (804) 524-5910 | srockenbach@vsu.edu

Media Management
(Master of Arts)
Chairperson: Dr. Jerry Crawford
Location: Hunter-McDaniel Building, Room 40Nd
Contact Information: (804) 524-5369 | jcrawford@vsu.edu

Social Work
(Master of Social Work)
Chairperson: Dr. Jimmie Fedrick
Location: Johnella Jackson Hall, Room 201
Contact Information: (804) 524-6276 | jfedrick@vsu.edu (%20jfedrick@vsu.edu)

Criminal Justice, Master of Science (M.S.)

Program Description

Core Mission of the Program

The Master of Science in Criminal Justice program will provide opportunities for advanced graduate work and scholarship in criminal justice. The program is designed to:

1. provide a Master of Science degree for entry into leadership positions in criminal justice professions; provide advanced professional educational opportunities for those who already work in the field of criminal justice, and
2. produce a new generation of academics capable of pursuing doctoral studies and leading the profession of criminal justice in the 21st century.

The students graduating with a Master's of Science in Criminal Justice degree will:

1. demonstrate a thorough understanding of the field of criminal justice;
2. acquire theoretical knowledge of crime and criminal behavior;
3. have improved skills for conducting scientific research in criminal justice;
4. develop improved competence in criminal justice administration and leadership; and
5. attain academic competence to pursue doctoral studies in criminal justice.

Admission Requirements

In addition to the requirements for admission to the College of Graduate Studies, the applicants who wish to pursue a Master's of Science Degree in Criminal Justice must meet the following departmental requirements.

1.Unconditional Admission

To be admitted in the regular status category, students will be required to fulfill:

1. a bachelors' degree from any accredited college or university;
2. an undergraduate grade-point-average [GPA] of 3.00 or higher on a 4.00 scale; and
3. Graduate Record Examination (GRE);
4. a personal statement describing personal characteristics, personal development reasons for seeking this degree, personal and professional experiences that influenced decision to pursue an advanced degree in criminal justice;
5. three professional/academic recommendations addressing character and academic promise.

2. Conditional Admission

A limited number of applicants, with a grade-point-average below a 3.00 and the minimum course prerequisites, may be admitted on a provisional status.

All applications are to be made on the official graduate application form of Virginia State University, which may be obtained from the College of Graduate Studies Office. The completed application should be returned to the College of Graduate Studies Office.

Code	Title	Credit Hours
Core Courses		**18**
CJUS 501	Theories Of Crime And Criminlo	
CJUS 502	Contemporary Criminal Justice	
CJUS 503	Research Methods In Crim Justi	
CJUS 504	Stat/Data Anal In Crim Justice	
CJUS 505	Policy Analy In Criminal Justi	
CJUS 506	Ethics In Criminal Justice	
Thesis Option - Students must take the following courses:		**6**
CJUS 597	Research & Master's Thesis I	
CJUS 599	Research & Master's Thesis II	
Non-Thesis Option - Students must take the following courses:		**3**
CJUS 590	Master's Project	
CJUS 598	Comprehensive Examination	
Restricted Electives **		**12**
CJUS 511		
CJUS 512		
CJUS 513		
CJUS 514		
CJUS 515		
CJUS 516		
CJUS 517		
CJUS 518		
CJUS 530		
CJUS 531		

CJUS 532	Problems African-Amer Communit
CJUS 533	African-Amer and Crim Thought
CJUS 534	
CJUS 535	
CJUS 536	
CJUS 537	Crime, Sex, Law and Order
CJUS 538	
CJUS 550	Sem Organization/Administratio
CJUS 551	Human Resource Development
CJUS 552	Research Methods/Planng Reso

** Students must take 12 credits from the Restricted Elective Courses.

CRIMINAL JUSTICE & ADMINISTRATION CONCENTRATION Courses

Code	Title	Credit Hours
Select 12 credit hours from the following:		12
CJUS 550	Sem Organization/Administratio	
CJUS 551	Human Resource Development	
CJUS 552	Research Methods/Planng Reso	
CJUS 553	Comm Theories/Crimina Justice	
CJUS 554	Sem Leadrshp and Mgmt	
CJUS 555	Law and Criminal Just Mgmt	
CJUS 556	Computer/Crim Justice Mgmt	
CJUS 557	Program Eval Crim Just Mgmt	
CJUS 558	Budget Aspects Crim Just Mgmt	

Media Management, Master of Arts (M.A.)

Description

The Department of Mass Communications trains students in the fields of audio and video production, photojournalism, film studies, public relations, and print online journalism. The mass communications major of the 21st century is involved in the management of people and resources, as well as the development and use of new technology.

The department's faculty members are active in academic and *professional* research and creative activities relevant to the mass communications field. We strive to incorporate students in these activities, exposing them to professional environments and expectations. We have memoranda of understanding to provide media services to the City of Petersburg, Minor League Baseball, and various non-profit and educational agencies in the surrounding community. We also actively collaborate with other academic units, both within Virginia State University and in other institutions for research and media services purposes.

The department provides media related services to a variety of constituents in Central Virginia, including the digital conversion of an extensive jazz performance recording library. These digitally remastered recordings will be preserved in the VSU library and the US Library of Congress. Our students have done documentary, interview and oral history work, giving students an expanded sense of history as well as the value of mass media services in preserving and communicating history.

Mission of the Department

The mission of the Department of Mass Communications is to educate the next generation of leaders in the mass communications profession by providing academic diversity which allows the department to provide an exceptional and exciting interdisciplinary environment within.

Programs Offered

The department offers a Master of Arts degree in Media Management which is designed to provide industry professionals with additional training necessary for them to move higher in their media corporate organization. It also accepts recent undergrads seeking extended preparation as they enter the job market. The program and course descriptions appear in the Virginia State University Graduate Catalog.

Master of Arts in Media Management (36 hours) Suggested Plan

Freshman Year		
1st Semester		**Credit Hours**
MCOM 500	Academic Writing Workshop	3
MCOM 501	Media Mgmt/Leadership Society	3
MCOM 503	Media Research Methods	3
	Credit Hours	**9**
2nd Semester		
MCOM 504	Communicati Theory & Criticism	3
MCOM 505	Media Convergence	3
MCOM	Professional Development Course	3
	Credit Hours	**9**
Sophomore Year		
1st Semester		
MCOM 690	Readings & Research in Media	3
MCOM	Professional Development Course	3
MCOM	Professional Development Course	3
	Credit Hours	**9**
2nd Semester		
MCOM	Professional Development Course	3
MCOM	Professional Development Course	3
MCOM 695	Professional Project (or MCOM 699 Thesis)	3
	Credit Hours	**9**
	Total Credit Hours	**36**

Thesis: A student seeking to take MCOM-699 Thesis must successfully defend the proposed thesis topic by mid-term the semester before registering for MCOM-699. If the thesis project involves doing research involving human subjects, the student must also bring the proposal before VSU's Institutional Review Board. Additional information is available on the VSU website under "Research" – look for the Office of Sponsored Research and Programs. A student should begin early to focus on a thesis or professional project concept, seeing the advice of the department faculty.

Social Work, Master of Social Work (M.S.W.)

Program Description

Overview and Goals

The Virginia State University MSW program is committed to the development of culturally competent, ethical, empathetic and skilled

professionals who identifies with the social work profession, recognize, support, and build on the strengths and resiliency of all human beings, and dedicated to advanced social work practice and leadership roles within social service agencies, educational, health and behavioral health agencies, organizations and institutions. The program has a major focus of preparing its graduates to address, systematically and strategically, the well-being of traumatized individuals and the promotion of human rights, social and economic justice through community engagement, advocacy, and collaborative scientific inquiry and the impact on professional practice locally, nationally and globally."

The Virginia State University MSW Program mission is linked to the liberal arts perspective, the person-in-environment framework, and the professional core competencies curriculum areas and themes that comprise the social work advanced degree program. Our mission recognizes the complex nature of societal problems and require all MSW students to understand how individuals, families and communities are affected, within the political and economic contexts they face. As stated in our mission statement:

- The program's mission is committed to the development of cultural competent, ethical, empathetic and skilled professionals who identifies with the social work profession, recognize, support, and build on the strengths and resiliency of all human beings, and dedicated to clinical social work practice and leadership roles within social service agencies, educational, health and behavioral health agencies, organizations and communities. This focal point is consistent with the generalist practice definition concept that generalist practitioners engages in diversity in their practice and they recognize, support, and build on the strengths of all human beings.
- The MSW program mission is committed to the development of skilled professionals dedicated to advanced social work practice and leadership roles within social service agencies, educational, health and behavioral health agencies, organizations and institutions. This focal point is consistent with the generalist practice definition which states that generalist practitioners use a range of prevention and intervention methods in their practice with diverse individuals, families, groups, organizations, and communities based on scientific inquiry and best practices.

The major focus of the MSW program mission is to prepare its graduates to apply critical thinking skills systematically and strategically to address the well-being of traumatized individuals and the promotion of social and economic justice through community engagement, advocacy and scientific inquiry is consistent with the generalist practice definition for generalist practitioners to engage diversity in their practice and advocate for human rights, social and economic justice.

Admission Requirements

Admission Criteria Applicants to the Traditional MSW Program (2- Years / 60 credit hours)
Applicants must have:

1. A baccalaureate degree from a regionally accredited college or university.
2. A liberal arts background with a minimum of 30 credit hours including one course in psychology, sociology and introductory statistics. These undergraduate requirements may be taken at any accredited college or university, including community colleges. All prerequisites for admission must be completed by the end of the first semester in the program. All offers of admission are conditional upon the successful completion, a grade of C or better, of the undergraduate coursework.
3. A minimum grade point average of 3.0 on the last 60 upper division credits on the last 120 credits leading to the bachelors' degree. Both GPAs are used in consideration for admission. Applicants with a GPA between 2.5 to 3.0 on the 120 credits leading to the bachelors' degree, but an otherwise strong application will be considered for provisional admission (3.0 will be required on the 60 upper divisions credits). Graduate credits will be considered in assessing an applicant's qualifications.
4. Three Letters of Recommendation from:
   a. One recommendation from a higher education academic source.
   b. One recommendation from an employer.
   c. One recommendation from another professional source or community associate.
5. Submit a current resume.
6. Complete a criminal background check and drug test.
7. Professional Statement of Intent – Applicants must demonstrate their understanding of the social work profession and their suitability for this program.

   Application Writing Prompts: Applicants are to prepare and submit a statement covering the questions below. Applicants' personal statements should be a minimum of two (2) pages, no more than three (3) pages, typed, double-spaced, and in 12-point font. Please use the number and its associated topic area (in bold and underlined) as headings when completing personal statement.

Applicants to the Advanced Standing Program (1 – Year / 45 credit hours)
Applicants must have:

1. A baccalaureate degree from an undergraduate social work program accredited by the Council on Social Work Education within the last three years. Applicants who graduated from an undergraduate social work program accredited by the Council on Social Work Education within the last five years and have two years of human service work during those five years, will be considered for the Advanced Standing program.
2. A broad liberal arts background with a minimum of 30 hours including at least one course in: sociology, psychology, and an introductory course in statistics. These undergraduate requirements may be taken at any accredited college or university, including community colleges. All prerequisites for admission must be completed prior to beginning the second semester in the program. All offers of admission are conditional upon the successful completion of the undergraduate coursework.
3. A minimum grade point average of 3.5 on the last 60 upper division credits (including all Social Work courses and the three prerequisites) and a 3.0 GPA on the last 120 credits leading to the bachelor's degree. Both GPA's will be used to consider admission. If the applicant has a 2.8 to 3.0 GPA on the last 120 credits leading to the bachelor's degree, but an otherwise strong application, consideration will be given for provisional admission (3.2 is needed on the 60 upper division GPA). Graduate credits will be considered in assessing an applicant's qualifications.
4. Applicants must submit a criminal background check and drug test.
5. Four Letters of Recommendation from

a. One recommendation from the Field Education Liaison who taught the applicant's most recent Field Education Seminar course
b. One recommendation from the Field Supervisor from the applicant's undergraduate Field Education Placement/Agency.
c. One recommendation from a higher education program academic source. d. One recommendation from either an employer or professional or community associate.

6. Submit final field evaluation from undergraduate field education experience.
7. Complete a criminal background check and drug test.
8. Submit a current resume.
9. Professional Statement of Intent – Applicants must demonstrate their understanding of the social work profession and their suitability for this program.

Application Writing Prompts: Applicants are to prepare and submit a statement covering the questions below. Applicants' personal statements should be a minimum of three (3) pages, no more than four (43) pages, typed, double-spaced, and in 12-point font. Please use the number and its associated topic area (in bold and underlined) as headings when completing personal statement.

The VSU MSW Program is in Pre-Candidacy Status for CSWE Accreditation
Pre-Candidacy for a baccalaureate or master's social work program by the Council on Social Work Education's Commission on Accreditation indicates that it has submitted an application to be reviewed for *Candidacy* and had its *Benchmark I* approved in draft form to move forward with *Candidacy* review within one year. A program that has attained *Pre-Candidacy* has not yet been reviewed by the Commission on Accreditation or been verified to be in compliance with the Educational Policy and Accreditation Standards.

Students who enter programs in *Pre-Candidacy* that attain *Candidacy* in the academic year in which they begin their program of study will be retroactively recognized as having graduated from a CSWE-accredited program once the program attains Initial Accreditation. The *Candidacy* Process is typically a three-year process and there is no guarantee that a program in *Pre-Candidacy* will eventually attain *Candidacy* or *Initial Accreditation*.

Candidacy by the Council on Social Work Education's Commission on Accreditation applies to all locations and delivery methods of an accredited program. Accreditation provides reasonable assurance about the quality of the program and the competence of students graduating from the program.

For more information about social work accreditation, please visit the CSWE Accreditation (https://www.cswe.org/Accreditation) page.

60 – Credit Full-Time Curriculum - Bachelor Degree not in Social Work

Code	Title	Credit Hours
First Year - Fall Semester		
SOWK 601	Prin & Prac of Gen SOWK Prac	3
SOWK 602	Human Behavior & Soc Envrin I	3
SOWK 603	Gen SOWK Prac w/Ind. & Groups	3
SOWK 604	Gen SOWK Prac with Families	3
SOWK 605	Fou Field Prac I & Int Seminar	3
Spring Semester		
SOWK 615	Hum Behav in the Soc Env II	3
SOWK 616	Social Science Res Methods	3
SOWK 617	Div & Cul Comp in SOWK Prac	3
SOWK 617	Div & Cul Comp in SOWK Prac	3
SOWK 618	Gen Prac II- Comm & Org	3
SOWK 619	Field Prac II & Int Sem II	3
Second Year - Fall Semester		
SOWK 720	Tra & Resiliency in SOWK Prac	3
SOWK 725	DSM-5:Diff Ass & Dia Clin SOWK	3
SOWK 726	Neuroscience & SOWK Practice	3
SOWK 727	Tra-Inf Clinic SOWK Prac w/Fam	3
SOWK 728	Spe Field Prac & Integ Semin I	3
Spring Semester		
SOWK 735	Trauma & Attachment Theory	3
SOWK 736	Tra-Inf Clinic SOWK Prac w/Grp	3
SOWK 737	Trama-Focus Research Capstone	3
SOWK 738	Spec Field Prac & Integ Sem II	3
Total Credit Hours		**60**

Advanced Standing Full-Time Curriculum – Bachelor Degree in Social Work

Code	Title	Credit Hours
One Year - Summer Semester		
SOWK 607	ADVSTD SOWK Practice II	3
SOWK 608	ADVSTD SOWK Research Methods	3
SOWK 609	ADVSTD Cult Div Soc Wel Pol Pr	3
SOWK 610	ADVSTD Field Prac I & Inte Sem	3
Restricted Elective		3
Fall Semester		
SOWK 720	Tra & Resiliency in SOWK Prac	3
SOWK 725	DSM-5:Diff Ass & Dia Clin SOWK	3
SOWK 726	Neuroscience & SOWK Practice	3
SOWK 727	Tra-Inf Clinic SOWK Prac w/Fam	3
SOWK 728	Spe Field Prac & Integ Semin I	3
Spring Semester		
SOWK 735	Trauma & Attachment Theory	3
SOWK 736	Tra-Inf Clinic SOWK Prac w/Grp	3
SOWK 737	Trama-Focus Research Capstone	3
SOWK 738	Spec Field Prac & Integ Sem II	3
Restricted Elective		3
Total Credit Hours		**45**

College of Natural and Health Sciences

Dean
Dr. Jessica Brooks (Interim)
Location
Hunter McDaniel Building, 30Nd
Contact Information
804-524-5077 | jbbrooks@vsu.edu

Overview of the College for Graduate Studies

The College of Natural and Health Sciences at Virginia State University offers rigorous graduate programs designed to prepare scholars, researchers, and practitioners for advanced roles in science and health-related fields. Through a blend of theoretical knowledge, applied research, and interdisciplinary collaboration, the College fosters academic excellence and scientific inquiry at the graduate level. Students pursuing a Master of Science in Biology or Psychology, or a Doctor of Philosophy in Health Psychology, are immersed in a challenging curriculum that promotes critical thinking, ethical practice, and evidence-based innovation. The graduate experience is enriched by access to research laboratories, faculty mentorship, and opportunities for scholarly contribution to the scientific community.

Mission of the College for Graduate studies

The mission of the College of Natural and Health Sciences is to deliver high-quality graduate education that advances knowledge in the biological, psychological, and health sciences. The College is committed to producing scholars and professionals equipped to address complex challenges in health and science through research, practice, and leadership.

Objectives of the College for graduate Studies

The primary objectives of the graduate programs within the College of Natural and Health Sciences are to:

- Maintain and continually enhance the quality of graduate instruction and research across all academic disciplines.
- Prepare students for advanced careers in academia, research institutions, healthcare organizations, and government or industry sectors.
- Equip graduates with the knowledge, skills, and ethical grounding necessary to contribute to the advancement of health science and psychological well-being.
- Support scholarly inquiry and the pursuit of doctoral and post-doctoral education.

Graduate Program Listings

Health Psychology with Concentrations in Clinical Health Psychology and Behavioral & Community Health Sciences
(Doctor of Philosophy)

Chairperson: Dr. Shedrick McCall
Location: Hunter-McDaniel Bldg, Room 102Sa
Contact Information: 804-524-5095 | smccall@vsu.edu (http://catalog.vsu.edu/undergraduate/college-natural-health-sciences/department-psychology/smccall@vsu.edu)

Biology
(Master of Science)

Chairperson: Dr. Kathryn H. Shows (Interim)
Location: Owens Hall, Room 102A
Contact Information: (804) 524-5025 | kshows@vsu.edu

Psychology with Concentrations in General Psychology and Clinical Psychology
(Master of Science)

Chairperson: Dr. Shedrick McCall
Location: Hunter-McDaniel Bldg, Room 102Sa
Contact Information: 804-524-5095 | smccall@vsu.edu (http://catalog.vsu.edu/undergraduate/college-natural-health-sciences/department-psychology/smccall@vsu.edu)

Health Psychology, Doctor of Philosophy (Ph.D.)

The Department of Psychology offers graduate study leading to both Master's and Doctoral degrees. Students working toward the Master of Science (MS) degree may choose a concentration in either General Psychology or Clinical Psychology. Students working towards the Doctor of Philosophy (PhD) in Health Psychology will focus on Clinical Health Psychology or Behavioral and Community Health Sciences (BCHS).

Doctor of Philosophy

Graduate study in Health Psychology has a strong research focus on behavioral risk factors that impact health, such as stress, at-risk sexual practices, drug use, sedentary lifestyles, smoking, noncompliance with treatment regimens, etc. This program focuses on health service provision disparities in minority communities for diseases such as mental health, cardiovascular disorders, diabetes, and hypertension, as well as effective health promotion education and planning for those communities. The doctoral program in Health Psychology has two specialized areas of study: Clinical Health; and Behavioral and Community Health Sciences (BCHS). The Clinical Health specialization will prepare students to work in applied settings, such as hospitals, physical rehabilitation settings, outpatient clinics, and other health services settings as members of multidisciplinary teams. The BCHS specialization will train students to conduct research and to develop and implement community interventions. Both areas of study will emphasize research and grant-writing, as well as offer opportunities for students to develop teaching skills.

Admission Requirements

To be considered for admission to the Health Psychology Doctoral Program, an applicant must:

1. Have a minimum of 15 semester hours in psychology, including at least one course in each of the following:
   a. social, personality, cognitive, or developmental psychology,
   b. research methods, quantitative methods, or experimental psychology, and
   c. physiological psychology.

   Students applying to the Clinical Health Psychology program must have a course in Abnormal Psychology.

B. Submit official transcripts of undergraduate and graduate coursework.
C. Submit official GRE scores. The GRE is required for all applicants, including those with a Master's degree.
D. Complete a VSU Graduate School Application and the Psychology Department Supplemental Application, including a resume.
E. Submit a written personal statement (not to exceed three pages, double-spaced) that describes your personal background, academic experience, and future goals (professional and educational);
F. Submit three current letters of recommendation from professors, employers, and other professionals qualified to assess the applicant's ability to complete doctoral studies. At least two letters should be from professors and/or psychologists.

Students who are most competitive for unconditional admission will have:

1. A minimum graduate grade point average of 3.00 on a scale of 4.0. Applicants with post-baccalaureate work, including those with Master's degrees, must have a minimum graduate GPA of 3.5.
2. Have a minimum verbal GRE score of 153 and quantitative GRE score of 144.

Those admitted with a master's degree will undergo a credit audit to determine which credits will be accepted. If an applicant with a master's degree completed a program with a non-thesis option, they will be required to complete a thesis. The course titles for the Health Psychology curriculum are listed below. A sample course sequence and complete descriptions for all the courses in the graduate inventory can be found in Appendix A. All courses have been approved by the appropriate VSU curriculum committees.

Health Psychology Clinical Area of Study Summary

Code	Title	Credit Hours
Core for both areas of study (48 hrs.)		
PSYC 530	Ethics/Prof Standards of Pract	3
PSYC 533	Introduction to Neuroscience	3
PSYC 580	Stat Methods in Health Psyc I	3
PSYC 581	Stat Methods in Health Psyc II	3
PSYC 597	Teaching of Psychology	3
PSYC 603	Health Psychology	3
PSYC 609	History and Systems	3
PSYC 612	Resr Meth Clinical/Health Psyc	3
PSYC 701	Hlth Psyc: Psycother Meth/Inte	3
PSYC 705	Health Ed & Behavioral Science	3
PSYC 715	Social/Cultural Aspect Hth Ill	3
PSYC 599	Research and Thesis	6
PSYC 899	Doctoral Dissertaton	6
PSYC 899	Doctoral Dissertaton	6
Clinical Core Requirements		
PSYC 508	Psychotherapy I: Theories Psyc	3
PSYC 517	Basic Psychopathology	3
PSYC 519	Psychotherapy II: Techniques	3
PSYC 520	Psychological Assessmnt I	3
PSYC 521	Psychological Assessmnt II	3
PSYC 522	Practicum I	3
PSYC 707	Theories Superv & Consult Psyc	3
Developemental Aspects of Behavior		
PSYC 512	Human Growth And Development	3
Cognitive Aspects of Behavior		
PSYC 515	Cognitive and Affective Psych	3
Social Aspects of Behavior		
PSYC 514	Experimental Social Psychology	3
Clinical Practicum		
PSYC 620	Clinical Practicum I	1
PSYC 621	Clinical Practium II	2
PSYC 720	Health Psychology Practicum	3
PSYC 721 & 721	Advanced Clinical Practicum and Advanced Clinical Practicum	6
Pre-Doctoral Internship		
PSYC 900 & 900	Predoc'l Intern Clinical Psyc and Predoc'l Intern Clinical Psyc	2
Unrestricted Electives		**3**
Total Credit Hours		**98**

Health Psychology: Behavioral & Community Health Sciences Area of Study Summary

Code	Title	Credit Hours
Core (for both areas of study)		
PSYC 530	Ethics/Prof Standards of Pract	3
PSYC 533	Introduction to Neuroscience	3
PSYC 580	Stat Methods in Health Psyc I	3
PSYC 581	Stat Methods in Health Psyc II	3
PSYC 599	Research and Thesis	6
PSYC 603	Health Psychology	3
PSYC 612	Resr Meth Clinical/Health Psyc	3
PSYC 899	Doctoral Dissertaton	6
PSYC 899	Doctoral Dissertaton	6
BCHS Core Requirements (33)		
PSYC 512	Human Growth And Development	3
PSYC 532	Diagnosis/Treatment of Substan	3
PSYC 609	History and Systems	3

PSYC 701	Hlth Psyc: Psycother Meth/Inte	3
PSYC 703	Assess & Eval Comm Health Prog	3
PSYC 711	Research Health Psyc -Seminar	3
PSYC 714	Epidemiology Hlth Behav/Com Ep	3
PSYC 715	Social/Cultural Aspect Hth Ill	3
PSYC 720	Health Psychology Practicum	3
Restricted Elective	**Choose at least one of the courses below:**	**3**
PSYC 705	Health Ed & Behavioral Science	
PSYC 713	Health Services Administration	
Restricted Electives	**Choose at least one of the courses below:**	**6**
PSYC 513	Educational Psychology	
PSYC 515	Cognitive and Affective Psych	
Restricted Electives	**Choose two of the three courses below:**	**3**
PSYC 514	Experimental Social Psychology	
PSYC 517	Basic Psychopathology	
PSYC 527	Personality Theory	
Total Credit Hours		**75**

Biology, Master of Science (M.S.)

Graduate study in biology is designed to prepare students for careers in teaching and research in state, federal and private institutions, including at the university level or in private laboratories. Graduate study in Biology leads to the Master of Science (M.S.) degree. Students typically complete the degree requirements in two years of full-time work. However, the duration to complete the program may vary based on individual differences in student backgrounds and experience levels. It is recommended that interested students contact the department for more information about research and other departmental activities related to the graduate program. Graduate study is characterized by smaller, more focused classes, closer interactions with qualified faculty, and opportunities for independent research. The low student-faculty ratio in the Department creates a dynamic, supportive atmosphere and allows greater access to the facilities and expertise that will make your education a success.

Students with undergraduate majors in biology and other science areas are encouraged to pursue graduate work in Biology. The Department's Graduate Committee will review your background in Biology, Chemistry, Mathematics, and Physics, and will determine what additional coursework (if any) you may need.

Please contact the department for information about research and other departmental activities related to the graduate program.

Admission Requirements

Students must have appropriate GRE test scores as determined by the Graduate Committee. Applicants are encouraged to contact the Department of Biology for information about sufficient scores in different areas. All applicants must have a minimum of thirty-two (32) semester hours of biology. Additionally, a minimum of eight semester hours of general chemistry and four semester hours of organic chemistry is required. Six semester hours of mathematics is also required. Applicants who do not possess the necessary requirements may be admitted into the program on a provisional basis. Students will be expected to make up deficiencies identified by the graduate committee.

Thesis Option

The thesis option allows students to increase their knowledge of biology and become involved with graduate-level research in biology with an eye on research careers or preparation for further graduate or professional school work. To complete the program, a minimum of 30 semester hours, including all core courses and the thesis, is required for the M.S. degree. Each student, with a faculty advisor, plans a tentative graduate program early in the first semester. Students are encouraged to begin their independent research in the second semester of their first year. The student's committee should be formed no later than one semester after admission to candidacy and should meet each semester thereafter to monitor the student's progress (in both research and coursework). Every effort is made to plan the graduate program around the needs and interests of the students.

Non-Thesis Option

The non-thesis degree is designed for students who must take additional course work to raise their academic credentials for application to medical, dental, or other professional schools, or are employed full time. Each student enrolled in the non-thesis option must complete a minimum of 36 semester hours, including all required core courses except BIOL 524 Research and Thesis. While these courses include Investigations and Research, in which students complete an independent research project, it should be noted that the research experience is not as extensive as in the thesis option, and therefore limits the marketability of students pursuing this option. In order to complete the degree, students must pass a written and/or oral comprehensive examination.

Code	Title	Credit Hours
Core Courses		**13**
BIOL 513	Seminar	1
BIOL 522	Investigations In Biology	3
BIOL 525	Leading a Biology Lab Course	3
BIOL 542	Advanced Biochemistry	3
STAT 511	Biometry	3
or PSYC 580	Stat Methods in Health Psyc I	
or STAT 510	Stat Procedures In Ed & PSYC	
Thesis Option - Students must take the following:		**3**
BIOL 524	Research & Thesis	
Non-Thesis Option - Students must take the Comprehensive Exam		**0**
Restricted Electives**		**14-23**
BIOL 508	Biology & Human Affairs	
BIOL 510	Human Genetics	
BIOL 510	Human Genetics	
BIOL 511	Topics In Modern Biology	
BIOL 514	Endocrinology	
BIOL 515	Advd Invertebrate Zoology	
BIOL 518	Advanced Plant Physiology	
BIOL 520	Cytology	
BIOL 521	Plant Morphogenesis	
BIOL 526	Experimental Embryology	
BIOL 533	Introduction to Neuroscience	
BIOL 546	Advanced Immunobiology	
BIOL 548	Molecular Biology	
BIOL 551	Topic in Molecular Biol & Geno	
BIOL 552	Topic in Ecology and Evol Biol	

BIOL 553	Topic in Organismal Biology
BIOL 554	Topic in Computational Biology

****Students who select the Thesis Option must select 14 credit hours from the Restricted Electives. Students who select the Non-Thesis Option must select 23 credit hours from the Restricted Electives.**

Psychology, Master of Science (M.S.)

The Department of Psychology offers graduate study leading to both Master's and Doctoral degrees. Students working toward the Master of Science (MS) degree may choose a concentration in either General Psychology or Clinical Psychology. Students working towards the Doctor of Philosophy (PhD) in Health Psychology will focus on Clinical Health Psychology or Behavioral and Community Health Sciences (BCHS).

Students who are interested in becoming community college teachers or researchers, or in pursuing further study toward the doctorate are advised to select the concentration in General Psychology. In addition, those who are interested in pursuing doctoral work in School Psychology can take Educational Psychology courses through the general Psychology concentration. If students' vocational goals include working in therapy or assessment services, they should pursue the Clinical Psychology concentration.

Admission Requirements

***Students are admitted to the Psychology department during the Fall semester only.**
****Graduate Record Examination (GRE) scores are required as part of the application packet and prior to receiving an offer of admission.**

Unconditional Admission. In addition to the general requirements for admission to the College of Graduate Studies, the Department of Psychology requires:

1. a minimum of 15 semester hours in Psychology, including at least one course in each of the following:
   a. social, personality, cognitive, or developmental Psychology,
   b. research methods, quantitative methods, or experimental Psychology, and
   c. physiological Psychology. Students desiring admission to the Clinical Psychology concentration must also have an undergraduate course in abnormal psychology;
2. a 3.00 grade point average (on a scale of 4.00 points) in Psychology or major area;
3. an overall undergraduate grade point average of 2.8 (on a scale of 4.00 points).
4. completed supplemental application (located on the psychology department's website), including a written personal statement.
5. three current letters of recommendation from professors, employers, and/or other professionals qualified to assess the applicant's ability to complete graduate studies. Two letters should be from professors or psychologists.

Conditional Admission. Applicants can be granted conditional admission under the general provisions of the College of Graduate Studies whenever the requirements in a), b), and/or c) above are not met, if additional program slots are available. Applicants also must have a minimum grade point average of 2.8 in the undergraduate major, a 3.00 grade point average during last two years of undergraduate course work, and/or a minimum total Graduate Record Examination (GRE) score of 291 (900 on the old scale) in order to be admitted with conditional status in Psychology.

Change of Status. In order to achieve unconditional status and advance to candidacy, students must

1. complete all undergraduate prerequisites listed on the Program Card by the major advisor;
2. earn a B average, with no grade below C, in the first 15 graduate-level hours of their planned program of study; and
3. successful completion of PSYC 528 with a B or better.

Continuing Status. Continuing status is dependent upon maintaining a cumulative GPA of at least 3.0, with no more than two grades of C (including grades of U), as well as a favorable review by the departmental graduate faculty committee. For anyone with a grade below C, continuing status is subject to further departmental review. Each student will be evaluated annually. This evaluation will include academic performance, departmental contribution and professionalism. The student should complete coursework with a grade of "B" or higher. Students are required to show good standing in the program. Thus, in the event of any concern, written documentation will be given to allow adequate time for the student to adjust the behavior in question.

Clinical Psychology Curriculum

Code	Title	Credit Hours
Required Courses (36 hrs)		
PSYC 510	Pro-Seminar	3
PSYC 517	Basic Psychopathology	3
PSYC 508	Psychotherapy I: Theories Psyc	3
PSYC 519	Psychotherapy II: Techniques	3
PSYC 520	Psychological Assessmnt I	3
PSYC 521	Psychological Assessmnt II	3
PSYC 522	Practicum I	3
PSYC 523	Practicum Ii	3
PSYC 524	Practicum Iii	3
PSYC 528	Exp Design & Data Analysis Psy	3
PSYC 530	Ethics/Prof Standards of Pract	3
PSYC 599	Research and Thesis	3
Electives (9 hrs)		**9**
PSYC 512	Human Growth And Development	
PSYC 513	Educational Psychology	
PSYC 518	Psychopathology Of Childhood	
PSYC 527	Personality Theory	
PSYC 529	Crisis Intervention Strategies	
PSYC 531	Intro to Group Therapy	
PSYC 532	Diagnosis/Treatment of Substan	
Total Credit Hours		**45**

General Psychology Curriculum

Code	Title	Credit Hours
Required Courses (27 hrs)		
PSYC 510	Pro-Seminar	3
PSYC 514	Experimental Social Psychology	3

PSYC 512	Human Growth And Development	3
PSYC 527	Personality Theory	3
PSYC 528	Exp Design & Data Analysis Psy	3
PSYC 532	Diagnosis/Treatment of Substan	3
PSYC 580	Stat Methods in Health Psyc I	3
PSYC 581	Stat Methods in Health Psyc II	3
PSYC 599	Research and Thesis	3
Electives (3 hrs)		**3**
Total Credit Hours		**30**

Continuing Status. Continuing status is dependent upon maintaining a cumulative GPA of at least 3.0, with no more than two grades of C (including grades of U), as well as a favorable review by the departmental graduate faculty committee. For anyone with a grade below C, continuing status is subject to further departmental review. Each student will be evaluated annually. This evaluation will include academic performance, departmental contribution and professionalism. The student should complete coursework with a grade of "B" or higher. Students are required to show good standing in the program. Thus, in the event of any concern, written documentation will be given to allow adequate time for the student to adjust the behavior in question.

Reginald F. Lewis College of Business

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Overview of the College for Graduate Studies

The Reginald F. Lewis College of Business at Virginia State University offers a dynamic and comprehensive Master of Business Administration (MBA) program designed to develop strategic thinkers and ethical leaders prepared for the complexities of today's global business environment. Grounded in innovation, technology, and practical application, the program equips students with the analytical, managerial, and leadership skills necessary to succeed in competitive corporate, nonprofit, and entrepreneurial settings. Through a rigorous curriculum and strong industry partnerships, the College cultivates professionals capable of driving sustainable growth and leading with purpose across diverse organizational landscapes.

Mission Statement of the college for graduate studies

The Reginald F. Lewis College of Business at Virginia State University prepares diverse graduate students to become ethical, globally minded, and socially responsible business leaders. Through a technology-infused curriculum, our MBA program emphasizes strategic problem-solving, leadership development, and practical engagement with real-world business operations. Students are empowered to drive innovation, lead with integrity, and make meaningful contributions to both industry and society.

objectives of the college for graduate studies

Aligned with our mission, the MBA program emphasizes the following core competencies:

- Strategic Problem Solving
- Technology Integration in Business
- Executive and Professional Development
- Business Ethics and Corporate Social Responsibility
- Effective Business Communication
- Global and Multicultural Business Perspectives

Graduate Program listings

Business Administration
(Master of Business Administration)

Business Administration, Master of Business Administration (M.B.A.)

Welcome to the Master of Business Administration (MBA) program at Virginia State University, where we're dedicated to molding the next generation of business leaders and innovators. Our program is designed to equip students with both the cutting-edge technological competencies and the essential managerial skills required to excel in today's dynamic business landscape. Positioned at the heart of the Greater Richmond region and extending our impact throughout Virginia, our MBA program is a cornerstone in fostering a versatile and proficient managerial workforce, capable of propelling the high-technology sector and various other industries into the future.

Admission Requirements

Admissions to the MBA program are facilitated through the Graduate Office in collaboration with the RFL College of Business, ensuring a

comprehensive evaluation based on both academic credentials and professional experiences.

Unconditional Admission: Applicants holding a bachelor's degree in any field from an accredited institution, boasting a minimum grade point average (GPA) of 3.0, are welcomed into the program without prerequisites.

Conditional Admission: Prospective students presenting a GPA between 2.5 and 3.0 from an accredited university may qualify for admission contingent upon the assessment of relevant work experience and a personal interview with our program staff.

Delivery Format

Embrace flexibility in your learning journey with our hybrid delivery format. All courses are available both as traditional in-person classes and through an innovative asynchronous online format. This flexible approach allows you to tailor your MBA experience to fit your personal and professional schedule, whether you prefer to study on-campus, online, or through a combination of both.

Embark on your path to becoming an influential business leader with Virginia State University's MBA program. Apply now or check your application status to take the next step in your professional journey.

Program Requirements

The MBA curriculum at Virginia State University is meticulously crafted to provide a robust foundation in business administration principles, augmented by core coursework in critical areas such as accounting, management, marketing, entrepreneurship, and information technology. To graduate, students must complete 36 credit hours as detailed below:

Code	Title	Credit Hours
Core Courses (18 Credit Hours):		
ACCT 510	ACCT for Dec. Making & Control	3
CISY 510	Managing Information Tech	3
FINC 510	Managerial Financial Economics	3
MGMT 510	Managing New & Growing Venture	3
MKTG 510	Marketing Management	3
Capstone Course (3 Credit Hours):		
MGMT 690	Strategic PLN & Implementation	3
Restricted Electives: Choose any six courses from the following:		**18**
ACCT 600	Report & Analysis of Fin Stat.	
ACCT 610	Accounting Analytics & Valuati	
FINC 600	Financial Mgmt for New & Grow	
CISY 610	Computer Security	
CISY 620	Org Rsk & Business Continuity	
MKTG 600	Data Analytics	
MKTG 630	Brand Building & Mgmt Strategy	
MKTG 640	Strategic Global Marketing Mgt	
MGMT 650	Mgmt Theory & Org Ldrshp	
MGMT 670	Hum Res & Hum Cap Mgmt	
Total Credit Hours		**36**

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