

VIRGINIA STATE UNIVERSITY



UNDERGRADUATE CATALOG 2008 – 2010

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



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.

TABLE OF CONTENTS

UNIVERSITY CALENDAR	v
BOARD OF VISITORS AND ADMINISTRATION	
Presidents.....	1
Board of Visitors	2
Administration.....	2
Directory.....	3
THE UNIVERSITY.....	4
History	4
The Mission.....	5
Accreditations and Affiliations.....	6
Policy Statements	8
Alcohol and Drug Policy	8
Americans with Disabilities Accessibility Policy	9
Sexual Harassment Policy	10
Procedures Governing the Prohibition of Sexual Harassment	12
Family Educational Rights and Privacy Act of 1974	15
Transfer Policy	16
The Student Academic Code.....	17
ACADEMIC REGULATIONS AND PROCEDURES	19
Admissions	19
Advisement.....	20
Academic Honors	20
Academic Sanction	20
Advanced Placement	21
Attendance	21
Academic Honesty.....	21
Advanced Scholars Program	21
Baccalaureate Degree	21
Cancellation of Enrollment.....	22
Change of Major.....	22
Classification of Students	22
Classroom Attendance.....	22
Commencement.....	22
Concentration	22
Concurrent Enrollment	22
Continuing Education Student.....	22
Course Load	22
Course Numbering System.....	23
Course Waivers and Substitutions.....	23
Credit by Examination.....	23
Degrees.....	23
Enrollment/Withdrawal	23
Examinations	23
Financial Aid	23

Foreign Language Requirement	23
Grades	23
Grade-Point Average (GPA)	24
Grade Review Procedure	24
Grade Reports	24
Graduation Procedures	24
General Education Requirements	24
Honors	24
Honors Program	24
Immunization	24
Laboratory Enrollment	24
Last 27 Credits	24
Late Registration	25
Major	25
Minor	25
Off-Campus Courses	25
Placement in Freshman Mathematics	25
Probation	25
Proficiency Examinations	25
Registration	26
Suspension	26
Transcripts	26
Transfer Credits	26
Tuition and Fees	26
In-State Tuition Eligibility	26
Withdrawal from the University	26
Undergraduate Scholarships	26
GENERAL EDUCATION PROGRAMS	28
Learning Outcomes	28
General Education Program Provisions, Requirements, and Courses	29
General Education Course Descriptions	32
SPECIAL ACADEMIC PROGRAMS	46
Bachelor of Individualized Studies Degree	46
Conferences and Workshops	48
Leisure/Recreational Short Courses	48
Special Programs	48
Virginia State University at Fort Lee	48
Honors Program	48
Institute for Leadership Development	49
UNDERGRADUATE ACADEMIC PROGRAMS	51
School of Agriculture	51
School of Business	93
School of Engineering, Science and Technology	116
School of Liberal Arts and Education	192
GENERAL INFORMATION	317
INSTRUCTIONAL FACULTY	322

University Calendar 2008-2010

Virginia State University
Petersburg, Virginia 23806

FALL SEMESTER, 2008

AUGUST

Sunday	10	Residence Halls Open at 8:00 A.M. for New Students
Monday	11	University Conference and Faculty Planning Workshop
Tuesday	12	Faculty Planning Day
Wednesday-Friday	13-15	Undergraduate, Graduate School and Continuing Education Registration
Monday	18	University Classes Begin
Monday	18	Late Validation Begins (Late fee is effect)
Monday	18	Term I, Off-Campus Eight Week Classes at Fort Lee Begin
Friday	22	Late Validation Ends

SEPTEMBER

Monday	1	LABOR DAY HOLIDAY (University Closed)
Monday	8	Formal Opening Convocation
Friday	26	Last Day to file an Application for Winter Commencement (Applications must be filed in the Office of the Registrar)
Friday	26	Term I, Last Day to Withdraw from Classes at Fort Lee (Grade of W will be recorded)

OCTOBER

Monday	6	Advisory Examination Period
Friday	10	Advisory Examinations End
Friday	10	Term I, Off-Campus Eight Week Classes End at Fort Lee
Monday	13	Term II, Off-Campus Eight Week Classes Begin at Fort Lee
Monday-Tuesday	13-14	FALL BREAK (No Fall Break for Eight Week Classes)
Friday	17	Advisory Grades are due in System by Faculty – (5:00 P.M.)
Friday	17	Term II, Last Day to Add Classes at Fort Lee
Monday	20	Curriculum Sheet Update/Schedule Planning/Course Scheduling
Monday	20	Registration Begins for Spring Semester, 2008
Friday	24	Last Day to Withdraw from Classes for On-Campus Students (Grade of W will be recorded)

NOVEMBER

Friday	14	Term II, Last Day to Withdraw from Classes at Fort Lee (Grade of W will be recorded)
Friday	14	Registration Ends for Spring Semester, 2008
Wednesday	26	No Classes
Thursday-Sunday	27-30	THANKSGIVING HOLIDAYS (University Closed)

DECEMBER

Monday	1	University Classes End
Tuesday	2	University Reading Day
Wednesday	3	Final Examinations Begin
Saturday	6	Final Examinations End
Saturday	6	Term II, Off-Campus Eight Week Classes End
Tuesday	9	Senior Grades are due in the System – (9:00 A.M.)
Wednesday	10	Semester Grades are due in System by Faculty – (5:00 P.M.)
Friday	12	Commencement Activities
Saturday	13	WINTER COMMENCEMENT – 10:00 A.M.

SPRING SEMESTER 2009

JANUARY

Sunday	11	Residence Halls Open at 8:00 A.M. for New Students
Monday	12	University Conference and Faculty Planning Workshop

Tuesday	13	Residence Halls Open at 8:00 A.M. for Continuing Students
Tuesday	13	Faculty Planning Day
Wednesday-Friday	14-16	Undergraduate, Graduate School and Continuing Education Registration
Monday	19	DR. MARTIN LUTHER KING, JR. HOLIDAY (University Closed)
Tuesday	20	University Classes Begin
Tuesday	20	Term I, Off-Campus Eight Week Classes Begin at Fort Lee
Tuesday	20	Late Validation Begins (Late Fee in Effect)
Monday	26	Late Validation Ends
Monday	26	Last Day to Add/Drop a Course (All Classes)

FEBRUARY

Wednesday	11	ASSESSMENT DAY
Friday	20	Term I, Last Day to Withdraw Eight Week Classes at Fort Lee (Grade will be recorded)
Friday	27	Last Day to file an Application for Spring Commencement (Applications must be filed in the Office of the Registrar)

MARCH

Friday	6	FOUNDER'S DAY
Tuesday	10	Advisory Examination Period Begins
Saturday	14	Term I, Off Campus Eight Week Classes End at Fort Lee
Saturday	14	Advisory Examinations End
Sunday-Sunday	15-22	SPRING BREAK (No Spring Break Eight Week Classes)
Monday	16	Term II, Off-Campus Eight Week Classes Begin at Fort Lee
Friday	20	Term II, Last Day to Add/Drop Courses-Eight Week Classes at Fort Lee
Friday	20	Advisory Grades are due in System by Faculty – (5:00 P.M.)
Monday	23	Registration for Fall Semester, 2009 Begins
Monday	23	Curriculum Sheet Update/Schedule Planning/Course Scheduling
Friday	27	Last Day to Withdraw from Classes for On-Campus Students (Grade of W will be recorded)

APRIL

Monday	6	Academic Honors Exercise
Monday-Friday	6-10	Honors Week Activities
Friday	17	Term II, Last Day to Withdraw from Classes at Fort Lee (Grade will be recorded as "W")
Friday	17	Registration for Fall Semester Ends

MAY

Monday	4	University Classes End
Tuesday	5	University Reading Day
Wednesday	6	Final Examination Period Begins
Saturday	9	Final Examination Period Ends
Saturday	9	Term II, Off-Campus Eight Week Classes End at Fort Lee
Tuesday	12	Senior Grades are due in System (9:00 A.M.)
Wednesday	13	Semester Grade Rosters are due in System by Faculty – (5:00 P.M.)
Friday-Sunday	15-17	Commencement Activities
Saturday	16	ROTC Commissioning Exercises
Saturday	16	Nurses Penning Ceremony
Sunday	17	COMMENCEMENT EXERCISES (9:00 A.M.)

SUMMER SESSIONS, 2009

MAY		
Friday	22	Registration for All Summer Sessions
Monday	25	MEMORIAL DAY (University Closed)
Tuesday	26	Late Registration
Tuesday	26	Session I Classes Begin for On-Campus Students (4½ Weeks)
Tuesday	26	Off-Campus Eight Week Classes Begins at Fort Lee
Tuesday	26	Ed. D Classes Begin (5 Weeks)
Wednesday	27	Last Day to Add Classes for Session I
Wednesday	27	Last Day to Add Off-Campus Classes at Fort Lee

JUNE

Monday	1	Last Day to Withdraw Session I On-Campus Classes (Grade will be recorded as W)
Monday	15	New Student Orientation
Tuesday	16	New Student Orientation
Thursday	25	Session I Classes End (4½ Weeks)
Thursday	25	Final Examinations for Session I (4½ Weeks)
Friday	26	Registration for All Session II Sections
Friday	26	Last Day to Withdraw from Off-Campus Classes at Fort Lee (Grade of W will be recorded)
Saturday	27	Session I-Ed. D Classes End (5 Weeks)
Monday	29	Session II Classes Begins for On-Campus Students (4½ Weeks)
Monday	29	Section II-Ed. D Classes Begins (5 Weeks)
Monday	29	Late Registration
Tuesday	30	Last Day to Add/Drop Classes for Session II
Tuesday	30	Session I Grades are Due in System by Faculty (5:00 P.M.)

JULY

Friday	3	Celebration of Independence Day (No Classes)
Saturday	4	INDEPENDENCE DAY (No Classes)
Tuesday	7	Last Day to Withdraw from Session II Classes (Grade of W will be Recorded)
Thursday	16	New Student Orientation
Friday	17	New Student Orientation
Tuesday	21	Off-Campus Eight Week Classes End at Fort Lee
Thursday	30	Session II Classes End (4½ Weeks)
Thursday	30	Final Examination Session II (4½ Weeks)
Tuesday	31	Session II grades are due in the system (12:00 Noon)

AUGUST

Saturday	1	Summer II-Ed. D Classes End (5 Weeks)
Monday	3	Session II-All Sessions Grades are Due in the System (12:00 Noon)

FALL SEMESTER, 2009

AUGUST

Sunday	9	Residence Halls Open at 8:00 A.M. for New Students
Monday	10	University Conference and Faculty Planning Workshop
Tuesday	11	Residence Halls Open at 8:00 A.M. for Continuing Students
Tuesday	11	Faculty Planning Day
Wednesday-Friday	12-14	Undergraduate School/Graduate School/Continuing Education Registration
Monday	17	University Classes Begin
Monday	17	Late Validation Begins (Late fee is in effect)
Monday	17	Term I, Off-Campus Eight Week Classes Begin
Friday	21	Late Validation Ends
Monday	24	Last Day to Add/Drop Courses (All Classes)

SEPTEMBER

Monday	7	LABOR DAY HOLIDAY (University Closed)
Monday	14	Formal Opening Convocation
Friday	18	Last Day to Withdraw from Eight Week Classes at Fort Lee (Grade of W will be recorded)
Friday	26	Last Day to file an Application for Winter Commencement (Applications must be filed in the Office of the Registrar)

OCTOBER

Monday	5	Advisory Examination Begins
Friday	9	Advisory Examinations End
Saturday	10	Term I, Off-Campus Eight Week Classes End at Fort Lee
Monday	12	Term II, Off-Campus Eight Week Classes Begin at Fort Lee

Monday-Tuesday	12-13	FALL BREAK (No Fall Break Eight Week Classes)
Friday	16	Advisory Grades are due in System by Faculty – (5:00 P.M.)
Friday	16	Term II, Last Day to Add/Drop Courses – Eight Week Classes at Fort Lee
Monday	19	Curriculum Sheet Update/Schedule Planning/Course Scheduling
Monday	19	Registration Begins Spring Semester, 2010
Friday	23	Last Day to Withdraw from On-Campus Classes (Grade of Will be recorded)
NOVEMBER		
Friday	13	Last Day to Withdraw from Term II, Eight Week Classes at For Lee (Grade of W will be recorded)
Friday	13	Registration Ends for Spring Semester, 2010
Wednesday	25	No Classes
Thursday-Sunday	26-29	THANKSGIVING HOLIDAYS (University Closed)
DECEMBER		
Friday	4	University Classes End
Monday	7	University Reading Day
Tuesday	8	Final Examination Begin
Wednesday	9	Term II, Off-Campus Eight Week Classes End
Friday	11	Final Examination End
Tuesday	15	Senior Grades are due in the System – (9:00 A.M.)
Wednesday	16	Semester Grades are due in the System by Faculty – (5:00 P.M.)
Friday	18	Commencement Activities
Saturday	19	WINTER COMMENCEMENT – 10:00 A.M.
SPRING SEMESTER, 2010		
JANUARY		
Sunday	10	Residence Halls Open at 8:00 A.M. for New Students
Monday	11	University Conference and Faculty Planning Workshops
Tuesday	12	Residence Halls Open at 8:00 A.M. for Continuing Students
Tuesday	12	Faculty Planning Day
Wednesday-Friday	13-15	Undergraduate School/Graduate School/Continuing Education Registration
Monday	18	MARTIN LUTHER KING, JR. HOLIDAY (University Closed)
Tuesday	19	University Classes Begin
Tuesday	19	Term I, Off-Campus Eight Week Classes Begin
Tuesday	19	Late Validation Begins (Late fee in effect)
Friday	22	Last Day to Add/Drop a Course (All Classes)
Monday	25	Late Validation Ends
FEBRUARY		
Wednesday	10	ASSESSMENT DAY
Friday	26	Last Day to file and Application for Spring Commencement (Application must be filed in the Office of the Registrar)

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

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
Interim President
1982-1983

Wilbert Greenfield, Ph.D
1983-1988

Wesley Cornelious McClure, Ed.D.
1988-1992

Nathaniel Pollard, Jr. Ph.D
1992-1993

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

BOARD OF VISITORS

Dr. Earnest J. Edwards, Rector	Keswick, Virginia
Dr. Albert W. Thweatt, Vice Rector	Disputanta, Virginia
Ms. Katherine E. Busser.....	Richmond, Virginia
Dr. Jerry B. Bias	Charlottesville, Virginia
Brigadier General (RET) Alfred J. Cade.....	Fredricksburg, Virginia
Mrs. Erika T. Davis.....	Glen Allen, Virginia
Mr. Felix Davis, Jr.	Chesterfield, Virginia
Dr. Mary H. Futrell	Alexandria, Virginia
Mr. Christopher H. Holden.....	Crozet, Virginia
Mr. Richard L. Legon.....	Fairfax, Virginia
Mrs. Maureen D. Massey	Glen Allen, Virginia
Mr. E. Ray Murphy	Keswick, Virginia
Mrs. Daphne Maxwell Reid.....	Petersburg, Virginia
Mr. James H. Starkey.....	Richmond, Virginia
Mr. Spencer L. Timm.....	West Chesterfield, Massachusetts
Dr. Deborah Goldwyn	Petersburg, Virginia
Miss Cora B. Brodie	Petersburg, Virginia

**Alumnus of the Virginia State University*

ADMINISTRATION

Eddie N. Moore, Jr.
President

W. Weldon Hill
Vice President for Academic Affairs

David J. Meadows
Vice President for Administration and Finance

Robert L. Turner
Vice President for Development

Michael M. Shackelford
Vice President for Student Affairs

DIRECTORY

Name	Position	Address	Phone Number
Eddie N. Moore, Jr.	President	P.O. Box 9001	524-5000
W. Weldon Hill	Vice President for Academic and Student Affairs	P.O. Box 9404	524-5997
David J. Meadows	Vice President for Administration/Finance	P.O. Box 9213	524-5995
Robert Turner	Vice President for Development	P.O. Box 9027	524-6751
Alma C. Hobbs	Dean, School of Agriculture	P.O. Box 9081	524-5961
David Bejou	Dean, School of Business	P.O. Box 9398	524-5166
Pamela Leigh-Mack	Dean, School of Engineering, Science and Technology	P.O. Box 9392	524-8989 Ext. 1141
Andrew J. Kanu	Interim Dean, School of Liberal Arts and Education	P.O. Box 9401	524-5930
Elsie Weatherington	Dean, University Library	P.O. Box 9406	524-5040
Michael Shackleford	Vice President for Student Affairs and Enrollment Management	P.O. Box 9054	524-5350
Irene Logan	Director of Admissions	P.O. Box 9018	524-5055
Henry Debose	Director, Financial Aid	P.O. Box 9031	524-5992
Dennis Jones	Budget Director	P.O. Box 9052	524-5247
Cortez Dial	Chief of Staff	P.O. Box 9073	524-5070
Peggy Davis	Director, Athletics	P.O. Box 9058	524-5650
Mark Phillips	Director, Band	P.O. Box 9007	524-5311
Rebecca Branch-Griffin	Director, Student Health Services	P.O. Box 9082	524-5674
Valery Bates-Brown	Assistant Vice President for Academic Support Services	P.O. Box 9034	524-6755
Gladys Nunnally	Director, Honors Program	P.O. Box 9207	524-6709
Johnnella Edmonds	Director, Chorus	P.O. Box 9007	524-5342

THE UNIVERSITY

HISTORY

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.

THE MISSION

MISSION STATEMENT

Virginia State University, America's first fully state supported four-year institution of higher learning for Blacks, is a comprehensive university and one of two land-grant institutions in the Commonwealth of Virginia. Its mission is to promote and sustain academic programs that integrate instruction, research, and extension/public service in a design most responsive to the needs and endeavors of individuals and groups within its scope of influence. Ultimately, the University is dedicated to the promotion of knowledgeable, perceptive, and humane citizens-secure in their self-awareness, equipped for personal fulfillment, sensitive to the needs and aspirations of others, and committed to assuming productive roles in a challenging and ever-changing global society.

PRINCIPLES

1. Regardful of its heritage and its tradition of eminent concern for the education, welfare and progress of all peoples, the University welcomes and extends its resources to all who strive for academic excellence, whatever their nationality, race, ethnicity or religious affiliation.
2. The University seeks to fulfill its mission by enrolling students with a diverse range of talents and abilities, including: (a) students whose pre-college records reveal high academic achievement and talent, (b) students who through a combination of factors have demonstrated the potential to be successful in college, and (c) students whose secondary school records reveal potential but who need special academic enhancement.
3. The University, using available resources, offers programs which are of interest to the students, meet current and changing needs of society, and fall within the scope of its mission.
4. The living/learning community of the University seeks to cultivate a sense of pride and dignity within each individual and promote an enduring search for knowledge among all students, staff, and faculty.
5. Those who matriculate are required to demonstrate a broad understanding of and competency in the arts and sciences and a commitment to intellectual development and scholarship in their fields of study.
6. Graduates of Virginia State University are prepared to enter the work force of the twenty-first century, pursue advanced study, assume leadership roles, and be competitive in a global society.
7. The University assures its constituencies of collegial participation in decision making.

ACCREDITATIONS AND AFFILIATIONS

Virginia State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award bachelor's and master's degrees and a certificate of advanced graduate study, and a doctorate degree.

The Teacher Education Program is fully accredited by the National Council for Accreditation of Teacher education and the Virginia Board of Education. It is a member of the American Association of Colleges for Teacher Education as well as the American Council on Education. The Music Program is accredited by the National Association of Schools of Music, and the Visual Communication Art and Design Program is accredited by the National Association of School of Art and Design. The Dietetic Program is accredited by the Commission on Accreditation for Dietetics Education of the American Dietetic Association. The Engineering Technology Program (electronics, mechanical) are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC of ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone (410) 347-7700.

Major affiliation 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 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
 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 Professional
 National Collegiate Athletic Association
 National Commission for Cooperative Education
 National Collegiate Honors Council
 National Commission of Accrediting
 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

Southern Regional Honors Council
Society of Manufacturing Engineers
Southern Education Foundation
Southeastern Universities Research Association, Inc.
Southern Universities Research Association
Southern Regional Educational Board
The Central Intercollegiate Athletic Association
The College Board
The Institute of Electrical and Electronics Engineers
Virginia Collegiate Honors Council
Technology Education Collegiate Association
Technology Student Association
The Society of Automotive Engineers
The University Center in Virginia
Virginia Association of College Registrars and Admissions Officers
Virginia Social Science Association
Virginia Technology Education Association
The Association for General and Liberal Studies
The Association to Advance Collegiate Schools of Business

POLICY STATEMENTS

ALCOHOL AND DRUG POLICY

THE UNIVERSITY

Philosophy

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.

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 "Amotivational 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

THE UNIVERSITY

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 Affairs 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.

SEXUAL HARRASSMENT POLICY

THE UNIVERSITY

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:

- A. 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;
- B. submission to, or rejection of, such conduct by an individual's employment, academic standing or other benefits, or;
- C. 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) sexually 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* 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 UNIVERSITY

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 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:

- A. 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;
- B. 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;
- C. 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 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; (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 member's, or faculty member or supervisor can have a decisive influence on a student's, staff member's, 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 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 whom 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 filed 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.

A. 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 which may be necessary.

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.

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.

Supervising management staff members are responsible for informing their employees and students of this policy.

B. 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.

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 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.

**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 UNIVERSITY

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

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, half-time, etc.)
- class
- 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.

THE UNIVERSITY TRANSFER POLICY

Transfer Students. Applicants who have attended an accredited college or university are considered for admission for all sessions. Applicants must have a cumulative 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 other two-year state institution, 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 (students with associates' degrees from other states will be considered on an individual basis) is guaranteed a minimum of 60 credit hours of transfer credit. The student will be given complete credit for all General Education requirements, with the residual hours coming from major, minor or elective course requirements. Course equivalency will be determined by the University Registrar in consultation with the departments.

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 decorum in the classroom or laboratory. The penalty for continued inappropriate conduct could include 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. All students entering their freshman year, as part of their freshman studies course, will be provided the Academic Code. Each student is then required to sign *The Student Pledge of Academic Integrity* and return the signed pledge to their freshman studies instructor before instruction begins. Transfer students,

graduate students and non-traditional students will sign the pledge as part of the advisement process. The pledge should also be disseminated as part of course syllabi. It is the student's responsibility to seek guidance from the instructor when there are questions or doubt pertaining to their academic integrity responsibilities. 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

"I, _____, have read and understand the Student Code of Conduct and Student Code of Ethics, collectively titled the Student Academic Code, and agree to abide by all provisions described therein."

Signature _____.

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 school or schools. 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 a 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 part of 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 indicating 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.

THE UNIVERSITY

ACADEMIC REGULATIONS AND PROCEDURES

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 and have satisfactory scores on the Scholastic Assessment Test (SAT) or American College Test (ACT) examination. Two letters of recommendation attesting to the students' character and scholastic potential, one of which must be from a high school teacher or guidance counselor and a respectable GPA and/or class rank are required. Students who were not graduated from a secondary school may be admitted on the basis of their GED test scores.

Admission Requirements

The admission requirements are as follows:

- Minimum 2.2 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 II)
- 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.
- Two (2) letters of recommendation, one of which must be from a guidance counselor, or high school teacher
- SAT or ACT score
- Personal statement

Under exceptional circumstances, a student who does not meet a component of the entrance requirement (e.g., a student's GPA is between 2.0 - 2.19), may be admitted on a "conditional" basis.

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.

International Students. 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. Applicants without previous college or university credit must submit SAT scores of the College Entrance Examination Board, Box 592, Princeton, NJ 08540, USA.

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). Official test scores must be sent directly from the Educational Testing Service. Registration forms and information concerning the time and place of the TOEFL may be obtained by writing to TOEFL, Educational Testing Service, CN 6151, Princeton, NJ 08546151, USA. An international student must provide documentation verifying resources to meet financial needs for the designated period of study at Virginia State University.

The Academic Support Center's Advisement services will assist students in making the transition from their native land. After students have met the requirements and have been admitted to VSU, the foreign student advisor will issue the 1-20 form and will provide information relative to housing and enrollment.

International Baccalaureate. Virginia State University recognizes the International Baccalaureate (IB) diploma or individual International Baccalaureate courses. Advanced standing and credit for corresponding courses may be granted if the student scores 3-7 on the Higher Level examination and 4-7 on the Standard Level examinations.

Non-Traditional Studies. Adult students may be admitted to non-traditional programs in the School of Graduate Studies, Research and Outreach which include the Bachelor of Individualized Studies (BIS) degree. Program requirements for earning college credit can be met by the following means: by examination, work and life experiences, a variety of courses through instructional television and other media, and international educational experiences.

Readmission. 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.

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 School 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 Department in which the student is enrolled. Students who have not declared a major will be advised through the Academic Support Center. Non-traditional students will be advised through the office of Outreach.

Academic Honors

Honors List. Undergraduate students earning twelve or more semester hours with a grade-point average of at least 3.0 shall be named to the Honors List.

Honors with Distinction List. Undergraduate students earning twelve or more semester hours with a grade-point average of 4.0 shall be named to the Honor's List with Distinction.

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
------------------	----------------

Top Ranking Graduates. Recognition will be given to the two students with the highest cumulative grade point average in each of the following categories:

1. the student who entered Virginia State University as a first-time freshman, and who has completed at least 95 percent of his/her overall credits at Virginia State University, or
2. the student who entered Virginia State University as a transfer student, and who has completed at least 51 percent of the credits required in his/her degree programs at Virginia State University.

Academic Sanctions

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

Transfer students with the Associate Degree must maintain a 2.0 semester average each regular semester (to avoid Academic Warning) or have a cumulative average of 2.0 (to avoid Probation or Suspension) to remain in good academic standing.

2. *Academic warning* will occur when a student’s semester average falls below the required minimum.
3. *Probation* occurs when a student’s semester and cumulative average falls below the required minimum for two semesters.
4. *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. 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. Under exceptional circumstances (such as serious and documented health or financial difficulties), a student may appeal his/her suspension to the department chair and school dean who may then, in turn, recommend readmission to the Academic Credits Committee. 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/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 “probation.”)

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

<i>Completed Semesters</i>	<i>Semester GPA</i>		<i>Cumulative GPA</i>
1	1.5		N/a
2	1.5		N/a
3+	2.0	OR	2.0

Advanced Placement. Virginia State University participates in the College Board Advanced Placement Program. Entering Freshmen will be awarded credit for Advanced Placement (AP) Examination scores of 3, 4, or 5. Accepted students should have AP score reports sent to the Office of Admission in the summer following the senior year of high school.

Attendance. (See Classroom Attendance)

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 is defined to 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.

Advanced Scholars Program. This program is designed for academically qualified high school seniors, within the University service area who would like to earn college credits while still in high school. To be admitted into the program, a student must have completed the junior year of high school and have a cumulative average of at least a "B" (3.0) and have submitted an admissions application, high school transcript, and a letter of recommendation from a high school counselor. A student may enroll in courses at Virginia State during the summer between the junior and senior years and/or during the senior year. A maximum of six semester hours may be pursued each session.

Baccalaureate Degree. To receive a Bachelor's degree from Virginia State University, a student must do the following:

1. Have a minimum of 120 semester hours of credit.

2. Have a cumulative grade point average of 2.00 or better.
3. Complete the General Education (Core) requirements.
4. Meet all of the major requirements of the curriculum leading to the degree for which he/she is a candidate.
5. Have spent his/her last year (**last 27 semester hours**) in resident study for the degree at Virginia State University.

A student who already possesses a baccalaureate degree and seeks to earn a **second baccalaureate degree** must submit an application for admission to the desired program. The student's transcript will be evaluated by the chairperson to determine advanced standing. The student must complete all courses prescribed by the second **degree program**. General education courses already taken need not be repeated. All academic regulations shall be in full force including residency (**see Last 27 Credits**).

Cancellation of Enrollment. [See Withdrawal from the University]

Certificate Program. A prescribed set or sequence of courses that results in a student receiving a certificate issued by the University when the identified courses and experiences are completed satisfactorily and when all other conditions have been met in accordance with the definitions and policies of the specific program.

Change of Major. Forms for change of major, available in the Registrar's Office and on the VSU website, must be completed and returned to the Registrar's Office after approval of the chairperson of the new major.

Classification of Students. Full-time and part-time students are classified by credit hours earned as follows:

Freshman	1-29	credit hours
Sophomore	30-59	credit hours
Junior	60-89	credit hours
Senior	90 or more	credit hours

A **full-time** student is one pursuing a minimum of 12 semester hours during a semester. A part-time student is one pursuing fewer than 12 hours during a semester.

Classroom Attendance.

Classroom attendance is expected of all students. The instructor may reduce grades for students who exceed four hours of absences for a four-semester-hour course, three hours of absences for a three semester-hour course, two hours of absences for a two-hour course, and/or one hour for a one-hour course. Faculty members must include on the course syllabus any attendance policy that will affect grades, including tardiness and early departures.

Commencement. (See Graduation Procedures)

Concentration. A prescribed set of courses associated with a major that is designed to focus a student's course of study according to interest and/or career goals. A concentration is not a required component of all majors and/or minors. The student must formally declare the concentration for it to appear on the transcript of record. The concentration will be noted on the transcript only after the student graduates.

Concurrent Enrollment. A matriculating student at Virginia State University who desires to take courses at another institution for transfer credit must obtain the prior approval of the department chairperson and school dean. Concurrent Registration forms may be obtained from the Registrar's Office or on the VSU website. Credits generated from courses in which the student earns a grade of C or better must be submitted, by official transcript only, to the University Registrar.

Continuing Education Student. A continuing education student is one allowed to enroll in classes under the auspices of Continuing Education and is not pursuing a degree. Upon earning thirty hours, the Continuing Education student must declare the intention to continue in that status indefinitely or make formal application to a degree program. Such a student is subject to lose some or all of his thirty or more hours as applicable units toward a degree at the discretion of the Department Chairperson if not admitted to a degree program at this point. [A Continuing Education student may not enroll for more than 11 semester hours per semester.]

Course Load.

During a **regular semester** of the academic year, a full-time course load for undergraduates is generally 15 semester hours. However, the maximum course load is 18 semester hours which includes all academic credits. Exceptions (overloads) must be approved by the Department Chairperson, and the Dean.

During a **summer session of four and a half weeks**, the maximum course load is six semester hours.

Course Numbering System. All course numbers consist of three digits (XXX). The first digit relates to the course level as follows: (a) 1xx--freshman, (b) 2xx--sophomore, (c) 3xx--junior, (d) 4xx--senior.

Course Waivers and Substitutions. The decision to waive a course shall be made by the chairperson of the Department and approved by the Dean of the School in which the student is enrolled.

The decision to substitute a course shall be made by the chairperson of the department in which the student is enrolled, and approved by the dean of that school and the deans of the school(s) in which the courses in question are offered.

Waivers and substitutions policy will not be applicable to courses in which the student has received a failing grade. If the student is dissatisfied with a decision, he may appeal to the Academic Credits Committee.

Credit by Examination. (Also see Proficiency Examinations) Credit by CLEP (College Level Examination Program) must be submitted upon admission to Virginia State University. Letter grades will not be recorded for credit received by CLEP. The number of credit hours a student may receive by CLEP examination will not exceed twelve semester hours. The same requirements established by the American Council on Education (ACE) will be used for awarding credit.

Credit by examination may be available in areas not covered by CLEP and is coordinated by the individual department. In those instances, no more than twelve hours may be awarded. The request should be initiated within the department during the first eight weeks of the semester. The student may not petition credit by examination for courses in which he or she has been enrolled. Students will receive credit for grades of A, B, and C, earned on the examination. The grade will be recorded on the student's permanent record. The cost for the departmentally-administered examination will be one-half of the regular fee per semester hour.

Degree. (Also see Associate and Baccalaureate Degrees) Symbols and classifications of undergraduate degrees conferred by VSU are:

AS	Associate of Science Degree in Nursing
BA	Bachelor of Arts
BS	Bachelor of Science
BFA	Bachelor of Fine Arts
BM	Bachelor of Music
BIS	Bachelor of Individualized Studies

Enrollment/Withdrawal. (See Registration)

Examinations. Mid-term examinations are optional but recommended to ensure an informed midterm report on student progress. Final examinations are required and should be taken as scheduled. Students enrolled in teacher education programs are required to take Praxis I and II and other relevant professional exams at the appropriate time.

Financial Aid. Information about financial aid is available from the Office of Financial Aid (see Directory).

Foreign Language Requirement. In programs where a foreign language is required, modifications are made based on high school foreign language credits. For placement purposes, a year of high school credit is equivalent to one semester of university credit in the same language. For specific requirements see the curriculum sheet for the appropriate department.

Grades. The approved grade symbols and grade symbol definitions are as follows:

Grade	Definition	Quality Points
A	Excellent	4
B	Good	3

C	Average	2
D	Below Average	1
F	Failure	0

The following grades are also used and have no quality point value, thereby being neutral in grade point average determination.

I	Incomplete grade—a student, otherwise passing, has for good reason failed to complete course requirements; must be removed within one year or be turned to an F (undergraduate only)
P	Satisfactory completion—at graduate level, successful completion of Research and Thesis
S	Satisfactory completion of certain experiences at the undergraduate level. At the graduate level, it indicates satisfactory progress in Research and Thesis.
U	Unsatisfactory performance—student has not earned credit hours for which she/he has enrolled
W	Withdrawn
R	No credit given—administrative indication; awarded to Special Services students
AU/Z	Course Audit
N	Non-attendance
O	Omitted Grade—administrative indication

Grade-point Average (GPA). The GPA is determined by dividing total quality points (QPTS) earned by total quality hours (QHRS) attempted for grades of A, B, C, D and F. The highest grade in courses which have been repeated is used.

Grade Review Procedure. 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 school 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.

Grade Reports. Midterm and final grade reports are viewed by the student via the Web for Student Module, which is accessed on the Virginia State University website.

Graduation Procedures. For graduation, a student should:

1. File an Application for Graduation by the deadline published in the official Academic Year Calendar.
2. Pay the appropriate Graduation Fee at the same time the application is filed.
3. Complete degree requirements, which include the removal of E or I grades; the earning of an overall grade point average of 2.0, and the appropriate grade point average in major course-work. Degree requirements must be completed by such time to be certified by the University before the anticipated degree is approved for conferral.
4. Satisfy all outstanding financial obligations to the University by the specified date.
5. Attend the ceremony. The Registrar should be notified if one is unable to attend, and the degree will be mailed to the recipient.

General Education Requirements. (See General Education Program)

Honors. (See Academic Honors)

Honors Program. (See Special Academic Programs)

Immunizations. Virginia State University requires physical examinations for all first-time enrollees (freshmen, transfer and graduate students) to provide a health history and immunization record to the Student Health Service prior to registration for classes. Any student who cannot produce an up-to-date immunization record must be re-immunized at his/her expense. Registration cannot be completed until an up-to-date immunization record is provided.

Laboratory Enrollment. Concurrent enrollment in lecture and laboratory science courses is required for first-time enrollees.

Last 27 Credits. A candidate for the bachelor's degree must spend the last year in resident study for the degree at Virginia State University. A year's residence is interpreted to mean the accumulation of a minimum of twenty-seven hours of upper-level courses in (1) two regular semesters, or (2) three regular summer sessions, or (3) one academic semester and one summer of nine weeks. Subject to the discretion of the chairman of department, the student may be required to take in residence a maximum of fifty percent of the credit hours required in his major sequence. This may in no case be less than twenty-five percent.

Transfer students must spend a year in residence before graduation. A transfer student from a junior or community college must complete a minimum of 60 semester hours at Virginia State University to qualify for candidacy for a degree.

Late Registration. (See Registration)

Major. A coherent set of required and elective courses approved by the Board of Visitors and meeting state criteria that, when completed by a student, signifies a degree of preparation in a field or fields of study. The credit hour requirements for the major are set by the respective colleges and academic units and may not consist of less than 30 hours. A student must formally declare a major.

Minor. A cohesive set of required and elective courses that, when completed by a student, connotes knowledge and skills in a discipline, region or topic area, but not at the depth of a major. The minor is designed for students who are not majoring in the same area and requires minimum credit hours as set by the respective academic department or school. A student must formally declare the minor for it to appear on the transcript of record. A minor is not required for graduation. A minor must have at least 15 semester hours as set by the department. Minor request forms are available in the Registrar's Office. Minor request forms are available in the Registrar's Office. Approved minor areas and minimum hours of study required are: Accounting (18), Africana Studies (18), Art and Commercial Art and Design (18), Art History (18), Computer Information Systems (18), Computer Science (18), Dance (18), English (18), Finance (18), French (18), German (18), Hospitality Management (19), Mechanical Engineering Technology (18), Management (18), Marketing (18), Mass Communications (18), Mathematics (18), Military Science (15), Music (18), Philosophy (18), Political Science (18), Spanish (18), Studio Art (18), and Writing (18). See academic programs for requirements of Elementary Education, Special Education, and Secondary Education.

Off-Campus Courses. (See Special Academic Programs)

Placement in Freshman Mathematics. The department of Mathematics and Computer Science administers a mathematics placement test to all incoming freshmen and transfer students. Placement in the appropriate beginning mathematics course is based upon the results of the mathematics placement test along with individual student data from the Office of Admissions and the student's intended major.

Probation. (See Academic Sanctions)

Proficiency Examinations. The purpose of proficiency examinations is to allow students to receive academic credit by examination in those subjects in which competence can be demonstrated by examination in lieu of formal course work.

1. Proficiency examinations are coordinated by the individual departments.
2. The student will inform the department chairperson that he intends to take a proficiency examination in a given course in order to satisfy the requirements of the course. Proficiency examination forms are secured in the Office of the student's major department. The student will then seek counsel of the chairperson of the department in which the examination will be administered. The student will then be assigned to a specific instructor who will schedule the examination. A student must register for a proficiency examination by the eighth week of the semester in which he/she plans to take the examination.
3. Students will receive credit for grades of A, B, and C earned on proficiency examinations. The grade will be recorded on the student's permanent record.

4. A maximum of twelve (12) semester hours may be earned through proficiency examinations.
5. The cost will be one-half of the regular fee per semester hour for proficiency examinations.
6. A committee in each department will be responsible for structuring and evaluating proficiency examinations. The examination should be so structured as to measure accurately the master of specific course content.
7. Instructors responsible for the administration of proficiency examinations should recommend or make available materials needed for preparation by the student.
8. No student may take a proficiency examination in the same course more than once.
9. Any student currently enrolled may request a proficiency examination.
10. Credit by proficiency examination shall not be granted for any course for which a student has been previously enrolled.

Registration. Registration and schedule adjustment are conducted in accordance with the schedule and procedure set forth in the Registration and Scheduling Bulletin issued each semester. Students are required to follow these procedures and guidelines to be assured of proper registration. Students are to register for sequence and number of credit hours required within the curriculum for each semester. The number of semester hours for students on academic sanction will be fifteen (15) hours and for students with honor roll status the number of semester hours may be increased by three (3) hours.

- A. **Early Registration.** Currently enrolled students are required to register for the upcoming semester.
- B. **Registration and Validation Period.** During this time, new students and those who completed early registration make course adjustments, if necessary, pay fees, and become validated. A student who is validated has made all payments owed to the university or has made arrangements for payment.

Suspension. (See Academic Sanctions)

Transcripts. Upon written request, a transcript of a student's record will be issued within five business days.

Transfer Credits. Credit hours accepted and displayed on the student's transcript will be for those courses in which the student has earned the grade A, B, C, P, or S; except for students with associate degrees (college prep track), where credit hours will be accepted and displayed for all grades (A, B, C, D, P, and S). However, certain courses in some major programs may require a grade of C or better. When a student who pursues one of these majors transfers D grade course credit that is equated to a Virginia State course requiring a grade of C or better, the student will have to repeat the course to satisfy the major program requirements. See University Transfer Guide for more information on transfer credit.

Tuition and Fees. (See Student Guide for tuition, fees, and other financial information.)

In-State Tuition Eligibility. (See Financial)

Withdrawal from the University. Withdrawal from the University is initiated in the Academic Support Center. Students who withdraw officially will receive a grade of W in the courses in which they were enrolled.

Undergraduate Scholarships. The following scholarships are awarded to students on the basis of academic merit. These scholarships are based primarily on an applicant's academic performance, SAT/ACT scores, record of leadership and service, and supporting recommendations.

Presidential Scholarship - A \$7,000 award to entering freshmen who have completed a college preparatory course-of-study with a grade-point-average (GPA) of *3.2 or higher* and *composite SAT 1100/ACT 24 or higher*. This award includes \$5,000 applicable to the *cost of tuition and fees and a waiver valued at \$2,000 applicable to room and board costs*. *This scholarship is renewable up to three additional years if the recipient maintains a cumulative grade-point-average of 3.0, participates in the University's Honors Program, and maintains residence on campus.*

Provost Scholarship – A \$3,500 award to entering freshman who have completed a college preparatory course-of-study with a grade-point-average (GPA) of *3.0 or higher and composite SAT 1000/ACT 21 or higher* or *transfer students* who have completed *a minimum of twenty-four college-level courses with a cumulative grade-point average (GPA) of 3.0 or higher.*

This scholarship includes *\$1,500* applicable to *tuition costs and waiver valued at \$2,000* applicable to the *costs of room and board*. *This scholarship is renewable up to three additional years if the recipient maintains a grade-point-average of 3.0 and maintain residence on the campus.*

J. Binford Walford Scholarship – *A \$2,000 award to entering freshmen in Drafting and Design Technology* with a minimum cumulative high school grade point average (GPA) of 3.00 or higher and composite SAT/ACT scores of 900/19 or higher. Transfer students with a cumulative GPA of 3.20 or higher are also eligible. This scholarship is renewable if the recipient maintains a GPA of 3.20 or higher. A limited number of scholarships are presented annually to sophomores, juniors, and seniors, based on availability of funds.

Math, Science, and Technology Scholarship - *A \$1,500 award to entering freshmen or transfer students whose records reflect above-average ability in mathematics, science, or technology and a minimum cumulative grade-point-average of 3.0.* A personal statement which describes goals, plans, and ambitions must be included with the application. This scholarship is renewable if the recipient maintains a grade-point-average of 3.0 in a mathematics, science, or technology major; satisfactory progress in other academic courses; and residence on the campus. Students must be recommended by a secondary teacher or counselor and the Virginia State University Department Chairperson to be considered for this scholarship.

University Scholarship - *A scholarship ranging from \$500 - \$2,000* which is awarded to a *continuing student* who has achieved a cumulative grade-point-average of *3.0 or higher* during his or her university course of study. This is a highly competitive award. A limited number is presented annually based on available funds. If the recipient wishes to be considered for subsequent awards, a new application must be submitted each academic year.

A number of additional scholarships are available to Virginia State University scholars. These scholarships are funded through external sources, including USDA Scholarship Program, Thurgood Marshall Scholarship Program, Central Fidelity Bank Scholarship Program, ROTC Scholarship Program, and others. Applicants must meet criteria established by the specific funding source.

GENERAL EDUCATION PROGRAM

THE VIRGINIA STATE UNIVERSITY GENERAL EDUCATION PROGRAM

INTRODUCTION

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.

A key component of the General Education Program is the Freshman Studies course which is required of all first-year students (including transfer students with fewer than 30 semester hours). The Freshman Studies course is designed not only to orient students to the University's history, legacy, and operational procedures but also to develop students' research and information literacy skills and critical thinking.

LEARNING OUTCOMES

Based upon the University *Mission and Principles*, the following learning outcomes comprise the foundation for the General Education Program courses:

1. Students will demonstrate an understanding of, and appreciation for, the needs and aspirations of self and others in the contexts of citizenship and socio-psychological integrity.
2. Students will demonstrate an understanding and appreciation of global cultural literacy within a trans-cultural context and, preferably, a second language.
3. Student will demonstrate a commitment to high academic standards and scholarly dispositions:
 - Demonstrate information literacy skills, utilizing current, effective strategies (including technology) for discovering knowledge in their respective disciplines;
 - Demonstrate an understanding of the need for continuing intellectual and personal growth;
 - Be cognizant of the importance of professional versatility;
 - Demonstrate analytical skills and the ability to engage in collaborative and individual decision making;
 - Demonstrate critical thinking, ethical reasoning, and analytical skills necessary to present and explain cogent, compelling, intellectually based theses/arguments;
 - Demonstrate knowledge of the inter-relatedness of content across the general education curriculum and their chosen major.
4. Students will demonstrate reading, writing, listening, and speaking proficiency in English.
5. Students will gain an understanding of holistic wellness and its maintenance.
6. Students will demonstrate proficiency in applying mathematical concepts.
7. Students will demonstrate an understanding of theoretical perspectives and concepts in social science.
8. Students will demonstrate scientific literacy.
9. Students will demonstrate technological literacy.

**GENERAL EDUCATION PROGRAM PROVISIONS,
REQUIREMENTS, AND COURSES**

The General Education 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.

Provisions and Requirements

1. The minimum requirement for successful completion of the General Education program is 45 semester hours. Departments (majors) may require additional credit 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 the Freshman Studies course is a "C-." Students must successfully complete this course prior to attaining junior status.
4. The minimum grade required for successful completion of English 110 and 111 (Composition I and II) is "C-."
5. Departments (majors) may choose courses from the limited menus or allow students to choose.

General Education Courses

Composition – 6 credit hours

ENGL	110	3 credit hours	<i>Composition I</i>
ENGL	111	3 credit hours	<i>Composition II</i>

Freshman Studies – 2 credit hours:

FRST	101	2 credit hours	<i>Freshman Studies</i>
------	-----	----------------	-------------------------

Global Studies – 3 credit hours from the following menu (students should enroll in courses for which they have appropriate prerequisites and academic background)

ARTS	302	3 credit hours	<i>Survey of Non-Western Art</i>
ARTS	405	3 credit hours	<i>Survey of African Art</i>
ECON	451	3 credit hours	<i>International Economics</i>
ENGL	314	3 credit hours	<i>Readings in Multicultural Literature</i>
ENGL	315	3 credit hours	<i>African Literature</i>
ENGL	322	3 credit hours	<i>Post-Colonial Literature</i>
ENGL	411	3 credit hours	<i>Readings in African Literature and Culture</i>
ENGL	412	3 credit hours	<i>Caribbean Literature</i>
ENGL	326	3 credit hours	<i>Mythology (cross-listed as PHIL 326)</i>
FREN	110	3 credit hours	<i>Elementary French I</i>
FREN	111	3 credit hours	<i>Elementary French II</i>
FREN	212	3 credit hours	<i>Intermediate French I</i>
FREN	213	3 credit hours	<i>Intermediate French II</i>
GEHI	114	3 credit hours	<i>World History I</i>
GEHI	115	3 credit hours	<i>World History II</i>
GEOG	210	3 credit hours	<i>World Geography</i>
GERM	110	3 credit hours	<i>Elementary German I</i>
GERM	111	3 credit hours	<i>Elementary German II</i>
GERM	212	3 credit hours	<i>Intermediate German I</i>
GERM	213	3 credit hours	<i>Intermediate German II</i>
IDUP	270	3 credit hours	<i>Introduction to Africana Studies</i>
POLI	207	3 credit hours	<i>International Relations</i>
POLI	210	3 credit hours	<i>Comparative Government</i>
SPAN	110	3 credit hours	<i>Elementary Spanish I</i>
SPAN	111	3 credit hours	<i>Elementary Spanish II</i>
SPAN	212	3 credit hours	<i>Intermediate Spanish I</i>
SPAN	213	3 credit hours	<i>Intermediate Spanish II</i>

History – 3 credit hours from the following menu:

GEHI	114	3 credit hours	<i>World History I</i>
GEHI	115	3 credit hours	<i>World History II</i>
GEHI	122	3 credit hours	<i>US History I</i>
GEHI	123	3 credit hours	<i>US History II</i>
GEPO	150	3 credit hours	<i>United States Government</i>
HIST	111	3 credit hours	<i>Introduction to History</i>
HIST	112	3 credit hours	<i>Introduction to Black History</i>

Humanities – 6 credit hours from the following menu (students should enroll in courses for which they have appropriate prerequisites and academic background)

ARTS	101	3 credit hours	<i>Drawing (non-majors only)</i>
ARTS	199	3 credit hours	<i>Art Appreciation</i>
ARTS	205	3 credit hours	<i>Basic Art</i>
ARTS	301	3 credit hours	<i>Survey of Western Art</i>
ARTS	307	3 credit hours	<i>20th Century Art</i>
ARTS	311	3 credit hours	<i>Arts and Crafts (non-majors only)</i>
ARTS	403	3 credit hours	<i>Survey of African American Art</i>
DANC	378	3 credit hours	<i>History of Dance and the Black Experience</i>
ENGL	311	3 credit hours	<i>African-American Literature</i>
ENGL	312	3 credit hours	<i>Women's Literature</i>
ENGL	313	3 credit hours	<i>Classics of Western Literature</i>
ENGL	323	3 credit hours	<i>Environmental Literature</i>
ENGL	325	3 credit hours	<i>The Bible as Literature</i>
ENGL	331	3 credit hours	<i>History of Drama</i>
ENGL	341	3 credit hours	<i>Expository Writing</i>
ENGL	342	3 credit hours	<i>Technical Communication</i>
ENGL	327	3 credit hours	<i>Philosophy in Literature (cross-listed as PHIL 327)</i>
FREN	110	3 credit hours	<i>Elementary French I</i>
FREN	111	3 credit hours	<i>Elementary French II</i>
FREN	212	3 credit hours	<i>Intermediate French I</i>
FREN	213	3 credit hours	<i>Intermediate French II</i>
GEEN	310	3 credit hours	<i>Advanced Communication Skills</i>
GEHI	122	3 credit hours	<i>US History</i>
GEHI	123	3 credit hours	<i>US History</i>
GEMU	380	3 credit hours	<i>Music and Art (Number will change to 280)</i>
GEMU	480	3 credit hours	<i>Blacks in American Music</i>
GEPI	140	3 credit hours	<i>Introduction to Philosophy</i>
GERM	110	3 credit hours	<i>Elementary German I</i>
GERM	111	3 credit hours	<i>Elementary German II</i>
GERM	212	3 credit hours	<i>Intermediate German I</i>
GERM	213	3 credit hours	<i>Intermediate German II</i>
MCOM	239	3 credit hours	<i>Motion Picture Appreciation</i>
MUSI	199	3 credit hours	<i>Music Appreciation</i>
PHIL	180	3 credit hours	<i>Critical Thinking</i>
PHIL	220	3 credit hours	<i>Logic</i>
PHIL	275	3 credit hours	<i>Ethics</i>
PHIL	290	3 credit hours	<i>Business Ethics</i>
PHIL	450	3 credit hours	<i>Applied Ethics</i>
SPAN	110	3 credit hours	<i>Elementary Spanish I</i>
SPAN	111	3 credit hours	<i>Elementary Spanish II</i>
SPAN	212	3 credit hours	<i>Intermediate Spanish I</i>
SPAN	213	3 credit hours	<i>Intermediate Spanish II</i>
SPEE	214	3 credit hours	<i>Introduction to Public Speaking</i>

Literature – 3 credit hours from the following menu (ENGL 201 and ENGL 202 are designed for most students. ENGL 210, 211, 212, 213, 214, and 215 are intended for students with a strong background in literature)

ENGL	201	3 credit hours	<i>Introduction to Literature</i>
ENGL	202	3 credit hours	<i>Introduction to African American Literature</i>
ENGL	210	3 credit hours	<i>English Literature I</i>
ENGL	211	3 credit hours	<i>English Literature II</i>
ENGL	212	3 credit hours	<i>American Literature I</i>
ENGL	213	3 credit hours	<i>American Literature II</i>
ENGL	214	3 credit hours	<i>World Literature I</i>
ENGL	215	3 credit hours	<i>World Literature II</i>

Mathematics – 6 credit hours from the following menu (it is recommended that a student successfully complete the appropriate two-course sequence [six semester hours] of mathematics from the limited menu below to satisfy the approved curriculum in the student's major and concentration)

GEMA	112	3 credit hours	<i>Basic Mathematics I</i>
GEMA	113	3 credit hours	<i>Basic Mathematics II</i>
MATH	120	3 credit hours	<i>College Algebra & Trigonometry I</i>
MATH	121	3 credit hours	<i>College Algebra & Trigonometry II</i>
MATH	122	3 credit hours	<i>Finite Mathematics</i>
MATH	130	3 credit hours	<i>Numbers and Operations</i>
MATH	131	3 credit hours	<i>Algebra and Functions</i>
MATH	200	3 credit hours	<i>Calculus I</i>
MATH	201	3 credit hours	<i>Calculus II</i>
PHIL	220	3 credit hours	<i>Introduction to Logic (Contingent upon mathematics placement test score.)</i>
STAT	210	3 credit hours	<i>Statistics</i>

Science – 8 credit hours from the following menu (to meet the general education requirement in science a student must successfully complete two courses with associated labs [eight semester hours] from survey science courses with prefix GE; or, if required by their major or deemed otherwise appropriate, students may substitute the science disciplines' entry level courses listed with the prefix CHEM, PHYS and BIOL with associated labs)

BIOL	100	4 credit hours	<i>Principles of Biology I with Lab</i>
BIOL	101	4 credit hours	<i>Principles of Biology II with Lab</i>
BIOL	315	4 credit hours	<i>Human Anatomy with Lab</i>
CHEM	101	4 credit hours	<i>General Chemistry I with Lab</i>
CHEM	102	4 credit hours	<i>General Chemistry II with Lab</i>
CHEM	111	4 credit hours	<i>Chemistry I with lab (Chemistry majors only)</i>
CHEM	112	4 credit hours	<i>Chemistry II with lab (Chemistry majors only)</i>
AGRI	150	4 credit hours	<i>Introduction to Environment Science with Lab</i>
GEBI	116	4 credit hours	<i>Biological Science with Lab</i>
GEBI	117	4 credit hours	<i>Biological Science with Lab</i>
GECH	119	4 credit hours	<i>Chemistry and Society with Lab</i>
DIET	101	4 credit hours	<i>Nutrition-Contemporary Health Issues with Lab</i>
GEES	181	4 credit hours	<i>Earth Science with Lab</i>
GEPH	101	4 credit hours	<i>Physical Science with Lab</i>
PHYS	112	4 credit hours	<i>General Physics I with Lab</i>
PHYS	113	4 credit hours	<i>General Physics II with Lab</i>
PHYS	116	4 credit hours	<i>General College Physics with Lab</i>
PHYS	117	4 credit hours	<i>General College Physics with Lab</i>

Social Science – 3 credit hours from the following menu

CJUS	116	3 credit hours	<i>Introduction to Criminal Justice</i>
ECON	100	3 credit hours	<i>Basic Economics</i>
ECON	210	3 credit hours	<i>Principles of Microeconomics</i>
ECON	211	3 credit hours	<i>Principles of Macroeconomics</i>

FACS	201	3 credit hours	<i>Consumer Economics</i>
GEPO	150	3 credit hours	<i>United States Government</i>
GEPS	124	3 credit hours	<i>Introduction to Psychology</i>
POLI	202	3 credit hours	<i>Contemporary Political Thought</i>
PSYC	212	3 credit hours	<i>Human Growth and Development</i>
GESO	211	3 credit hours	<i>Introduction to the Social Sciences</i>
SOCI	101	3 credit hours	<i>Introduction to Sociology</i>
SOCI	102	3 credit hours	<i>Introduction to Anthropology</i>

Technology – 3 credit hours from the following menu (students should enroll in a course deemed appropriate by their department/major)

ASYM	130	3 credit hours	<i>Introduction to Microcomputers</i>
CISY	201	3 credit hours	<i>Microcomputer Concepts I</i>
CISY	155	3 credit hours	<i>Introduction to Information Systems</i>
CSCI	100	3 credit hours	<i>Programming Logic and Introduction to Computers</i>
CSCI	120	3 credit hours	<i>Introduction to Problem Solving Using Computers</i>
ENGR	203	3 credit hours	<i>Introduction to Programming</i>
AGRI	280	3 credit hours	<i>Principles of Geographic Information Systems</i>
IDST	200	3 credit hours	<i>Digital Media in Teacher Education</i>
INTC	201	3 credit hours	<i>Technology, Society, and Development</i>

Wellness and Health – 2 credit hours from the following menu (this requirement can be satisfied by completing one two-semester-hour course or two one-semester-hour courses):

HPER	170	2 credit hours	<i>Health and Wellness</i>
HPER	160	1 credit hour	<i>Team Sports I/Wellness</i>
HPER	161	1 credit hour	<i>Team Sports II/Wellness</i>
HPER	164	2 credit hours	<i>Personal Health (Physical Education majors only)</i>
HPER	165	1 credit hour	<i>Personal Fitness</i>
HPER	166	1 credit hour	<i>Beginning Swimming/Wellness</i>
HPER	168	1 credit hour	<i>Aerobics and Conditioning/Wellness</i>
HPER	169	1 credit hour	<i>Gymnastics/Wellness</i>
HPER	170	1 credit hour	<i>Lifetime Sports I/Wellness</i>
HPER	172	1 credit hour	<i>Lifetime Sports II/Wellness</i>
HPER	175	1 credit hour	<i>Dance as Art/Wellness</i>

GENERAL EDUCATION COURSE DESCRIPTIONS

Composition

ENGL 110 COMPOSITION I – 3 semester hours

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 semester hours

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.

Prerequisites(s): ENGL 110 Composition I

Freshman Studies

FRST 101 FRESHMAN STUDIES – 2 semester hours

Freshman studies is a key foundational general education course that provides students with the knowledge and skills they will need throughout their college career with emphasis on use of the library (information literacy), research skills, writing skills, critical thinking, and synthesis and analysis of information. The course will help to develop students' intellectual curiosity, capacity for life-long learning, and personal responsibility. Student will also become familiar with VSU's mission, principles, history, traditions, policies, and procedures.

Global Studies

ARTS 302 SURVEY OF NON-WESTERN ART – 3 semester hours **Sp**
A survey of Non-Western art objects. Emphasis is placed on the art of Africa, Asia, Oceania, and the Americas from a historical perspective.

ARTS 405 SURVEY OF AFRICAN ART – 3 semester hours **F**
A survey of the major forms of art and architecture produced by various cultures of Africa. The course will examine the art forms and their places within society for pre-historic and ancient civilization, 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.

ECON 451 INTERNATIONAL ECONOMICS – 3 semester hours **Sp**
International economics 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.

ENGL 314 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.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 315 AFRICAN LITERATURE – 3 semester hours
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 influence written African literature. Will include representative works from such writers as Achebe, Soyinka, WaThiongo, Head, Emecheta, Ba, Osundare, U’Tamsi, and Aidoo.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 322 POST-COLONIAL LITERATURE – 3 semester hours
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 former colonies integrate influences from their cultures and influences from European literary traditions in their work.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 411 READINGS IN AFRICAN LITERATURE AND CULTURES – 3 semester hours
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.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II; 3 hours of literature or permission of instructor

ENGL 412 CARIBBEAN LITERATURE – 3 semester hours
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.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II; 3 hours of literature or permission of instructor

ENGL 326/PHIL 326 – MYTHOLOGY – 3 semester hours
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 110 Composition I; ENGL 111 Composition II

FREN 110 ELEMENTARY FRENCH I – 3 semester hours **F, Sp**
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 semester hours **F, Sp**
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 111 Elementary French I or its equivalent.

FREN 212 INTERMEDIATE FRENCH I – 3 semester hours **F, Sp**
Inductive review of grammar, reading of moderately difficult prose, and extensive oral drill in basic structures.
Prerequisites: FREN 111 Elementary French II or its equivalent

FREN 213 INTERMEDIATE FRENCH II – 3 semester hours **F, Sp**

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.

GEHI 114 WORLD HISTORY TO 1500 – 3 semester hours **F, Sp**

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.

GEHI 115 WORLD HISTORY SINCE 1500 – 3 semester hours **F, Sp**

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.

GEOG 210 WORLD GEOGRAPHY – 3 semester hours **F, Sp, Su**

An introduction to the geographic principles underlying different types of climate and their influence on society in various physical and political regions.

GERM 110 ELEMENTARY GERMAN I – 3 semester hours **F**

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 semester hours **Sp**

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 semester hours **F**

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 semester hours **Sp**

Study of selected readings of more difficult nature from standard modern authors.

Prerequisite: GERM 212 Intermediate German I or its equivalent

IDUP 270 INTRODUCTION TO AFRICANA STUDIES – 3 semester hours

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, Afrocentricity, 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

POLI 207 – INTERNATIONAL RELATIONS – 3 semester hours **F**

A study of the political, social, and economic dynamics of the present international system.

POLI 210 – COMPARATIVE GOVERNMENT – 3 semester hours **Sp**

A comparative analysis of nation-states within the contemporary international system.

SPAN 110 ELEMENTARY SPANISH I – 3 semester hours **F, Sp**

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 semester hours **F, Sp**

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 I – 3 semester hours **F, Sp**

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 semester hours F, Sp
Careful study of representative modern prose; continued practice in pronunciation and conversation.
Prerequisite: SPAN 212 Intermediate Spanish or its equivalent

History

GEHI 114 WORLD HISTORY TO 1500 – 3 semester hours F, Sp
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.

GEHI 115 WORLD HISTORY SINCE 1500 – 3 semester hours F, Sp
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.

GEHI 122 UNITED STATES HISTORY TO 1865 – 3 semester hours F, Sp, Su
Introduces students to the social, political and economic history of the United States from Pre-Columbian America to the end of the Civil War.

GEHI 123 UNITED STATES HISTORY AFTER 1865 – 3 semester hours F, Sp, Su
Introduces students to the social, political and economic history of the United States from Reconstruction to Contemporary America.

GEPO 150 UNITED STATES GOVERNMENT – 3 semester hours F, Sp
An introductory course in the study of the American political system.

HIST 111 INTRODUCTION TO HISTORY – 3 semester hours F
An introductory course that 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.

HIST 112 INTRODUCTION TO BLACK HISTORY – 3 semester hours F, Sp
An introductory course that allows flexibility to both students and professors to explore a historical topic or theme related to the Black Experience in depth, different from a survey format. Mainly intended for history or related majors interested in the Black History Concentration, the course will emphasize a critical thinking approach to analysis of historical events, thus preparing students for higher courses in the Concentration, historical methodology and the history senior seminar.

Humanities

ARTS 101 DRAWING I – 3 semester hours F
Fundamentals of drawing expression introduced. Pencil, charcoal, conte, and wash media are explored. Course includes weekly critiques and discussions.

ARTS 102 DRAWING II – 3 semester hours Sp
Fundamentals of drawing expression introduced. Pencil, charcoal, conte, and wash media are explored. Course includes weekly critiques and discussions.

ARTS 199 ART APPRECIATION – 3 semester hours F, Sp
This course serves as a basic 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 as appropriate.

ARTS 205 BASIC ART – 3 semester hours
Course designed for the non-art majors; students are introduced to fundamentals of art theory and practice. Experiences are provided in color, design, lettering and varied art activities which are related to modern trends in art.

ARTS 301 SURVEY OF WESTERN ART – 3 semester hours F
A survey of social and political conditions as they influence the art objects of Western man. Art objects discussed span the period from prehistoric to contemporary expressions of today.

ARTS 307 20TH CENTURY ART – 3 semester hours

An examination of the historical styles and artists beginning with the 20th Century, 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 311 ARTS AND CRAFTS – 3 semester hours

Students introduced to functional and decorative handicrafts through a variety of media.

ARTS 403 SURVEY OF AFRICAN-AMERICAN ART – 3 semester hours

A survey of Art produced by African-Americans in the United States from the Colonial Period to present. This course will explore the social and political climates influencing the Art of African-Americans.

DANCE 378 HISTORY OF DANCE AND THE BLACK EXPERIENCE – 3 semester hours

A survey course of dance history in America and the contributions of African Americans to historical and current trends in dance.

ENGL 311 AFRICAN-AMERICAN LITERATURE – 3 semester hours

Survey of the African-American literary tradition from its earliest expressions to the present.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 312 WOMEN'S LITERATURE – 3 semester hours

Study of selected literary works by or about women, within the context of women's literary traditions as they have developed in various cultures and historical periods.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 313 CLASSICS OF WESTERN LITERATURE – 3 semester hours

Study of Greek and Latin literature in translation, with consideration of major classical works and their influences on English 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 Composition I; ENGL 111 Composition II

ENGL 323 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 Composition I; ENGL 111 Composition II

ENGL 325 BIBLE AS LITERATURE – 3 semester hours

Study of selections from the Old and New Testaments as literary texts. May include consideration of the influence of Biblical texts on other literary works and traditions.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 331 HISTORY OF DRAMA – 3 semester hours

Study of major developments of drama up to the 20th century. Close reading and discussion of representative plays from major playwrights and literary periods in terms of their historical and social contexts.

Prerequisites: ENGL 110 Composition I; ENGL Composition II

ENGL 341 EXPOSITORY WRITING – 3 semester hours

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.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 342 TECHNICAL COMMUNICATION – 3 semester hours

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, resumes, problem-solving, research, and proposals.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 327/PHIL 327 PHILOSOPHY IN LITERATURE – 3 semester hours

Study of basic philosophical problems in major works of literature.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II; GEPI 140 or other philosophy course, or permission of instructor(s).

FREN 110 ELEMENTARY FRENCH I – 3 semester hours**F, Sp**

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 semester hours**F, Sp**

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 111 Elementary French II or its equivalent

FREN 212 INTERMEDIATE FRENCH I – 3 semester hours**F, Sp**

Inductive review of grammar, reading of moderately difficult prose, and extensive oral drill in basic structures.

Prerequisites: FREN 111 Elementary French II or its equivalent

FREN 213 INTERMEDIATE FRENCH II – 3 semester hours**F, Sp**

Careful study and reading of representative modern prose with continued practice in pronunciation and conversation and some extensive reading.

Prerequisite: FREN 212 Intermediate French or its equivalent

GEEN 310 ADVANCED COMMUNICATION SKILLS – 3 semester hours**F, Sp**

Expository writing based upon thematically arranged reading selections. Rhetorical theory and practices.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

GEHI 122 UNITED STATES HISTORY TO 1865 – 3 semester hours**F, Sp, Su**

Introduces students to the social, political and economic history of the United States from Pre-Columbian America to the end of the Civil War.

GEHI 123 UNITED STATES HISTORY AFTER 1865 – 3 semester hours**F, Sp, Su**

Introduces students to the social, political and economic history of the United States from Reconstruction to Contemporary America.

GEMU 380 MUSIC AND ART – 3 semester hours**F, Sp, Su**

A course concerned with man, the aesthetic creator. It is intended to provide a broad exposure to the Fine Arts, provoke curiosity and develop interest in the Arts and in the realm of the Aesthetic. A guide for the student in search of personal freedom through a constructive use of his leisure by association with Arts, Music, Literature, Drama, Architecture, and Photography.

GEMU 480 BLACKS IN AMERICAN MUSIC – 3 semester hours

A humanities course concerned with the full range of Black contributions to music from African heritage to the present day. Course content will be presented through lectures, recordings, and class discussions.

GEPI 140 PHILOSOPHY – 3 semester hours**F, Sp, Su**

An introduction to methods of critical thinking, and to the major problem areas of philosophy such as epistemology, metaphysics and ethics.

GERM 110 ELEMENTARY GERMAN I – 3 semester hours**F**

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 semester hours**Sp**

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 semester hours**F**

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 semester hours **Sp**

Study of selected readings of more difficult nature from standard modern authors.

Prerequisite: GERM 212 Intermediate German I or its equivalent

MCOM 239 MOTION PICTURE APPRECIATION – 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 form from beginnings to present day. Weekly screening and discussion of important motion pictures not only as art but as they reflect and affect our times.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

MUSI 199 MUSIC APPRECIATION – 3 semester hours **F, Sp**

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.

PHIL 180 CRITICAL THINKING – 3 semester hours **F**

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 220 INTRODUCTION TO LOGIC – 3 semester hours **F, Sp**

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 semester hours **F, Sp**

An introductory study of the nature, analysis, and justification of moral judgments.

PHIL 450 APPLIED ETHICS – 3 semester hours **F, Sp**

An in-depth exploration of moral theory and discussion of its application to broad areas such as business, the environment, or bio-medical issues.

SPAN 110 ELEMENTARY SPANISH I – 3 semester hours **F, Sp**

Emphasis on the four skills of listening, speaking, reading, and writing in Spanish: Pronunciation, understanding or grammatical construction, basic readings, dictations, and daily oral practice; open to students receiving no admission credit in Spanish.

SPAN 111 ELEMENTARY SPANISH II – 3 semester hours **F, Sp**

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 I – 3 semester hours **F, Sp**

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 semester hours **F, Sp**

Careful study of representative modern prose; continued practice in pronunciation and conversation.

Prerequisite: SPAN 212 Intermediate Spanish or its equivalent

Literature

SPEE 214 INTRODUCTION TO PUBLIC SPEAKING – 3 semester hours **F, Sp**

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; ENGL 111 Composition II; Literature

ENGL 201 INTRODUCTION TO LITERATURE – 3 semester hours **F, Sp**

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.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

ENGL 202 INTRODUCTION TO AFRICAN AMERICAN LITERATURE – 3 semester hours **F, Sp**

A course in reading, thinking critically about, and discussing literature from a variety of genres, through the study of significant texts by African American authors. Writing intensive.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

- ENGL 210 ENGLISH LITERATURE I – 3 semester hours** **F**
Study of English literature and its background from Anglo-Saxon times through the age of Samuel Johnson.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II
- ENGL 211 ENGLISH LITERATURE II – 3 semester hours** **Sp**
Study of English literature and its background from the Romantic age to the twentieth century.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II
- ENGL 212 AMERICAN LITERATURE I – 3 semester hours** **F**
Survey of various topics, literary forms, and writers representative of achievements and trends from Colonial times to the Civil War.
- ENGL 213 AMERICAN LITERATURE II – 3 semester hours** **Sp**
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.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II
- ENGL 214 WORLD LITERATURE I – 3 semester hours** **F, Sp**
Survey in English of world literature from the Ancient World through the Renaissance, with attention to main ideas and genres.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II
- ENGL 215 WORLD LITERATURE II – 3 semester hours** **Sp**
Survey in English of world literature from the seventeenth century to the present, with attention to main ideas and genres.
Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

Mathematics

- GEMA 112 BASIC MATHEMATICS - 3 semester hours** **F, Sp, Su**
A course for students who plan to pursue a major in the humanities and social sciences. Problem solving, irrational numbers, real numbers, polynomials, equations, inequalities, ratios, proportions, geometry, graphs of linear and quadratic functions. This course cannot be used as an elective for mathematics majors.
Prerequisite: Two units of high school mathematics and placement criteria
- GEMA 113 BASIC MATHEMATICS - 3 semester hours** **F, Sp, Su**
The second part of a basic mathematics sequence. Set, deductive reasoning, computer literacy, probability, statistics, mathematics of finance.
Prerequisite: GEMA 112 Basic Mathematics
- MATH 120 COLLEGE ALGEBRA AND TRIGONOMETRY I - 3 semester hours** **F, Sp, Su**
A pre-calculus course in algebra. Graphs, functions and their graphs, equations and inequalities, polynomial and rational functions, systems of equations and inequalities, and matrices.
- MATH 121 COLLEGE ALGEBRA AND TRIGONOMETRY II - 3 semester hours** **F, Sp, Su**
Exponential and logarithmic functions, trigonometric functions, analytic trigonometry, and applications of trigonometry.
Prerequisite: MATH 120 College Algebra and Trigonometry I
- MATH 122 FINITE MATHEMATICS - 3 semester hours** **F, Sp, Su**
Solving systems of Linear Equations and Inequalities, Introduction to Matrices and Linear Programming, Mathematics of Finance, Sets, Counting and Probability.
Prerequisite: MATH 120 College Algebra and Trigonometry I
- MATH 130 NUMBER AND OPERATIONS - 3 semester hours** **F, Sp**
ONLY for students seeking certification to teach PreK – 3/PreK-6
Examines number systems and operations, elementary number theory, concepts of integers and rational numbers, proportions, logic, computational algorithms, and counting techniques in a problem-solving environment. Will include student investigations and hands-on activities.
Prerequisites: Two units of high school mathematics and placement criteria

MATH 131 NUMBER AND OPERATIONS - 3 semester hours **F, Sp**

ONLY for students seeking certification to teach PreK – 3/PreK-6

Examines 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, symbolic). Will include student investigations and hands-on activities.

Prerequisites: MATH 130 Number and Operations

MATH 200 CALCULUS I - 3 semester hours **F, Sp, Su**

Analytic Geometry (introduction to conic sections), review of functions and their graphs, limits and rate of change, continuity, derivative, derivative of trigonometric functions, chain rule, implicit differentiation, higher derivatives, related rates, applications of differentiation: maximum and minimum values, The Mean Value Theorem, the first and second derivative tests, optimization problems.

Prerequisites: MATH 121 College Algebra and Trigonometry II

MATH 201 CALCULUS II - 3 semester hours **F, Sp, Su**

Antiderivatives, areas, definite integrals, Fundamental Theorem of Calculus, indefinite integrals, areas between curves (in the Cartesian Plane), volumes, integration technique: substitution rule, integration by parts, trigonometric substitutions, integration of rational functions, table of integration, transcendental functions and their inverses, applications of integration.

Prerequisites: MATH 200 Calculus I; MATH 120 College Algebra and Trigonometry I; MATH 121 College Algebra and Trigonometry II; MATH 122 Finite Mathematics

PHIL 220 INTRODUCTION TO LOGIC - 3 semester hours **F, Sp**

An introduction to the methods of elementary formal logic, including traditional syllogistic, Venn diagrams, sentential logic, truth tables, methods of deduction, and inductive reasoning.

STAT 210 ELEMENTARY STATISTICS - 3 semester hours **F, Sp, Su**

An introductory statistics course without a calculus prerequisite. Presentation of data, frequency distributions, descriptive statistics, elementary concepts of probability, random variables, binomial and normal distribution, sampling procedures, student's t-test, linear correlation. Interpretation of examples of data which occur in daily life. This course cannot be taken as a mathematics elective by mathematics majors.

Prerequisites: GEMA 112 Basic Mathematics I; GEMA 113 Basic Mathematics II or the equivalent
Science

BIOL 315 HUMAN ANATOMY - 3 semester hours **F, Sp, Su**

A lecture course for science and non-science majors of functional anatomy and organogenesis based on historical examinations, demonstrations, and dissections in man or selected anthropoids.

Prerequisites: GEBI 116 Biological Science for non-majors; BIOL 112

BIOL 315 HUMAN ANATOMY LABORATORY - 1 semester hour **F, Sp, Su**

A laboratory course for BIOL 315.

Corequisite: BIOL 315 Human Anatomy

CHEM 101 GENERAL CHEMISTRY I - 3 semester hours **F, Sp, Su**

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.

Co-requisite: CHEM 103 General Chemistry I Laboratory

CHEM 102 GENERAL CHEMISTRY II - 3 semester hours **F, Sp, Su**

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.

Prerequisite: CHEM 101 General Chemistry I; **Corequisite** CHEM 104

CHEM 111 CHEMISTRY I - 3 semester hours **F**

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.

Prerequisite: Chemistry Majors or Special Permission from the Department Chair

Corequisites: MATH 200 Calculus I and CHEM 113 Chemistry Laboratory I

CHEM 112 CHEMISTRY II - 3 semester hours

S

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.

Prerequisite: CHEM 111 Chemistry with a "C" or better

Corequisite: CHEM 114 Chemistry Laboratory II

AGRI 150 INTRODUCTION TO ENVIRONMENTAL SCIENCE (and lab) - 4 semester hours

F, Sp

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.

GEBI 116 BIOLOGICAL SCIENCE - 3 semester hours

F, Sp, Su

Designed to familiarize the student with the basic biological concepts, and the knowledge aimed at an understanding of the life process held in common by organisms. Topics stressed will include: reproduction, development, genetics, evolution and adaptation, taxonomy, ecology, the cell, and chemistry of living organisms. Non-majors only.

GEBI 116 BIOLOGICAL SCIENCE LABORATORY - 1 semester hour

F, Sp, Su

The laboratory complements the lecture portions of the course. It is strongly recommended that the laboratory be taken concurrently with the lecture. Non-majors only.

GEBI 117 BIOLOGICAL SCIENCE - 3 semester hours

F, Su

Principles and data needed to interpret ecological, taxonomical and genetical aspects of phenomena associated with life are studied.

GEBI 117 BIOLOGICAL SCIENCE - 1 semester hour

F, Su

A laboratory course for GEBI 117.

Corequisite: GEBI 117 Biological Science

GECH 119 CHEMISTRY AND SOCIETY - 3 semester hours

F, Sp

Chemistry principles are introduced and applied to issues and problems facing society. The fundamental language and symbols of inorganic, organic and biochemistry are covered along with chemical pollution, narcotics, life processes and nutrition.

GECH 119 CHEMISTRY AND SOCIETY LABORATORY - 1 semester hour

Corequisite for GECH 119

DIET 101 NUTRITION: CONTEMPORARY HEALTH ISSUES - 3 semester hours

F, Sp

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 102 NUTRITION: CONTEMPORARY HEALTH ISSUES LAB - 1 semester hour

F, Sp

A laboratory course required to be taken in conjunction with DIET 101 Nutrition: Contemporary Health Issues. The laboratory course will provide hands on laboratory exercises related to selected lecture topics.

GEES 181 GENERAL EARTH SCIENCE - 3 semester hours

F, Sp, Su

A survey course in earth science designed for non-science majors.

GEES 181 GENERAL EARTH SCIENCE LABORATORY - 1 semester hour

F, Sp, Su

Corequisite for GEES 181

GEPH 101 PHYSICAL SCIENCE - 3 semester hours

F

A survey course with emphasis on understanding the fundamental laws of nature and the logical application of these laws to specific situations; particular areas covered include analysis of motion. Newton's Law, energy, momentum, the nature of heat and the nature of sound.

GEPH 101 PHYSICAL SCIENCE LABORATORY - 1 semester hour **F**

A study of selected experiments in mechanics, heat, and sound, emphasizing practical applications of the underlying principles and the metric system of measurement.

Corequisite for GEPH 101

PHYS 112 GENERAL PHYSICS I - 3 semester hours **F**

An in depth study of selected topics in mechanics. Topics covered include the following: a review of trigonometry, vector algebra, Newton's Law of Motion, work and energy momentum, rotation, mechanical properties of solids and harmonic motion. The course is designed for physics majors, mathematics majors, and other science or engineering students whose program requires a calculus-based university-wide physics course.

Corequisite: MATH 200 Calculus I

PHYS 112 GENERAL PHYSICS I LABORATORY - 1 semester hour **F**

Selected experiments in mechanics are performed by students and written up. A problem session is held on alternate weeks.

Corequisite: PHYS 112 General Physics I

PHYS 113 GENERAL PHYSICS II - 3 semester hours **Sp**

A continuation of PHYS 112 treating hydrostatics and hydrodynamics, thermal properties of matter, thermodynamics, wave motion, and acoustics.

Prerequisite: PHYS 112 General Physics I

PHYS 113 GENERAL PHYSICS II LABORATORY - 1 semester hour **Sp**

A continuation of PHYS 112 treating hydrostatics and hydrodynamics, thermal properties of matter, thermodynamics, wave motion, and acoustics.

Prerequisite: PHYS 112 General Physics I Laboratory

Corequisite: PHYS 113 General Physics II

PHYS 116 GENERAL COLLEGE PHYSICS I - 3 semester hours **F, Sp**

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.

PHYS 116 GENERAL COLLEGE PHYSICS I LABORATORY - 1 semester hour **F, Sp**

Laboratory experiments designed to complement Physics 116. Basic concepts of measurement, mechanics, heat and electrical circuits.

PHYS 117 GENERAL COLLEGE PHYSICS II - 3 semester hours **F, Sp**

A continuation of PHYS 116 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles.

Prerequisite: PHYS 116 General College Physics I

PHYS 117 GENERAL COLLEGE PHYSICS LABORATORY II - 3 semester hours **F, Sp**

Laboratory experiments designed to complement Physics 117. Electromagnetism, wave motion, optics, atomic structure, and nuclear physics.

Prerequisite: PHYS 116 General College Physics I

Corequisite: PHYS 117 General College Physics II

Social Science

CJUS 116 INTRODUCTION TO CRIMINAL JUSTICE - 3 semester hours **Sp**

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.

ECON 100 BASIC ECONOMICS - 3 semester hours **F, Sp, Su**

A one semester survey course designed to cover basic microeconomics and macroeconomics for those not planning further course work in the field. Basic microeconomics and macroeconomics theories are used to explain the economic system, the institutions that make up the system and their functions.

ECON 210 PRINCIPLES OF MICROECONOMICS - 3 semester hours **F, Sp, Su**

The course 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 semester hours **F, Sp, Su**

The course analyzes national and international economic problems, such as inflation, unemployment, productivity, improve 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

FACS 201 CONSUMER ECONOMICS - 3 semester hours

A study of personal and family money management problems, designed to help individuals acquire knowledge, understanding of basic principles of consumer economics and to aid them in developing abilities and skills necessary for intelligent management of personal and family income to function in a global society.

GEPO 150 UNITED STATES GOVERNMENT - 3 semester hours **F, Sp**

An introductory course in the study of the American political system.

GEPS 124 INTRODUCTION TO PSYCHOLOGY - 3 semester hours **F, Sp**

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.

POLI 202 CONTEMPORARY POLITICAL THOUGHT - 3 semester hours **F**

A study of political thought from the end of the Middle Ages to the present.

PSYCH 212 HUMAN GROWTH AND DEVELOPMENT - 3 semester hours **F, Sp**

Human Growth and Development is 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. Skills in this area shall contribute to an understanding of the physical, social, emotional, and intellectual development of children and ability to use this understanding in guiding learning experiences. Students will observe children via videotape and apply some of the methods of child study.

GESO 211 INTRODUCTION TO SOCIAL SCIENCES - 3 semester hours **F, Sp**

An integrated picture of the social life of people, a systematic concept of society and its major problems, and the basic principles of social relations.

SOCI 101 INTRODUCTION TO SOCIOLOGY – 3 semester hours **F, Sp**

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 **F, Sp**

The study of evidence of human evolution, developing cultures, racial groupings and people in preliterate societies.

Technology**ASYM 130 INTRODUCTION TO MICROCOMPUTERS - 3 semester hours** **F, Sp, Su**

A computer literacy course for those who desire to learn about the capabilities and applications of computers in today's society.

CISY 201 MICROCOMPUTER CONCEPTS I - 3 semester hours **F, Sp, Su**

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, data base, spreadsheet software, and presentation graphics.

CISY 155 INTRODUCTION TO INFORMATION SYSTEMS - 3 semester hours **F, Sp, Su**

This course is designed to introduce the student to the basic concepts and procedures required in the development and use of computer based management information systems. Topics include; overview of computer concepts and computer literacy, computer hardware, computer software, and data communications. It provides a hands-on experience on three specific computer application packages: word processing, spreadsheets, database, and presentation graphics.

Prerequisite: High school algebra or equivalent

CSCI 100 INTRODUCTION TO COMPUTERS - 3 semester hours **F, Sp**

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 PROBLEM SOLVING USING COMPUTERS - 3 semester hours **F, Sp, Su**

Topics include: basic computer architecture, machine representation of data, algorithms and their application to solve problems, introduction to programming using a high-level language.

ENGR 203 INTRODUCTION TO PROGRAMMING - 3 semester hours **F**

An introduction to the computer, to the algorithmic process, and to programming in C using standard control structures. Windows and UNIX operating systems are used.

Prerequisite: ENGR 101 Introduction to Engineering I

AGRI 280 PRINCIPLES OF GEOGRAPHICAL INFORMATION SYSTEMS - 3 semester hours

This course is designed to introduce students to the fundamental concepts and applications of Geographic Information Systems (GIS), specifically to natural resource management and environmental analyses. Basic GIS concepts such as map characteristics and projections, spatial data models, relational databases, and spatial analysis with emphasis on the nature and source of geographic data and the issues of data input, data quality and metadata, will be covered. The course will also deal with the supporting disciplines of remote sensing and Global Positioning System (GPS). To complement classroom instruction, there will be extensive hands-on exercises based on computer software dedicated to GIS and remote sensing. Field-trips will be organized to visit governmental agencies or institutions where GIS-related work is being done.

IDST 200 DIGITAL MEDIA IN TEACHER EDUCATION - 3 semester hours **F, Sp**

This course will focus on the integration of applications and the visual literacy required to select and prepare rich media presentations to fully utilize the impact that technology can have on the learning outcome of its intended audience. It will also focus on the role that technology and computers play in enhancing personal productivity and how adaptive technology can provide access to knowledge and information processing for all. Emphases will be placed on the competencies required by the Virginia Board of Education for all completers of undergraduate Professional Education Programs for initial licensure.

INTC 201 TECHNOLOGY, SOCIETY AND DEVELOPMENT - 3 semester hours **F, Su**

A comprehensive study of technology – characteristics, paradigms, and trajectories; advantages and limitations; legislative and regulatory actions. Technological innovations and the process of development. Incisive analysis of the dimensions of technology in society.

Wellness and Health**HPER 160 TEAM SPORTS/WELLNESS - 1 semester hour**

The development of basic skills and the abilities to perform a variety of team sports (field hockey, soccer, and basketball), and their relationship to personal health and fitness.

HPER 162 TEAM SPORTS II/WELLNESS - 1 semester hour **F, Sp, Su**

The development of basic skills and the abilities to perform a variety of team sports: softball, flag or touch football, and basketball, and their relationship to personal health and fitness.

HPER 165 PERSONAL FITNESS - 1 semester hour

Introductory level course designed to assist students with the development of lifetime fitness programs. Emphasis is placed on the utilization of appropriate self-assessment techniques, and physical activities that gradually increase in level of difficulty. Content includes the integration of personal health-related (flexibility, strength, aerobic, endurance, body composition) and skill-related (coordination, agility, power, balance, speed) fitness components. Various conditioning principles (e.g., overload), precautionary measures, current trends, issues and practices, and specialized conditioning programs for assorted situations.

HPER 166 BEGINNING SWIMMING/WELLNESS - 1 semester hour

A course designed for non-swimmers fundamental principles and practices of beginners' swimming techniques and safety skills leading to the American National Red Cross Beginner's Certificate, and their relationship to personal health and fitness.

HPER 167 INTERMEDIATE SWIMMING/WELLNESS - 1 semester hour **F, Sp, Su**

Refine of 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 skills.

HPER 168 AEROBICS AND CONDITIONING WELLNESS - 1 semester hour **F, Sp, Su**

Introduction to and participating in aerobic exercises and their relationship to personal health and fitness.

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 hour**F, Sp, Su**

An introductory course and a functional approach to the health problems of the class. Guidance is given in solving those problems through the application of scientific knowledge to everyday living. The opportunity is provided for students to attend forums, lectures and film showings that relate to the course.

HPER 171 LIFETIME SPORTS WELLNESS - 1 semester hour**F, Sp, Su**

Development of fundamental skills, knowledge of rules to perform in a variety of individual sports activities (Archery, Tennis and Badminton) and their relationship to personal health and fitness.

HPER 172 LIFETIME SPORTS II WELLNESS - 1 semester hour

Development of fundamental skills, knowledge of rules to perform in a variety of individual sports (Golf, Wrestling and Track activities) and their relationship to personal health and fitness.

HPER 175 DANCE AS ART WELLNESS - 1 semester hours**F, Sp, Su**

A course designed to provide students with opportunities to gain a basic understanding, appreciation and participation in dance as an art form in culture and individual life, and the relationship of dance to personal health and fitness. Concepts and exercises in dance will be cultivated through lectures, films, live performances and studio experiences.

SPECIAL ACADEMIC PROGRAMS

Bachelor of Individualized Studies Degree

Mission: The Bachelor of Individualized Studies (BIS) degree at Virginia State University was created to provide adult transfer students with an educationally sound baccalaureate degree program incorporating the University's liberal arts general education requirements and an opportunity to design a specialization focus area, while providing maximum flexibility in accepting transferable credits from other accredited institutions and an ability to receive academic credit for college level learning acquired through various professional, service, personal and other nontraditional experiences. The non-traditional methods of earning credit include credit by examination, credit for educational experiences in the Armed Forces as evaluated by the American Council on Education, and credit for work/life learning as documented by a personal portfolio. The BIS degree is the only Servicemembers Opportunity Colleges (SOC) degree program at VSU, and adheres to the SOC Principles and Criteria.

Degree Requirements. The following minimum requirements must be met:

GENERAL EDUCATION: A minimum of 39 semester hours (s.h.) must be in General Education, consisting of at least 6 s.h. in English Composition, 6 s.h. in Humanities, 6 s.h. in Natural Sciences*, 6 s.h. in Mathematics, 3 s.h. in Social Sciences, 3 s.h. in Literature, 3 s.h. in History, 3 s.h. in Global Studies, and 3 s.h. in Technology (computer literacy). *Natural science labs are highly recommended.

SPECIALIZATION: A minimum of 30 semester hours reflecting a focus in a particular subject area selected by the student will be designated as the specialization. This specialization or primary focus area of the individualized degree program may be in any area as long as VSU has courses to support the specialization. A minimum of 15 s.h. in the specialization must be courses taken at VSU at the upper level (junior/senior level courses).

ELECTIVES: The remaining semester hours taken to complete the degree beyond the general education requirement and the specialization are elective credits. These elective credits may complement the area of specialization or reflect a secondary interest.

Additional requirements in completing the above 120 semester hours include:

RESIDENCY: At least 30 s.h. must be earned from Virginia State University.

COURSE LEVEL: At least 40 s.h. must be earned at the upper division (Junior/Senior level).

COURSE TYPE: A minimum of 60 s.h. must be earned from traditional classroom study (transfer and resident credit). At least 30 of these 60 s.h. must be current, which is defined as 'earned within six years of the date of graduation'. A maximum of 64 s.h. of community college credit may be applied towards the BIS degree. A maximum of 30 s.h. each may be awarded for work/life experience (portfolio petition), military occupational specialty, and military education courses; but the combined total from all sources of non-traditional credit may not exceed 60 hours.

Methods of earning credit: In addition to taking resident course work at Virginia State University, academic credit may be earned through the following sources or processes:

Transfer Credit is approved through the Transfer Coordinator/Admissions Office as part of the application for admission process. When admitted, a matriculating student's accepted transfer credit will be posted by Admissions directly to the student's VSU academic record.

Credit for Educational Experiences in the Armed Forces may be awarded after one has completed the admission process, enrolled in INDS 302, Orientation, and submitted documentation of military education/training (an official military transcript). Academic credit is based on the recommendations of the American Council on Education (ACE), as found in the [Guide to the Evaluation of Educational Experiences in the Armed Services](#). This evaluation is done by an advisor in the BIS degree program.

Credit for Work/Life Experience may be awarded on the basis of the preparation of a personal portfolio documenting experiential learning. After enrolling in INDS 301, Life/Work Seminar, the student must match experiential learning with courses currently offered by Virginia State University, as reflected in the current catalog. Each portfolio is evaluated by the faculty of the academic department from which credit is being petitioned.

All forms of non-traditional credit awarded by Virginia State University will be identified accordingly on the student's transcript. Only graded courses taken at VSU and proficiency examinations enter into the calculation of the final cumulative grade point average.

The flexibility of the above distribution requirements and the traditional and non-traditional methods of earning credit allow the mature student, working with an academic advisor, to design a program of study tailored to meet his/her individualized educational goals.

Persons seeking admission to the BIS degree must be graduates of an accredited secondary school or must possess a GED certificate, and must be transfer students or four years out of high school. Persons enrolled as full-time students in traditional degree programs at VSU may not be admitted to the BIS degree unless they have been out of college a minimum of one full year. A request for an exception to this policy must be submitted in writing to the BIS Advisory Committee. Any person with an earned baccalaureate degree from an accredited institution is not eligible for admission to the BIS degree; nor may any person be enrolled simultaneously in the BIS degree and another baccalaureate degree program.

Summary of Degree Requirements

Total semester hours required: 120

General Education	39 hours min.
English Composition.....	6
Humanities.....	6
Literature.....	3
Social Sciences	3
History	3
Global Studies.....	3
Mathematics.....	6
Natural Sciences.....	6 (science labs are highly recommended)
Technology	3
Specialization.....	30 hours min.
Restrictive electives (approved specialization courses)	27
INDS 499 or appropriate capstone course.....	3
Electives	53 hours max.
Restricted..... INDS 302	1
Unrestricted.....	52

Course Descriptions

INDS 301 LIFE/WORK - 1 semester hour

Required course for students seeking credit for learning from life/work experience. Students will document appropriate experiential learning and match it with corresponding courses, develop a portfolio for each course petitioned, and provide supporting documentation.

Co-requisite: INDS 302

INDS 302 ORIENTATION - 1 semester hour

A course designed to reorient students to college, complete the process of defining personal degree objectives, and finalize the requirements of the program to meet those objectives.

Prerequisite: matriculating in the BIS degree

INDS 499 SENIOR RESEARCH PROJECT - 3 semester hours

An independent research project which builds upon the student's area of specialization and serves as a culminating experience.

Note: INDS-499 should be used only when an appropriate capstone or senior seminar/research course is unavailable in the student's chosen specialization. Each senior research project must be approved and graded by a VSU faculty member with an academic background appropriate to the student's specialization.

Prerequisite: senior standing; prerequisites established for the approved alternative capstone course.

CNED 299 SPECIAL TOPICS - 3 semester hours

An academic credit-bearing course that serves as a generic course vehicle to offer special topics on an as needed basis. Specific course title and description will be entered each time the course is offered. This course may be repeated for credit.

Evening Courses

The [Division of Outreach](#) encourages and publicizes the scheduling of course offerings to provide adults the opportunity to pursue a number of complete undergraduate degree programs at night. Individuals may take courses for self-enrichment or career

development. Public school teachers have the opportunity to recertify in their respective fields or to certify in additional fields utilizing course work pursued at non-traditional hours. Non-matriculated students may register for courses through the Division of Continuing Education in the School of Graduate Studies, Research and Outreach.

Off-Campus Programs

The Off-Campus Program provides students an opportunity to pursue individual courses at locations away from the main campus. These sites include public school systems, large businesses or industrial establishments, public services and government agencies and defense installations. These sites are located close to the University campus to maximize the use of campus facilities. Courses are sponsored by the various academic departments of the University and coordinated through the Division of Outreach.

Conferences and Workshops

The School of Graduate Studies, Research and Outreach coordinates conferences, workshops and seminar activities at the University. The School also originates and offers workshops, seminars and conferences to meet the short-term training needs of public schools, business, industry, public agencies and a variety of other groups. The University awards Continuing Education Units (CEU's) for these activities according to the nationally accepted standard of one CEU for each ten hours of instruction. Permanent records, transcripts, and certificates are available for all conference and workshop activity.

Leisure/Recreational Short Courses

The Division of Outreach also offers a wide variety of personal interest, personal and professional development, and leisure and recreational short courses for the community. These courses range in length from a few hours to several weeks. They are developed in response to community interests and needs.

SPECIAL PROGRAMS

A variety of special programs are available for groups within the community with special problems and/or interests, including senior citizens and children.

Virginia State University at Fort Lee, VA

Through the Division of Outreach, Virginia State University offers a variety of courses at Fort Lee, Virginia. At Fort Lee, classes are offered in two 8-week sessions in each of the fall and spring semesters, and in one 8-week session in the summer, for a total of five sessions per calendar year. Students have the opportunity to attend classes on a full-time or a part-time basis in the evenings. At Fort Lee, six (6) semester hours taken during a single 8-week session constitutes full-time study for purposes of computing veterans' benefits for that period.

Counseling is available during office hours and by appointment. Military and ex-military personnel may qualify for tuition-assistance or veterans' benefits.

The VSU Office at Fort Lee is located in Army Continuing Education Services Building, Building 8035, Fort Lee, VA. The telephone number is (804) 862-6269/FAX 862-6271.

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
- Scholarly Presentations at Honors Conferences

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.

Participants in the Honors Program have access to the Honors House, a meeting place for Honors students. The house is equipped with a multimedia center, a presentation room for exhibits and displays, and project rooms where small groups of students study and carry on discussions together. The house also has a lounge, an office for visiting scholars and artists invited to meet with Honors students for seminars, colloquia, and tutorials.

The Honors Program is open to high school graduates, transfer students, and continuing students. Each applicant must meet criteria established by the Honors Council, including an excellent combination of grade-point-average, SAT/ACT scores, and a record of service and leadership experiences.

Institute for Leadership Development

The Virginia State University Institute for Leadership Development (VSU-ILD) is an emerging program designed to provide a cadre of distinguished leaders who will function in all levels of decision making roles. It is designed for students who seek a degree in any of the University's programs and who demonstrate potential in achieving a high academic standard (3.0 or above), conduct community service and charitable projects.

The VSU-ILD program will be offered to qualified freshmen and is renewable for the sophomore, junior and senior years. Participants will be selected based on academic standing, letters of recommendations, community services, an essay, and an interview. Each participant will receive a full four-year scholarship and a personal computer. Creative and innovative activities will be conducted monthly for the participants which will focus on assessment of leadership competencies, exploration of current social issues, an international trip, the planning and initiation of a leadership conference, and an assessment of diverse issues which impact on leaders.

Students who are selected to participate will have a broad base of resources as well as experiences which can be adapted to challenging leadership roles.

OTHER ACADEMIC EXPERIENCE

Academic Opportunities

Since 1993, students and faculty of Virginia State University have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 98 colleges and universities and a contract for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the *ORISE Catalog Education and Training Programs*, which is available at <http://www.ornl.gov/orise/educ.htm>, or by calling either of the contacts below.

ORAU'S Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU'S members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact:

Dr. Ali Ansari
Acting Dean of the Graduate School
ORAU Councilor for Virginia State University

Monnie E. Champion
ORAU Corporate Secretary (865-576-3306); or

Visit the ORAU Home Page (<http://www.ornl.gov>)

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, 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 & Health' requirement. In addition, 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 BIS degree.

UNDERGRADUATE ACADEMIC PROGRAMS

SCHOOL OF AGRICULTURE

Description of School

The School of Agriculture is comprised of the following units:

- The Department of Agriculture and Human Ecology
- Agricultural Research Station
- Cooperative Extension
- Randolph Farm

Mission of School

The mission of the School is consistent with the University's land-grant mission to develop and implement quality programs in instruction, research, and extension/public service.

Objectives of School

It is the primary objective of the School 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 School are:

- To prepare students for employment in a multitude of agriculture-related occupations, and for advanced studies in graduate schools.
- To prepare students in the areas of family and consumer sciences, dietetics, and hospitality management 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 Agriculture degree program through facilities at the Randolph Farm.

Other Pertinent School Information

Together, the Agriculture and Human Ecology Department, Agricultural Research, Cooperative Extension, and Randolph Farm fulfill the land-grant mission of the University. Academic programs offered by the Agriculture and Human Ecology Department are described in the section that follows.

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY

Chairperson:	Conrad Gilliam, P.O. Box 9416, 103 Owens Hall, Phone: 524-5672
Professors:	Harbans Bhardwaj, Conrad Gilliam, Tadesse Mebrahtu, Steven Pao, Shobha Sriharan, Stephen Wildeus,
Associate Professors:	Asmare Atalay, Gollahota Jagannadham, Isabell Jones, Alice Joyner, Pamela Thomas-Buchanan, Deanne Williams
Assistant Professors:	Christopher Catanzaro, Glenn Chappell, Badiyyah Waajid, Paula Inserra, Alice Joyner, Brian Nerrie, Oluwarotimi Odeh, Pamela Thomas-Buchanan, Joe Tritschler, Badiyyag Waajid, Yan Zhong
Instructor:	Carey Snow

Description of Department

The Department of Agriculture and Human Ecology offers programs in Agriculture and Human Ecology.

The Agriculture Program leads to the Bachelor of Science (B.S.) Degree in Agriculture with the following five concentrations: Agriculture Business and Economics, Teacher Education Endorsement, Animal Science and Pre-Veterinary Medicine, Aquatic Science, and Plant, Soil and Environmental Science with specialties in Horticulture and Soils.

The Human Ecology Program consists of two B.S. degrees, Hospitality Management (ACPHA accredited), and Family and Consumer Sciences (FACS) with the four concentrations: Dietetics (ADA accredited); Family, Child and Community Services, (FCCS); Teacher Education Endorsement; and Textile Apparel, Marketing and Management (TAMM). A post-baccalaureate non-degree, non-credit ADA accredited program, Dietetic Internship, provides eligibility to take the national Registered Dietitian (RD) Examination is also offered.

Mission of Department

In accordance with the University's mission, The Department of Agriculture and Human Ecology is committed to assuring that each student reaches her/his full potential and excels in society.

Objectives of Department

The objectives of the Department of Agriculture and Human Ecology are to:

- Facilitate growth and development of each student throughout his/her life span;
- Provide students with experiences to make them knowledgeable of the different and most recent developments in Agriculture and Human Ecology;
- Provide preparation for professional employment;
 - Prepare teachers in the field of Agriculture and Family and Consumer Sciences;
 - Prepare students to enter advanced study in Agriculture and Human Ecology in graduate schools of their choice; and
 - Prepare dietetic practitioners (RD).

Academic Programs

AGRICULTURE

Agriculture Business and Economics
 Teacher Education Endorsement
 Animal Science and Pre-Veterinary Medicine
 Aquatic Science
 Plant and Soil Science
 Environmental Science

The Program

The Agriculture curricula for prospective agricultural professionals are designed with differentiated sequences which permit the students to prepare for careers of their choice. Each sequence provides balance among general education, professional subject matter, concentration in specific areas, and restrictive electives.

The Teacher Education Endorsement Curriculum 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 School of Liberal Arts and Education.

The Agriculture Business and Economics Curriculum focuses on the understanding and problem solving in the production, distribution, and consumption of agricultural goods as well as the management of services and natural resources. In addition, the curriculum emphasizes public policy, financial management, farm management, non-farming agribusiness management and marketing. This program prepares students for advanced study in agribusiness, agricultural economics and/or employment in one of the many areas of agribusiness and/or agencies, such as the U. S. Department of Agriculture.

The Animal Science specialty is designed for the student who enjoys and is intrigued by science and welcomes the challenges of such a complex field of study. The program prepares students for admission to veterinary school and/or leads to suitable employment in many animal science and related specialties.

The Aquatic Science program is designed to prepare students for advanced study or professional and technical careers in hydrobiology, aquaculture and fisheries-oriented occupations. The focus of our Aquatic Science program is on aquaculture, the rearing of aquatic organisms under controlled or semi-controlled conditions.

The Plant, Soil and Environmental Science program is divided in three (3) program areas. Horticulture encompasses the production of fruits and vegetables for consumption, as well as the production of plants and flowers for decor and beautification. Soil Science furthers interest in soil productivity and land use. This diverse area examines soil use for plant and crop production, as well as other areas, such as soil used for foundations, construction of roads, waterways and numerous other areas. Environmental Science is the study and process of finding answers (or at least trying) to many of life's confusing questions. Examples: How can the watering of a lawn affect the water quality of a nearby stream? How can recycling an aluminum can help save fossil fuels and reduce both air and water pollution? How does the exhaust from cars in New York contribute to the decline of salmon in Canada?

Course Descriptions

AGRICULTURE

AGRI 140 INTRODUCTION TO AGRICULTURE - 2 semester hours

F

A survey course designed to introduce students to the agricultural industry and to aid them in exploring the many different careers in agriculture.

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 341 RESEARCH METHODS IN AGRICULTURE - 3 semester hours

F

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.

Prerequisite: Completion of core agriculture courses.

AGRI 400 INTERNSHIP - 3 semester hours

F, Sp

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

F, Sp

An opportunity for students to work independently on Agricultural Science related issues and problems under the guidance of a single professor.

AGRI 441 ORGANIZED INSTRUCTION IN AGRICULTURAL EDUCATION - 3 hours

F, Sp

Evaluation of instructional proceedings, planning programs of instruction, and evaluation of instructional outcomes.

AGRICULTURAL ECONOMICS**AGEC 140 INTRODUCTION TO AGRIBUSINESS ENTREPRENEURSHIP - 3 semester hours**

An introductory course for all agricultural majors that will focus on the importance of business to the food and agricultural sector. The course will explore the mechanics of developing a business plan, applying the principles of marketing, management and finance.

AGEC 142 PRINCIPLES OF AGRICULTURAL ECONOMICS I - 3 semester hours**F**

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**Sp**

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 344 FINANCIAL MANAGEMENT IN AGRICULTURE I - 3 semester hours**F**

An introduction to 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: AGECE 142, 143 Principles of Agricultural Economics I & II; ACCT 201, 202 Principles of Accounting; STAT 210 Elementary Statistics

AGEC 342 COOPERATIVE MARKETING - 3 semester hours**Sp**

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.

AGEC 346 FARM BUSINESS MANAGEMENT - 3 semester hours**Sp**

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. Alternatives for farm business organization.

Prerequisites: ECON 310 Microeconomics; AGECE 344 Financial Management in Agriculture

AGEC 347 LAND ECONOMICS - 3 semester hours**Sp**

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. Investigation of the role of public policy in land ownership and use.

Prerequisite: ECON 310 Microeconomics

AGEC 441 MANAGEMENT OF AGRI-BUSINESS FIRMS - 3 semester hours**Sp**

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: AGECE 344 Financial Management in Agriculture I; ECON 310 Microeconomics; STAT 210 Elementary Statistics; AGECE 447 Agricultural Marketing

AGEC 443 FINANCIAL MANAGEMENT IN AGRICULTURE II - 3 semester hours**Sp**

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 Microeconomics; ECON 320 Macroeconomics; STAT 210 Elementary Statistics

AGEC 444 AGRICULTURE POLICY - 3 semester**Sp**

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 Microeconomics; GEHI 122, 123 U.S. History;
GEPO 150 United States Government

AGEC 445 ADVANCE FARM MANAGEMENT - 3 semester hours**Sp**

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.

AGEC 447 AGRICULTURE MARKETING - 3 semester hours**F**

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 448 INTRODUCTION TO COMMODITY MARKETING - 3 semester hours**F**

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.

AGRICULTURAL EDUCATION**AGRI 240 AGRICULTURE YOUTH AND ADULT ORGANIZATIONS - 3 semester hours**

Introduce students to the organization and functions of 4-H, FFA, and other youth and adult groups. Students will observe, practice and develop leadership skills necessary to succeed as advisors of organizations. A practicum will be used in conjunction with this course for observation of groups and group leaders.

AGRI 342 METHODS OF TEACHING AGRICULTURE - 3 semester hours**S**

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.

AGRI 343 PRINCIPLES AND PRACTICES OF AGRICULTURAL EDUCATION - 3 semesters hours**Sp**

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.

AGRI 402 STUDENT TECHING IN AGRICULTURE – 3 semester hours**F, Sp**

This course is designed to provide supervision on the content area for pre-service secondary agriculture candidates.

Prerequisite: Department approval

Co-requisite: EDUC 402 Student Teaching Seminar; EDUC 402 Student Teaching

AGRI 446 PRINCIPLES OF COOPERATIVE EXTENSION - 3 semester hours**Sp**

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.

AGRICULTURAL MECHANIZATION**AGME 140, 141 AGRICULTURAL MECHANICS - 2 semester hours****F, Sp**

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 INTRODUCTION TO AGRICULTURAL ENGINEERING - 3 semester hours**Sp**

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: GEMA 112 Basic Mathematics; GEMA 113 Basic Mathematics; Sophomore or above standing

AGME 346 AGRICULTURAL POWER MACHINERY - 3 semester hours **Sp**
 A study of the construction, operation, adjustment and management of agricultural implements and power machinery. Primary emphasis is on tractor and machinery management.

AGME 442 ADVANCED AGRICULTURAL MECHANICS - 3 semester hours **F**
 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.

AGME 444 ELECTRICITY IN AGRICULTURE - 3 semester hours **F, Sp**
 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.

AGME 445 INTERNAL COMBUSTION ENGINES - 3 semesters hours **Sp**
 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.

AGME 446 AGRICULTURAL POWER MACHINERY - 3 semester hours **Sp**
 A study of construction, operation, and adjustment of agricultural implements, and power machinery.

AGME 447 ADVANCED INTERNAL COMBUSTION ENGINES - 3 semester hours **Sp**
 A study of multi-cylinder internal combustion engines, including designing, operating, testing, repairing, overhauling, and the application of agricultural uses.

ANIMAL SCIENCE AND PRE-VETERINARY MEDICINE

ANSC 140 PRINCIPLES OF ANIMAL SCIENCE - 3 semester hours **Sp**
 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 **F**
 Supervised farm practices in feeding, handling, and managing farm animals.
Prerequisite: ANSC 140 Principles of Animal Science; Sophomore or above standing

ANSC 242 PRINCIPLES OF POULTRY PRODUCTION - 3 semester hours **F**
 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 **Sp**
 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 **F**
 Feeding and management practices used in purebred and commercial swine production
Prerequisite: ANSC 342 Principles of Poultry Production

ANSC 344 BEEF CATTLE PRODUCTION - 3 semester hours **Sp**
 Methods of producing, managing, and marketing commercial and purebred cattle.

ANSC 345 VETERINARY ANATOMY AND PHYSIOLOGY - 3 semester hours **F**
 A consideration of gross anatomy and physiological functions of animals as a background for the studies in nutrition, reproduction and diseases.
Prerequisites: BIOL 112 Principles of Modern Biology; BIOL 113 General Zoology; ANSC 140 Principles of Animal Science

ANSC 346 PHYSIOLOGY OF REPRODUCTION - 3 semester hours **Sp**
 Study of reproductive processes with special emphasis upon reproduction efficiency of domestic animals.
Prerequisite: ANSC 345 Veterinary Anatomy and Physiology

ANSC 348 FARM DAIRYING - 3 semester hours **Sp**
Teaches the basic principles of dairy management, current knowledge in the many areas of dairy science and present day practices of successful dairy persons.

ANSC 349 VETERINARY HYGIENE - 3 semester hours **F**
Predisposition, causes and symptoms of infections, parasitic and nutritional diseases with emphasis on prevention and control through management and sanitation.

ANSC 350 SMALL RUMINANT MANAGEMENT - 3 semester hours **Sp**
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.

ANSC 351 FEEDS AND FEEDING - 3 semester hours **F**
Basic nutritional principles, composition and value of feeds and the formulation of rations for farm animals.

ANSC 441 ANIMAL NUTRITION - 3 semester hours **F**
Course matter focuses on nutrients and their digestion, metabolism, biological role and the principles of animal nutrition.

ANSC 446 SPECIAL TOPICS - 3 semester hours **F**
Presentation and discussion of papers on animal industry subjects.
Prerequisites: ANSC 140 Principles of Animal Science

ANSC 447 SPECIAL PROBLEMS - 3 semester hours **Sp**
Lectures and assignments relating to industry problems in breeding, nutrition, diseases, market products, and management of farm animals.
Prerequisites: ANSC 140 Principles of Animal Science

ANSC 448 ADVANCED LIVESTOCK PRODUCTION - 3 semester hours **Sp**
A study of economic, nutritional and managerial factors affecting the operation of livestock enterprises. Field trips required.
Prerequisite: ANSC 140 Principles of Animal Science

ANSC 449 SEMINAR - 3 semester hour **F, Sp**
Research and presentation of important literature related to the animal sciences. Areas of economic importance to the agricultural community will be emphasized.
Prerequisites: ANSC 140 Principles of Animal Science

AQUATIC SCIENCE

AQSC 201 INTRODUCTION TO AQUACULTURE - 3 semester hours **F**
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 SYSTEMS DESIGN - 3 semester hours **Sp**
Application of engineering principles to aquacultural 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 MANAGEMENT OF AQUATIC WEEDS - 3 semester hours **Sp**
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 semester hours **Sp**
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 semester hours **F**

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.

AQSC 404 FISH BREEDING AND GENETICS - 3 semester hours **Sp**

An overview of the history of genetics and fish breeding will be presented. Emphasis is placed on aquacultural fish cultured in Virginia. Basic genetic principles are discussed as they apply to selected fish breeding programs.

AQSC 406 SALMONIDS - 3 semester hours **Sp**

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.

AQSC 407 FISH PROCESSING TECHNOLOGY - 3 semester hours **Sp**

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.

AQSC 408 FISH NUTRITION - 3 semester hours **F**

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 101 General Chemistry; CHEM 102 General Chemistry

AQSC 409 AQUACULTURAL ECONOMICS - 3 semester hours **Sp**

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.

HORTICULTURE**HORT 253 VEGETABLE PRODUCTION - 3 semester hours** **Sp**

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 semester hours **F**

A 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 ADVANCED LANDSCAPE DESIGN - 3 semester hours **Sp**

A study of the designing of the home grounds, the country estate, special gardens and playgrounds. This course is for advanced horticultural students. Practices in designs and drawing will be emphasized.

Prerequisite: HORT 340

HORT 351 FRUIT PRODUCTION - 3 semester hours **F**

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 **F**

A study and identification of perennials, biannuals 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 **F**

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 **Sp**

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 **F**

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 **F**

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 **F**

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 PRACTICE - 3 semester hours **Sp**

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 **F, Sp**

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** **F**

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 341 FIELD CROPS PRODUCTION - 3 semester hours **Su**

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 MANAGEMENT - 3 semester hours **Sp**

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 SPRAYS, DUST, AND FUMIGANTS, AND THEIR APPLICATION - 3 semester hours **F**

The selection, preparation and application of sprays, dusts and fumigants for the control of insects, diseases, weeds, and other pests of farm crops. Special attention is given to spraying and dusting schedules, effects of various chemicals on different kinds of plants, ecological factors, residues, application machinery, and economical considerations.

PLSC 440 PLANT RESISTANCE TO INSECTS - 2 semester hours **F**

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 resistant varieties of field and horticultural crops.

PLSC 441 PLANT PATHOLOGY - 4 semester hours **F**

A study of the nature, cause and control of plant diseases. This course will concentrate on disease of field, orchard and vegetable crops.

PLSC 442 PROBLEMS IN PLANT SCIENCE - 3 semester hours **Sp**

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.

PLSC 444 GENETICS - 3 semester hours **Sp**

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 semester hours **Sp**

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 or BIOL 313 General Zoology or equivalent

PLSC 446 PLANT PHYSIOLOGY - 4 semester hours **Sp**

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.

PLSC 448 PLANT BREEDING - 3 semester hours **Sp**

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: PLSC 444 Genetics

PLSC 450 INTRODUCTION TO FORESTRY - 3 semester hours **F, Sp**

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 454 SPECIAL TOPICS IN CROP SCIENCE - 3 semester hours **F**

Selected topics for advanced student dealing with current issues in crop science. Special emphasis is placed on modern crop production problems.

PLSC 455 TURF MANAGEMENT - 3 semester hours **F, Sp**

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 PRINCIPLES OF SOILS - 4 semester hours** **F**

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.

Prerequisites: CHEM 101 General Chemistry

SOSC 344 SOIL MANAGEMENT AND CONSERVATION - 3 semester hours **Sp**

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.

SOSC 345 SOIL FERTILITY AND FERTILIZERS - 4 semester hours **Sp**

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 Soil Science and CHEM 101 General Chemistry

SOSC 347 SOIL CLASSIFICATION - 2 semester hours **F**

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.

Prerequisite: SOSC 242 Soil Science; CHEM 101 General Chemistry

SOSC 450 PROBLEMS IN SOIL SCIENCE - 1-4 semester hours **Sp**

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.

Prerequisite: SOSC 242 Soil Science; CHEM 101 General Chemistry

SOSC 455 WORLD SOIL RESOURCES - 3 semester hours **F**

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 242 Soil Science; CHEM 101 General Chemistry

ENVIRONMENTAL SCIENCE**AGRI 150 INTRODUCTION TO ENVIRONMENTAL SCIENCE - 4 semester hours****F, Sp**

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**F, Sp**

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**F, Sp**

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.

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Animal Science and Pre-Veterinary Medicine Concentration
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Freshman Writing/Read and Writ Lit 1	3	3	6
MATH 120, 121	Mathematics	3	3	6
BIOL 120	Principles of Mod & Lab	4	-	4
BIOL 313	Zoology & Zoology Lab	-	4	4
ANSC 140	Principles of Animal Science	-	3	3
HPER 170	Wellness/Health	2	-	2
FRST 101	Freshman Studies	2	-	2
GEHI 122	US History	-	3	3
AGRI 140	Introduction to Agriculture	<u>2</u>	-	<u>2</u>
		16	16	32
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
GEHI 123	U.S. History	3	-	3
CHEM 101, 103	General Chemistry I & Lab	4	-	4
CHEM 102, 104	General Chemistry II & Lab	-	4	4
ASYM 130	Introduction to Microcomputers	3	-	3
PLSC 140	Principles of Plant Science	3	-	3
PHIL 180	Critical Thinking	-	3	3
ANSC 242	Principles of Poultry Production	<u>2</u>	<u>3</u>	<u>3</u>
		16	13	29
JUNIOR YEAR				
GEPS 124	Introduction to Psychology	3	-	3
PHYS 110	General Physics I & Lab	4	-	4
PHYS 111	General Physics II & Lab	-	4	4
CHEM 305, 307	Organic Chemistry I and Lab	4	-	4
CHEM 306, 308	Organic Chemistry II & Lab	-	4	4
ANSC 351	Feeds and Feeding	-	3	3
ANSC 345	Veterinary Anatomy & Physiology	3	-	3
ANSC 346	Physiology of Reproduction	-	3	3
ANSC 349	Veterinary Hygiene	<u>2</u>	<u>3</u>	<u>3</u>
		14	17	31
SENIOR YEAR				
CHEM 422	Bio Chemistry & Lab	4	-	4
PLSC 444	Genetics	-	3	3
GEOG 210	World Geography	-	3	3
ANSC 344	Beef Cattle Production	3	-	3
ANSC 441	Animal Nutrition	3	-	3
BIOL 241	Introduction to Microbiology & Lab	4	-	4
ANSC 343	Swine Production	-	3	3
ANSC 447	Special Problems	3	-	3
ANSC 446	Special Topics	<u>2</u>	<u>3</u>	<u>3</u>
		17	12	29

Total hours required for graduation – 121

Elective:

- ANSC 448 - Advanced Livestock (3)
- AGRI 341 - Research Methods in Agriculture (3)
- AGRI 400 - Internship (3)
- AGRI 401 - Independent Study (3)
- ANSC 348 - Farm Dairy (3)
- ANSC 246 - Introduction to Equine Science (3)
- ANSC 350 - Small Ruminant Management (3)
- ANSC 449 - Seminar (3)

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Animal Science Concentration
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Freshman Writing/Read and Writ Lit 1	3	3	6
MATH 120, 121	Mathematics	3	3	6
BIOL 120	Principles of Mod Biology & Lab	4	-	4
BIOL 313	Zoology & Zoology Lab	-	4	4
ANSC 140	Principles of Animal Science	-	3	3
HPER 170	Wellness/Health	2	-	2
FRST 101	Freshman Studies	2	-	2
GEHI 122	US History	-	3	3
AGRI 140	Introduction to Agriculture	<u>2</u>	-	<u>2</u>
		16	16	32
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
GEHI 123	U.S. History	3	-	3
CHEM 101, 103	General Chemistry I & Lab	4	-	4
CHEM 102, 104	General Chemistry II & Lab	-	4	4
ASYM 130	Introduction to Microcomputers	3	-	3
PLSC 140	Principles of Plant Science	3	-	3
GEOG 210	World Geography	-	3	3
PHIL 180	Critical Thinking	-	3	3
AGME 242	Introduction to Agricultural Engineering	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
GEPS 124	Introduction to Psychology	3	-	3
PHYS 110	General Physics I & Lab	4	-	4
GEMU380	Music and Art	-	3	3
ANSC 242	Poultry Production	3	-	3
ANSC 344	Beef Cattle Production	3	-	3
ANSC 345	Veterinary Anatomy & Physiology	3	-	3
ANSC 346	Physiology of Reproduction	-	3	3
SOSC 242	Principles of Soil Science	-	4	4
AGEC 140	Intro to Agri-business Entrepreneurship	-	3	3
ANSC 351	Feeds and Feeding	-	<u>3</u>	<u>3</u>
		16	16	32
SENIOR YEAR				
CHEM 305, 307	Organic Chemistry I & Lab	4	-	4
PLSC 444	Genetics	-	3	3
ANSC 441	Animal Nutrition	3	-	3
BIOL 241	Introduction to Microbiology & Lab	4	-	4
ANSC 343	Swine Production	-	3	3
ANSC 348	Farm Dairy	-	3	3
ANSC 350	Small Ruminant Management	3	-	3
ANSC 448	Advanced Livestock	-	<u>3</u>	<u>3</u>
		14	12	26

Total hours required for graduate – 122

Electives

- AGRI 341 - Research Methods in Agriculture (3)
- AGRI 400 - Internship (3)
- AGRI 401 - Independent Study (3)
- ANSC 246 - Introduction to Equine Science (3)
- ANSC 449 - Seminar (3)

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Aquatic Science Concentration
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEEN 110, 111	Freshman Writing/Read and Writ Lit 1	3	3	6
MATH 120, 121	Mathematics	3	3	6
BIOL 100	Principles Biology I & Lab	4	-	4
BIOL 101	Principles Biology II & Lab	-	4	4
AGRI 140	Introduction to Agriculture	2	-	2
PLSC 140	Principles of Plant Science	3	-	3
AGEC 142	Intro to Agribusiness Entrepreneurship	-	3	3
FRST 101	Freshman Studies	2	-	2
GEHE 164	Wellness/Health Elective	-	2	2
		17	15	32
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
GEEN 310	Advanced Communication Skills	-	3	3
GEHI 122	U.S. History	3	-	3
CHEM 101, 103	General Chemistry I & Lab	4	-	4
CHEM 102, 104	General Chemistry II & Lab	-	4	4
SOSC 242	Intro to Agricultural Engineering	-	4	4
ECON 210	Principles of Microeconomics	3	-	3
AGME 242	Principles of Ag Mechanics	-	3	3
AGSC 201	Introduction to Aquaculture	-	3	3
GE _____	Technology Elective	3	-	3
		16	17	33
JUNIOR YEAR				
ANSC 346	Physiology of Reproduction	3	-	3
BIOL 241	Introduction to Microbiology	4	-	4
GEMU 380	Music and Art	-	3	3
CHEM 305, 307	Organic Chemistry & Lab	4	-	4
AQSC 301	Aquatic Culture System Design	-	3	3
AQSC 302	Management of Aquatic Weeds	-	3	3
ANSC 441	Animal Nutrition	-	3	3
_____	Language (200 level or above)	3	3	6
		14	15	29
SENIOR YEAR				
AQSC 401	Fish Pond Management	3	-	3
AQSC 402	Fish Pathology	3	-	3
AGRI 400	Internship	3	-	3
AQSC 404	Limnology	-	3	3
AQSC 405	Fish Breeding and Genetics	-	3	3
AQSC 406	Salmonids	-	3	3
_____	Restrictive Elective	5	-	5
_____	Unrestrictive Elective	-	3	3
		14	12	26

Total hours required for graduation – 120

Electives:

- AGRI 150 - Introduction to Environment Science (3)
- AGRI 341 - Research Methods in Agriculture (3)
- AGRI 401 - Independent Study (3)

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Agriculture Business and Economics Concentration
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I & II	3	3	6
GEES 181	Earth Science and Lab	4	-	4
AGRI 150	Environmental Science Lab	-	4	4
MATH 120, 121	College Algebra & Trig	3	3	6
AGEC 142	Principles of Ag. Econ. I	3	-	3
AGRIC 140	Introduction to Agriculture	2	-	2
HPER _____	Wellness/Health	-	2	2
FRST 101	Freshman Studies	2	-	2
ECON 210	Principles of Microeconomics	-	3	3
		17	15	32
SOPHOMORE YEAR				
ENGL 214	World Literature	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
ACCT 201, 202	Principles of Accounting	3	3	6
GEHI 122	U.S. History	3	-	3
STAT 210	Elementary Statistics	3	-	3
ASYM 130	Introduction to Microcomputers	-	3	3
PLSC 140	Principles of Plant Science	3	-	3
ANSC 140	Principles of Animal Science	-	3	3
ECON 310	Microeconomics	-	3	3
		15	15	30
JUNIOR YEAR				
AGEC 346	Farm Management	3	-	3
AGEC 344	Agriculture Financial Mgmt I	3	-	3
ECON 320	Macroeconomics	-	3	3
AGME 242	Intro to Agricultural Engineering	3	-	3
CISY 260	Business Statistics	3	-	3
GEHI 119	Chemistry & Society & Lab	4	-	4
GEPO 150	United States Government	-	3	3
SOSC 242	Principles of Soil Science	-	4	4
	Global Studies Elective	-	3	3
AGRI 280	Geographic Information Systems	-	3	3
		16	16	32
SENIOR YEAR				
AGEC 441	Management of Agribus Firms	3	-	3
AGEC 447	Agriculture Marketing	3	-	3
AGEC 443	Agriculture Financial Mgmt II	-	3	3
MGMT 270	Legal Environment of Bus	-	3	3
AGME 242	Principles of Ag Mechanics	-	3	3
AGEC 444	Agriculture Policy	3	-	3
	Agriculture Elective	3	2	5
ECON 380	Econometrics	-	3	3
		12	14	26

Total hours required for graduation – 120

Electives

- AGRI 341 - Research Methods in Agriculture (3)
- AGRI 400 - Internship (3)
- AGRI 401 - Independent Study (3)

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Environmental Science Concentration
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I & II	3	3	6
AGRI 150	Intro to Environment Science/Lab	4	-	4
MATH 120, 121	Mathematics	3	3	6
AGRI 140	Introduction to Agriculture	2	-	2
PLSC 140	Principles of Plant Science	3	-	3
FRST 101	Freshman Studies	2	-	2
GEPE	Physical Ed Elective	-	1	1
BIOL 120	Principles of Biology I & Lab	-	4	4
AGEC 142	Intro to Agribusiness Entrepreneurship	-	3	3
HPER	Wellness/Health Elective	-	<u>2</u>	<u>2</u>
		17	16	33
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
SOSC 242	Principles of Soils	4	-	4
CHEM 101, 103	General Chemistry I & Lab	4	-	4
ANSC 140	Principles of Animal Science	3	-	3
SPEE 214	Intro to Public Speaking	-	3	3
GE	Technology Elective	-	3	3
GEHI 122	U.S. History	-	3	3
AGME 242	Intro to Agricultural Engineering	-	3	3
CHEM 102, 104	General Chem & Lab	-	<u>4</u>	<u>4</u>
		14	16	30
JUNIOR YEAR				
AGRI 280	Principles of Geo Info Sys	3	-	3
SOSC 345	Soil Fertility & Fertilizers	4	-	4
STAT 210	Elementary Stats I	3	-	3
BIOL 241	Intro to Microbiology & Lab	4	-	4
STAT 310	Elementary Stats II	-	3	3
CHEM 113	Organic Chemistry & Lab	-	4	4
BIOL 424	Ecology & Lab	-	4	4
ECON 210	Principles of Microeconomics	-	3	3
_____	Global Studies Elective	-	<u>3</u>	<u>3</u>
		14	17	31
SENIOR YEAR				
PADM 401	Environmental Law	3	-	3
GEMU 380	Music & Art	3	-	3
AQSC 404	Limnology	3	-	3
PHYS 110	Intro to Physics & Lab	4	-	4
	Scientific Elective	-	4	4
	Policy Elective	-	3	3
	Soil Science Elective	-	3	3
	Internship/Co-op Ed/Independent Study	-	<u>4</u>	<u>4</u>
		13	14	27

Totals hours required for graduation – 121

Electives:

Scientific Electives

BIOL 320 - Genetics
 CHEM 424 - Environmental Chemistry
 AGRI 290 - Introduction to Remote Sensing
 PLSC 353 - Sprays, Dust, & Fumigants
 PLSC 446 - Plant Physiology

Policy Electives

AGEC 444 - Agricultural Policy
 AGEC 446 - Land Economics
 PADM 403 - Land Use Law and Policy

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Plant and Soil Science - Horticulture Concentration
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Freshman Writing, Rdnng & Writg Abt. Lit.	3	3	6
AGRI 150	Intro to Environment Science/Lab	4	-	4
MATH 120, 121	Mathematics	3	3	6
AGRI 140	Introduction to Agriculture	2	-	2
BIOL 100	Principles of Mod Biology & Lab	-	4	4
PLSC 140	Principles of Plant Science	3	-	3
AGEC 140	Intro to Agribusiness Entrepreneurship	-	3	3
FRST 101	Freshman Studies	2	-	2
HPER	Wellness/Health Elective	-	<u>2</u>	<u>2</u>
		17	15	32
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
AGRI 280	Principles of Geographic Information Sys.	-	3	3
GEHI 122	U.S. History	-	3	3
CHEM 101, 103	General Chem I & Lab	4	-	4
CHEM 102, 104	General Chem II & Lab	-	4	4
SOSC 242	Principles of Soils & Lab	4	-	4
AGME 242	Principles of Agricultural Engineering	-	<u>3</u>	<u>3</u>
		14	16	30
JUNIOR YEAR				
DRFT 160	Mechanical Drawing	3	-	3
GEPS 124	Intro to Psychology	3	-	3
SOSC 345	Soil Fertility & Fertilizers	4	-	3
BIOL 241	Intro to Microbiology & Lab	4	-	4
GEMU 380	Music and Art	-	3	3
PLSC 353	Sprays, Dust & Fumigants	-	3	3
GE _____	Global Studies Elective	-	3	3
ECON 210	Principles of Microeconomics	-	3	3
HORT 353	Vegetable Production	-	<u>3</u>	<u>3</u>
		14	15	29
SENIOR YEAR				
PLSC 450	Introduction to Forestry	3	-	3
HORT 446	Greenhouse & Management	3	-	3
HORT 449	Plant Propa/Nur Pract	3	-	3
PHIL 180	Critical Thinking	3	-	3
HORT 352	Plant Materials	3	-	3
HORT 450	Problems in Horticulture	-	3	3
ORT 340	Landscape Design	-	3	3
PLSC 455	Turf Management	-	3	3
PLSC 444	Genetics	-	3	3
HORT/PLSC	Restrictive Elective	-	<u>3</u>	<u>3</u>
		15	15	30
Total hours required for graduation - 121				

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
Agriculture with a minor in Secondary Education 6-12 (125 hrs)

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100	Analytical Reading, Writing and Reasoning I	2**	-	2**
IDST 101	Analytical Reading, Writing and Reasoning II	-	2**	2**
FRST 101	Freshman Studies	2	-	2
ENGL 110	Freshman Writing	3	-	3
ENGL 111	Reading and Writing About Literature	-	3	3
MATH 112	Basic Math I	3	-	3
MATH 113	Basic Math II	-	3	3
BIOL 120	Principles of Biology I & Lab	-	4	4
ANSC 140	Principles of Animal Science	-	3	3
GEAG 150	Environmental Science and Lab	4	-	4
	Humanities Elective	-	3	3
HPER 170	Health and Wellness	2	-	2
AGRI 140	Introduction to Agriculture	<u>2</u>	-	<u>2</u>
		16	16	32
SOPHOMORE YEAR				
EDUC 201	Introduction to Teaching I	2	-	2
EDUC 202	Introduction to Teaching II	-	2	2
IDST 200	Digital Media in Teacher Education	3	-	3
ENGL 201/202	Literature Elective	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
GEHI 119	Chemistry and Society	-	4	4
AGEC 140	Introduction to Agri Bus Entre	3	-	3
AGME 242	Intro to Agricultural Engineering	3	-	3
SOSC 242	Principles of Soil Science & Lab	-	4	4
PLSC 140	Principles of Plant Science	3	-	3
GEMU 380	Music and Art	<u>-</u>	<u>3</u>	<u>3</u>
		17	16	33
JUNIOR YEAR				
EDUC 315	Data Driven Instructional Design	3	-	3
PSYC 212	Human Growth and Development	-	3	3
SPED 403	Classroom Management in Educational Settings (FB)	-	3	3
AGRI 340	Agri Youth Organizations	3	-	3
AGME 140	Agri Mechanics	2	-	2
GEPH 101	Physical Science	-	4	4
AGRI 342	Prins & Prac of Agri Ed	3	-	3
AGME 141	Agri Mechanics	-	2	2
GEHI 122	U.S. History	3	-	3
GLOBAL STUDIES	Elective	<u>-</u>	<u>3</u>	<u>3</u>
		14	15	29
SENIOR YEAR				
EDUC 424	Critical Issues in Education	2	-	2
AGRI 441	Organization & Inst in Ag Ed	3	-	3
AGME 444	Electricity in Agriculture	3	-	3
AGME 445	Inter Combustion Engines	3	-	3
EDUC 427	Reading in the Subject Area	3	-	3
AGRI 402	Teaching of Agriculture	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
AGRI 402	Student Teaching in Agriculture	-	3	3
EDUC 402	Student Teaching	<u>-</u>	<u>9</u>	<u>9</u>
		17	15	32

**IDST 100/101 are not counted in semester hours or toward graduation requirements.

Total hours required for graduation - 126

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
AGRICULTURE MAJOR
Plant and Soil Science Concentration
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I & II	3	3	6
AGRI 150	Intro to Environment Science/Lab	4	-	4
MATH 120, 121	Mathematics	3	3	6
AGRI 140	Introduction to Agriculture	2	-	2
BIOL 100	Principles of Biology I & Lab	-	4	4
PLSC 140	Principles of Plant Science	3	-	3
AGEC 140	Intro to Agribusiness Entrepreneurship	-	3	3
FRST 101	Freshman Studies	2	-	2
HPER 170	Wellness/Health Elective	-	<u>2</u>	<u>2</u>
		17	15	29
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
SPEE 214	Intro to Public Speaking	-	3	3
ANSC 140	Principles of Animal Science	3	-	3
GEHI 122	U.S. History	-	3	3
AGRI 280	Principles of Geograph Info Sys	-	3	3
CHEM 101, 103	General Chemistry I & Lab	4	-	4
CHEM 102, 104	General Chem & Lab	-	4	4
SOSC 242	Principles of Soils & Lab	4	-	4
AGME 242	Principles of Agricultural Engineering	-	<u>3</u>	<u>3</u>
		14	16	30
JUNIOR YEAR				
GE	Global Studies Elective	3	-	3
PHYS 110	Intro to Phys & Phys Lab	4	-	4
SOSC 345	Soil Fertility & Fertilizer	4	-	4
BIOL 241	Introduction to Microbiology/Lab	4	-	4
SOSC 447	Soil Classification	-	3	3
PLSC 341	Field Crop Production	-	3	3
GE	Technology Elective	-	3	3
ECON 210	Principles of Microeconomics	-	3	3
SOSC 455	World Soil Resources	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
PLSC 450	Intro to Forestry	3	-	3
GEMU 380	Music & Art	3	-	3
HORT 449	Plant Propa/Nur Pract	3	-	3
PLSC/SOSC	Restrictive Elective	3	-	3
PLSC 454	Spec Topics in Crop Sci	3	-	3
SOSC 450	Problems in Soil	-	3	3
PLSC 448	Plant Breeding	-	3	3
CHEM 305, 307	Organic Chem & Lab	-	4	4
PLSC 444	Genetics	-	<u>3</u>	<u>3</u>
		15	13	28

Total hours required for graduation - 120

HUMAN ECOLOGY**Academic Programs:****Family and Consumer Sciences**

Dietetics
Family, Child and Community Services
Teacher Education Endorsement
Textiles, Apparel and Marketing Management

Hospitality Management

Dietetics Internship Program

The Program

The Family and Consumer Sciences curriculum is designed to provide students with a broad background in the Human Ecology subject areas. These areas include foods and nutrition, textiles and clothing, human development, housing, and management of resources. The Teacher Education Endorsement concentration meets the requirements of the Virginia Department of Education. It focuses on preparing students for careers as teachers and employment in business, industry, and governmental agencies.

The curriculum 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 context. 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. An internship and other volunteer work experiences are required. The Center for Young Children is an important component of the Program. It offers developmental and educational services for two- to five-year-old children. Observational facilities promote a conducive research atmosphere.

The Hospitality Management Program is designed to prepare students for a wide variety of career opportunities in the hospitality industry. The curriculum is designed in recognition of the demands of the industry for well-trained and qualified leaders. The focus of the program is the development of managerial and leadership skills essential to all hospitality managers, with rigorous course work in management of hotels and restaurants, travel tourism, recreation, retail, convention and meeting planning; food service systems management; marketing; accounting; hospitality law; and general management. Students participate in laboratory experiences and are required to complete two 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.

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. The Hospitality Management Program, is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA) since 1995. The mission of the program is "To prepare students to be effective and empowered hospitality leaders who can assume productive roles in an ever-changing global society."

The curriculum Textile, Apparel Merchandising (TAMM) is also designed to prepare students for careers in fashion related businesses. Opportunities are available in business, industry, governmental, and educational settings. Students will have a broad, understanding of textiles, clothing, fashion, merchandising and/or retailing of textiles, consumer foods, and of business associated with families and consumer issues.

The Dietetics Program offers three options for students: 1. B.S. in Family and Consumer Science with a concentration in Dietetics, 2. Certification Program in Nutrition and Dietetics; and 3. Dietetic Internship.

Option 1**B.S. Degree in Family and Consumer Science, Concentration in Dietetics**

Concurrently fulfills the Virginia State University's American Dietetic Association's (ADA) accredited Didactic Program in Dietetics (DPD). Graduates are eligible for ADA accredited Dietetic Internship (DI) Programs.

Option 2**Certificate Program in Nutrition and Dietetics**

This option is for students who already have a baccalaureate degree. Concurrently fulfills the Virginia State University's ADA accredited DPD. Graduates are eligible to apply for ADA accredited DI Programs.

Option 3**Dietetic Internship**

This option is open to students who have completed DPD requirements from an ADA accredited program and have been accepted into the VSU Dietetic Internship Program.

The B.S. Degree in Family and Consumer Science with a concentration in Dietetics and the Certificate Program in Nutrition and Dietetics both fulfill the Didactic Program in Dietetics (DPD) coursework. The DPD curriculum is designed to provide a body of foundation, knowledge, and skills in the area of nutrition and dietetics which is a requirement for entry-level dietitians. The knowledge and skills consist of basic and working knowledge and the ability to demonstrate the knowledge and skills in the content areas of communications, physical and biological sciences, social sciences, research, food, nutrition, management, and health care systems. Graduates of either program are eligible to apply for American Dietetic Association's (ADA) accredited Dietetic Internships (DI). Successful completion of a DI is an essential component for eligibility to take the national Registered Dietitian (RD) examination. To practice as an RD, one needs to pass the RD examination.

The DPD Program is currently accredited by the Commission on the Accreditation for Dietetics Education of the American Dietetic Association, 216 W. Jackson Blvd., Chicago, IL 60609-6995, and phone: (312) 899-4876. The ADA's Commission on Accreditation for Dietetics Education is a specialized accrediting body recognized by the Council on Higher Education Accreditation and the United States Department of Education.

The curriculum for B.S. Degree in Family and Consumer Science with a concentration in Dietetics and the Certificate Program in Nutrition and Dietetics is listed in the following pages. Students who successfully complete the B.S. Degree in Family and Consumer Science with a concentration in Dietetics with a C or better in all DPD coursework will receive a Verification Statement which is needed for the DI application. Students who enroll in the Certificate Program in Nutrition and Dietetics and complete at least 30 credit hours with a C or better will receive a Verification Statement for DI Application. Students who need less than 30 credit hours will also be required to pass a comprehensive assessment evaluation before receiving the Verification Statement.

Course Descriptions
FAMILY AND CONSUMER SCIENCES

HEBU 381 INTERNSHIP IN FAMILY AND CONSUMER SCIENCES - 3 semester hours**Sp**

Students will participate in introductory work experiences relating to their area of emphasis. The areas include Child Development Centers, Marketing and Retailing of Apparel, Extension Services and Community Services. Three-hundred hours are required. The internship will be supervised by an Human Ecology faculty member and a coordinator at the place of the internship.

HEBU 481 INTERNSHIP IN FAMILY AND CONSUMER SCIENCES - 6 semester hours**Su**

Students will participate in planned work and service experiences, serving as supervisors, assistants and special aides. Learning and career goals are clearly defined. The experiences will serve to improve interpersonal relations, increase technical skills and experiences related to day to day operations of a business or other setting. Students may conduct the internship in a Child Development Center, Apparel Industry/Business, Extension or Community Services organizations, or a related career. Three-hundred hours are required for the internship.

HEBU 495 SELF PRESENTATION IN THE MARKETPLACE - 2 semester hours**Sp**

Students will be provided opportunities to become aware of and practice skills relative to self-presentation and survival in the world of work. Emphases are placed on etiquette in a variety of settings, character education, appropriate dress, personal development, interpersonal relationships, management of human and non-human resources, and oral and written communication skills. Learning experiences in developing the total person are required.

Prerequisite: FACS 141 Perspective on Professionalism or permission of instructor

FACS 141 PERSPECTIVES ON PROFESSIONALISM -1 semester hour**F, Sp**

Provide an overview of family and consumer sciences as a profession, introduces students to career expectations and opportunities in family and consumer sciences, hotel restaurant and institutional management and related subject areas.

FACS 262 TEXTILES AND CLOTHING - 3 semester hours **F**

Students will be exposed to the analysis of textiles used for clothing related to care, structure, characteristics and construction. Special emphasis is placed on designing a wardrobe for specific purposes and high quality construction techniques.

FACS 263 HOUSEHOLD FURNISHINGS AND EQUIPMENT - 3 semester hours **Sp**

Concepts of housing and equipment which include selection criteria, quality standards, operation and financial analysis for family decision making will be taught.

FACS 342 OCCUPATIONAL FAMILY AND CONSUMER SCIENCES - 3 semester hours **Sp**

Focuses on planning, implementing and evaluating Family and Consumer Sciences occupational education programs. Practical experiences provided in chosen areas of occupational endorsement.

Prerequisites: DIET 221 Principles of Food Preparation; DIET 310 Human Nutrition; FCCS 301 Child Development; FACS 262 Textiles and Clothing

FACS 403 HOME AND FINANCIAL MANAGEMENT - 3 semester hours **F**

Democratic principles in family living constitute the basis on which the home management experience is planned. Areas of responsibility rotates 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 concept.

Prerequisite: DIET 322 Meal Management

FACS 440 CONTEMPORARY APPROACHES TO CURRICULUM AND TECHNIQUES - 3 semester hrs. **Sp**

An assessment of current trends in curriculum development related Family and Consumer Sciences is made; an analysis of components of curriculum related to management of resources and development and use of current teaching and motivating techniques designed to assure specific competency levels is done.

FACS 402 STUDENT TEACHING - 3 semester hours **F, Sp**

Students will be provided opportunities to make practical application of knowledge and skills in a classroom setting. They teach under the supervision and direction of cooperating teachers and the University Family and Consumer Sciences educator. Students are expected to assume total responsibility for planning, developing, implementing, and evaluating all classes assigned during the student teaching period.

Prerequisites: All course work (Refer to criteria pertaining to student teaching as outlined under the Center for Undergraduate Professional Education Program)

HIDG 161 PRINCIPLES OF ART AND DESIGN - 3 semester hours **F**

Students will be given an understanding of the basic principles of design as they relate to fashion and residential environments. Special considerations will be given to visual design in a sensory and behavioral context.

HIDG 316 ADVANCED INTERIOR DESIGN - 3 semester hours **Sp**

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; IDG 263 Household Furnishings and Equipment

HIDG 362 ADVERTISING DESIGN AND DISPLAY - 3 semester hours **Sp**

Study of developing presentation techniques on organizing subject matter for advertising and display suitable for reproduction. 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 semester hours **F**

Study of the relationship of people's basic needs and values in relation to their housing-modern, rural, and urban living patterns the housing as related to diversified societies and cultural backgrounds. Housing needs and resources for the aged are examined. Open to non-majors.

FCCS 101 FAMILY AND COMMUNITY HEALTH - 2 semester hours **Sp**

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 practice and trends in health related problems.

FCCS 102 INDIVIDUAL FAMILY AND COMMUNITY LIFESTYLES - 3 semester hours **Sp**

Designed to explore various contemporary issues related to family roles, responsibilities, interpersonal interaction, functions and developmental tasks of individuals and families. Special emphasis is placed upon cultural diversity among families.

FCCS 301 CHILD DEVELOPMENT/LABORATORY - 3 semester hours **F**

General instruction to the professional field of child development, its history and scope are explored. Special attention is directed to the perceptual, cognitive, social, emotional and physical processes from infancy through adolescence. The Laboratory is to be taken simultaneously with the class. This experience allows for the student to work directly with the children and to receive "hands-on-experience" in the preschool environment (sophomores and juniors).

FCCS 302 FAMILY RELATIONS - 3 semester hours **F**

Attention given to factors related to the development of functional lifestyles and families. Consideration given to current problems relating to marriage and family life and those changes in society which affect the institution of the family. Open to non-majors.

FCCS 401 FAMILY PLANNING AND SEXUAL EDUCATION - 3 semester hours **F**

Attention given to factors related to the development of functional lifestyles and families. Includes the consideration of current problems relating to marriage and family life and those changes in society which affect the institution of the family. Designed to explore 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 semesters hours **Sp**

A study of management processes and how they can be effectively applied to specific resources. Emphasizes goals, values and standards which motivate forces behind decisions made by families and businesses. Open to non-majors.

FCCS 404 NURSERY SCHOOL PLANNING - 3 semester hours **F**

Essential procedures in child care administration, curriculum development, equipment, floor plans, food service and guidance are addressed. Emphasis will be placed on the operation of a facility according to minimum standards.

FCCS 405 PARENT EDUCATION - 3 semester hours **F**

Emphasis is placed on parenthood responsibilities and the task of parenting in today's culture. Theories and concepts relative to parent education are explored.

GEDI 101 NUTRITION: CONTEMPORARY HEALTH ISSUES - 3 semester hours **F, Sp**

Presents basic nutrition 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 requirement, impact of gender, culture, ethnicity, social environment, and lifestyle on nutrition status and health.

GEDI 102 NUTRITION: CONTEMPORARY HEALTH ISSUES LABORATORY - 1 semester hour **F, Sp**

Required to be taken in conjunction with GEDI 101 Nutrition: Contemporary Health Issues lecture course, hands on laboratory exercises related to selected lecture topics.

GEHO CONSUMER ECONOMICS - 3 semester hours **F, Sp**

A study of personal and family money management problems, designed to help individuals acquire knowledge, understanding of basic principles of consumer economics and to aid them to developing abilities and skills necessary for intelligent management of personal and family income to function in a global society.

DIETETICS**DIET 221 PRINCIPLES OF ANALYSIS OF FOODS - 3 semester hours** **Sp**

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.

DIET 275 SEMINAR IN PRACTICE - 1 semester hour

A study of the history, structure, and function of the American Dietetic Association and current issues facing the profession. Students explore career options and laws, regulations and standards affecting dietetic practice.

DIET 310 HUMAN NUTRITION - 3 semester hours **F**

The examination of present knowledge in nutrition. Emphasis is on selection of foods as a source of nutrients which fulfill desirable nutritional standards. Computer experiences required.

Prerequisite: one semester of college chemistry or biology

DIET 311 NUTRITION IN THE LIFE CYCLE - 3 semester hours **Sp**

A study of the nutritional requirements at different stages of the life span and the factors which influence eating patterns. Emphasis 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 semester hours **F**

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 221 Principles of Analysis of Food; DIET 310 Human Nutrition

DIET 385 NUTRITIONAL BIOCHEMISTRY - 3 semester hours **Sp**

A study of energy metabolism and the role of nutritional factors. Discusses the composition of living matter and the chemical changes associated with nutritional status.

Prerequisites: CHEM 305 Organic Chemistry I; DIET 310 Human Nutrition

DIET 410 NUTRITION COUNSELING PRACTICUM - 2 semester hours **Sp**

Counseling skills applied to dietetic practice. Emphasizes interviewing and listening skills, surfacing underlying issues, motivation, behavior modification, supporting group processes, and documentation. Student counseling experiences required.

Prerequisites: GEPS 124 Introduction to Psychology; GEPS 211 Introduction to Social Science;
DIET 311 Nutrition in the Life Cycle

DIET 422 NUTRITION AND THE COMMUNITY - 3 semester hours **F**

Explores resources existing in governmental and voluntary organizations for working with nutrition problems. 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 semester hours **Sp**

Recent research with its application to human nutrition. Discusses the metabolic consequences of nutritional manipulation.

Prerequisite: DIET 385 Nutritional Biochemistry

DIET 431 MEDICAL NUTRITION THERAPY I - 3 semester hours **F**

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 1 of a two-part course.

Prerequisite: DIET 311 Nutrition in the Life Cycle; DIET 385 Nutritional Biochemistry

DIET 433 QUANTITY FOODS - 3 semester hours **Sp**

Study and practice in planning, purchasing, preparing, and serving 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

DIET 435 ORGANIZATION AND MANAGEMENT OF FOOD SERVICE SYSTEMS - 3 semester hours **F**

The application of management principles to food service systems. Emphasis is on policies and procedures, cost/benefit analysis, computer applications, human and financial resource management.

Prerequisites: DIET 322 Meal Management

DIET 437 MEDICAL NUTRITION THERAPY II - 3 semester hours **Sp**

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.

Prerequisite: DIET 431 Medical Nutrition Therapy I or prior approval by Program Director

DIET 489 PRACTICUM IN DIETETICS - 3 semester hours

F, Sp

The practical application of previously learned theories in Medical Nutrition Therapy, Food Service Management Systems, and other dietetics practice areas.

Prerequisites: DIET 275 Seminar in Practice; DIET 310 Human Nutrition; DIET 311 Nutrition in the Life Cycle; DIET 322 Meal Management; DIET 385 Nutritional Biochemistry; DIET 431 Medical Nutrition Therapy I; DIET 435 Organization and Management of Food Service Systems
Concurrent: DIET 410 Nutrition Counseling; DIET 424 Advanced Human Nutrition; DIET 437 Medical Nutrition Therapy II

TEXTILES, APPAREL AND MARKETING MANAGEMENT**TAMM 271 CLOTHING CONSTRUCTION - 3 semester hours**

F

Designed to provide students with fundamentals of construction, production, personal choice merchandising, marketing and producing apparel goods.

TAMM 371 FAMILY PROBLEMS IN CLOTHING - 3 semester hours

Sp

Emphasis is placed upon selection and management practices in relation to individual and family needs. This includes the handicaps, the elderly and special needs person.

TAMM 372 HISTORY OF COSTUMES - 3 semester hours

Sp

Study of historic costumes with emphasis on developing an appreciation and understanding of fundamentals of historic costumes in relation to fashion trends.

TAMM 373 THE BUSINESS WORLD OF FASHION - 3 semester hours

Sp

A framework for fashion merchandising strategy. Emphasis on elements of merchandising, new product decisions, planned and assortment policy, as well as, evaluation.

TAMM 471 FLAT PATTERN DESIGN - 3 semester hours

Sp

Major emphasis on techniques of designing patterns and altering flat patterns. Advanced construction techniques and original design in appropriate fabrics are studied.

Prerequisites: TAMM 373 Fashion Illustration

TAMM 473 TEXTILE DESIGN - 3 semester hours

F

Understanding of textile design as an art, craft, and process in consumer business and industrial applications. Emphasis is placed on creation and execution of designs and their appropriateness to various fibers in the environment.

Prerequisite: TAMM 373 Fashion Illustration

TAMM 474 ADVANCED CLOTHING - 3 semester hours

F

Application of principles and techniques of tailoring in the construction of garments.

Prerequisite: FACS 272 Textiles and Clothing

TAMM 475 ADVANCED TEXTILES - 3 semester hours

F

Study of physical and chemical properties of fibers in relation to fabric characteristics. Technological developments in fabric formation, dyes, and finishes, testing techniques and recent development in related research are explored. **Prerequisite:** FACS 272 Textiles and Clothing

HOSPITALITY MANAGEMENT

The Hospitality Industry is the largest private industry worldwide. The VSU Hospitality Management major, upon graduation receives multiple job offers. The Hospitality Management Program experiences placement rates of 100% each year for its graduates. There is critical 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. Minority representation is needed to create balance in higher echelons of the businesses that comprise the hospitality industry. The Hospitality Management core courses are listed below. Students will be advised on selection of classes based on their stated career interest. Internship placement will support the area of interest.

Course Descriptions**HMGT 101 INTRODUCTION TO HOSPITALITY MANAGEMENT - 3 semester hours** **F**

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 107 FOOD SANITATION AND SAFETY - 3 semester hours **Sp**

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.

Prerequisites: HMGT 101

HMGT 111 PROFESSIONAL DEVELOPMENT - 1 semester hour **Sp**

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

HMGT 200 TOURISM MANAGEMENT - 3 semester hours **Sp**

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, 107

HMGT 201 HOSPITALITY APPLICATIONS TECHNOLOGY - 3 semester hour **Sp**

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.

Prerequisites: HMGT 101, 203

HMGT 203 LODGING MANAGEMENT - 3 semester hours **F**

Study 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

HMGT 211 PROFESSIONAL DEVELOPMENT - 1 semester hour **Sp**

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

HMGT 221 PRINCIPLES OF FOOD PREPARATION - 3 semester hours **Sp**

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, HMGT 107

HMGT 223 INTRODUCTION TO BAKING AND PASTRY - 3 semester hours **Sp**

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, 221

HMG 299 INTERNSHIP IN HOSPITALITY MANAGEMENT - 1 semester hour**Sp, Su**

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. 320 clock hours required.

Prerequisites: Completion of all freshman and sophomore HMG 299 courses

HMG 300 INTERNATIONAL STUDY TOUR - 3 semester hours**Su**

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: HMG 101 and or 200

HMG 301 LODGING OPERATIONS MANAGEMENT - 3 semester hours**F**

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: HMG 203

HMG 302 CATERING AND EVENT MANAGEMENT - 3 semester hours**Sp**

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: HMG 322, MKTG 300 or junior standing.

HMG 303 HOSPITALITY LAW AND ETHICS - 3 semester hours**Sp**

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: Junior standing

HMG 304 FOOD AND BEVERAGE CONTROL - 3 semester hours**Sp**

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: HMG 107, 221

HMG 305 HOSPITALITY MANAGEMENT CONTRACTS - 3 semester hours**Sp, Sp**

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: HMG 303

HMG 306 FINANCIAL MANAGEMENT AND PLANNING - 3 semester hours**Sp, F**

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.

HMG 310 SECURITY AND LOSS PREVENTION MANAGEMENT - 3 semester hours**Sp, F**

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: HMG 201, 203, 301

HMG 311 PROFESSIONAL DEVELOPMENT - 1 semester hour**Sp**

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: HMG 211

HMG 320 TOURISM DEVELOPMENT - 3 semester hours**Sp**

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: HMG 200, 301 and ECON 210 or junior standing

HMG 321 SERVICE MANAGEMENT - 3 semester hours**Sp, F**

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: HMG 203, 301, 322

HMG 322 MEAL MANAGEMENT & Lab - 3 semester hours**F**

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: HMG 101, HMG 107, HMG 221.

HMG 324 Introduction to Beverage Service - 3 semester hours**Sp, F**

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 offsite locations.

Prerequisites: HMG 221, 322

HMG 325 CULTURE AND CUISINE - 3 semester hours**Sp, F**

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: HMG 221, 322

HMG 326 GARDE MANAGER - 3 semester hours**Sp, F**

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: HMG 107, 221

HMG 330 INTERNATIONAL HOPITALITY MANAGEMENT - 3 semester hours**Sp, F**

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: HMG 200, 201, 301, 300, 303

HMG 333 QUALITY MANAGEMENT - 3 semester hours**Sp, F**

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 Baldrige, continuous improvement, empowerment, goal setting, conflict management, change management and diversity will be addressed.

HMG 350 GAMING AND CRUISE-SHIP OPERATIONS - 3 semester hours**Sp, F**

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: HMG 201, 203, 301

HMG 399 INTERNSHIPS IN HOSPITALITY MANAGEMENT - 2 semester hours**Sp, Su**

Internship for students in HMP 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. 360 clock hours are required.

Prerequisite: Completion of HMG 299 and all junior HMG courses.

HMG 400 ROOMS DIVISION MANAGEMENT - 3 semester hours**Sp**

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: HMG 203,301

HMG 402 HOSPITALITY HUMAN RESOURCE MANAGEMENT - 3 semester hours**Sp**

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 / MGMT 330

HMG 404 HOSPITALITY ACCOUNTING AND PURCHASING - 3 semester hours**F**

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

HMG 407 CONFERENCE AND EXPOSITION MANAGEMENT - 3 semester hours**Sp**

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: HMG 203, 302,322, or junior standing.

HMG 409 HOSPITALITY FACILITY MANAGEMENT AND PLANNING - 3 semester hours**F**

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: HMG 203, 322, or junior standing

HMG 420 RESORT MANAGEMENT - 3 semester hours**F**

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: HMG 201, 301

HMG 430 REVENUE MANAGEMENT AND STRATEGIC PLANNING - 3 semester hours**Sp**

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: HMG 400, 404

HMG 432 ADVANCED FOOD PREPARATION - 3 semester hours **F**

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: HMG 221, 322

HMG 433 QUALITY FOODS - 3 semester hours **Sp**

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: HMG 322 or Diet 322

HMG 435 ORGANIZATIONAL LEADERSHIP, MANAGEMENT AND DECISION-MAKING - 3 semester hours **Sp**

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: HMG 404, MGT 330

HMG 440 CONTEMPORARY ISSUES IN HOSPITALITY MANAGEMENT - 3 semester hours **Sp, F**

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: HMG 201, 203, 301

HMG 444 HOSPITALITY AND TOURISM RESEARCH - 3 semester hours **Sp, F**

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.

Prerequisite: HMG 200, 203, HMG 449, STAT 210

HMG 449 HOSPITALITY MARKETING MANAGEMENT - 3 semester hours **F**

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: Junior standing

HMG 450 SENIOR SEMINAR - 3 semester hours **Sp**

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: All HMG required courses

HMG 499 HOSPITALITY MANAGEMENT SEMINAR - 3 semester hours **F, Sp**

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 HMG required courses

DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
HOSPITALITY MANAGEMENT MAJOR
Bachelor of Science Degree
B.S. Hospitality Management (120hrs)

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMGT 101	Introduction to Hospitality	3	-	3
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Mathematics I	3	-	3
GEHI 122/123	United States History	3	-	3
HYPER 170	Personal Health	2	-	2
FRST 101	Freshman Studies	<u>2</u>	<u>-</u>	<u>2</u>
ENGL 111	Composition II	-	3	3
GEMA 113	Basic Mathematics II	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMGT 107	Food Sanitation and Safety	-	3	3
HMGT 111	Professional Development	<u>-</u>	<u>1</u>	<u>1</u>
		16	17	33
SOPHOMORE YEAR				
AGRI 150	Environmental Science	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HMGT 203	Lodging Management	3	-	3
ENGL 201	Introduction to Literature	3	-	3
HMGT 211	Professional Development	-	1	1
SPEE 214	Introduction to Public Speaking	-	3	3
HMGT 200	Tourism Management	-	3	3
HMGT 221	Principles of Food Preparation	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMGT 299	Internship I	<u>-</u>	<u>1</u>	<u>1</u>
		16	17	33
JUNIOR YEAR				
HMGT 301	Lodging Operations Management	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HMGT 322	Meal Management	3	-	3
GEOG 120	World Geography	3	-	3
HMGT 303	Hospitality Law and Ethics	-	3	3
MGMT 330	Organization Behavior	-	3	3
HMGT 311	Professional Development	-	1	1
HMGT 399	Internship (360 Hours)	-	2	2
HMGT	Hospitality Restrictive Elective	-	3	3
		15	12	27
SENIOR YEAR				
HMGT	Restrictive Elective	3	-	3
GE	Spanish/French 110	3	-	3
HMGT 404	Hospitality Accounting & Purchasing	3	-	3
HMGT 409	Hospitality Facilities Management	3	-	3
HMGT 449	Hospitality Marketing Management	3	-	3
HMGT 402	Hospitality Human Resources Management	-	3	3
HMGT 407	Conference & Exposition Management	-	3	3
HMGT 435	Leadership Management & Decision Making	-	3	3
HMGT 450	Senior Seminar	<u>-</u>	<u>3</u>	<u>3</u>
		15	12	27

Electives:

HMGT 300	International Study Tour	3
HMGT 302	Catering and Event Management	3
HMGT 304	Club Management	3
HMGT 305	Hospitality Management and Operations	3
HMGT 306	Financial Analysis and Planning	3
HMGT 320	Tourism Development	3
HMGT 321	Service Management	3
HMGT 330	International Hospitality Management	3
HMGT 444	Hospitality and Tourism Research	3
HMGT 499	Hospitality Management Seminar	3

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
FAMILY AND CONSUMER SCIENCES MAJOR
DIETETICS CONCENTRATION
Bachelor of Science Degree**

		Semester Hours		
		1 st Sem	2 nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I & II	3	3	6
GEMA 112, 113	Basic Mathematics	3	3	6
GEHI 122	US History	3	-	3
GEPS 124	Introduction to Psychology	3	-	3
FRST 101	Freshman Studies	2	-	2
BIOL 112	Principles of Biology I/Lab	-	4	4
FACS 141	Perspective on Prof	-	1	1
GE _____	Technology Elective	-	3	3
MGMT 150	Business Principles	<u>3</u>	-	<u>3</u>
		17	14	31
SOPHOMORE YEAR				
CHEM 101, 103	General Chemistry I/Lab	4	-	4
CHEM 102, 104	General Chemistry II/Lab	-	4	4
ECON 210	Principles of Economics	3	-	3
STAT 210	Statistics	3	-	3
DIET 310	Human Nutrition	3	-	3
BIOL 316	Human Physiology	3	-	3
HPER _____	Wellness/Health	-	2	2
GE _____	Global Studies Electives	-	3	3
DIET 221	Principles of Analysis of Foods	-	3	3
DIET 275	Seminar in Practice	-	1	1
DIET 311	Nutrition in the Life Cycle	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
BIOL 241	Microbiology/Lab	4	-	4
CHEM 305	Organic Chemistry	3	-	3
CHEM 307	Organic Chemistry Lab	1	-	1
DIET 322	Meal Management	3	-	3
GE _____	Humanities Electives	3	-	3
GE _____	Literature	3	-	3
GEEN 310	Advanced Communication Skills	-	3	3
DIET 385	Nutritional Biochemistry	-	3	3
DIET 433	Quantity Food/Lab Elective	-	3	3
HMGT 402	Staff Planning	-	3	3
_____	Restrictive Elective	-	<u>3</u>	<u>3</u>
		17	15	32

SENIOR YEAR

DIET 431	Medical Nutrition Therapy I	3	-	3
DIET 435	Organization and Management	3	-	3
FACS 440	Cont. Appch Curr & Tech	3	-	3
FCCS 402	Decision Making/Elective	3	-	3
DIET 422	Community Nutrition	3	-	3
DIET 410	Nutrition Counseling Pract	-	2	2
DIET 424	Advanced Nutrition	-	3	3
DIET 437	Medical Nutrition Therapy II	-	3	3
DIET 489	Practice in Dietetics	-	<u>3</u>	<u>3</u>
		15	11	26

VIRGINIA STATE UNIVERSITY
DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
FAMILY AND CONSUMER SCIENCES
FAMILY, CHILD AND COMMUNITY SERVICE
(FCCS) Concentration

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Freshman Reading & Writing Literature	3	3	6
GEMA 112, 113	Basic Mathematics	3	3	6
FACS 141	Perspec on Prof	1	-	1
GEPE 165	Personal Fitness	-	1	1
FCCS 102	Ind. & Family Living	-	3	3
GEES 181	Earth Science	-	4	4
GEPS 124	Introduction to Psychology	3	-	3
HPER	Wellness/Health	2	-	2
FRST 101	Freshman Orientation	<u>2</u>	-	<u>2</u>
		14	14	28
SOPHOMORE YEAR				
GEBI 116	Biological Science/Lab	4	-	4
GEHI 122	United States History	3	-	3
ENGL 314	Multiculture Literature	3	-	3
ECON 210	Principles of Microeconomics	3	-	3
PSYC 212	Human Growth & Development	3	-	3
FACS 201	Consumer Econ	-	3	3
DIET 221	Principles of Analysis of Foods	-	3	3
GE _____	Global Studies Electives	-	3	3
FACS 262	Textiles/Clothing	-	3	3
SPEE 214	Introduction to Public Speaking	-	<u>3</u>	<u>3</u>
		16	15	31
JUNIOR YEAR				
DIET 310	Human Nutrition	3	-	3
FCCS 301	Child Development/Lab	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
FACS	Elective	3	-	3
CISY 201	Micro Computers Concept	-	3	3
DIET 433	Quantity Foods or Diet 322	-	3	3
HEBU 381	Internship	-	3	3
FACS 263	Housing and Equipment	-	3	3
_____	Humanities Elective	<u>3</u>	<u>3</u>	<u>6</u>
		15	15	30

SENIOR YEAR

FCCS 401	Family Life	3	-	3
FACS 461	Housing and Society	3	-	3
	Elective	-	3	3
FACS 403	Home and Financial Management	3	-	3
FACS	Elective (Diet or Busi)	3	-	3
FACS 440	Contemp. Curriculum Techn.	-	3	3
HEBU 481	Internship	-	3	3
DIET 435	Organization and Management	3	3	6
	Elective	<u>3</u>	<u>3</u>	<u>6</u>
		18	15	33

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
FAMILY AND CONSUMER SCIENCE WITH A
MINOR IN SECONDARY EDUCATION 6-12 (121 HRS)**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100	Analytical Reading, Writing and Reasoning I	2**	-	2**
IDST 101	Analytical Reading, Writing and Reasoning II	-	2**	2**
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
MATH 112	Basic Math I	3	-	3
MATH 113	Basic Math II	-	3	3
GEBI 116	Principles of Biology & Lab	-	4	4
FACS 141	Perspective on Profession	1	-	1
GEHI 122 or 123	United States History or Elective	-	3	3
FCCS 102	Ind & Family Living	-	3	3
HPER 170	Health and Wellness	2	-	2
HIDG 161	Principles of Art and Design	3	-	3
FRST 101	Freshman Studies	<u>2</u>	<u>-</u>	<u>2</u>
		16	16	32
SOPHOMORE YEAR				
EDUC 201	Introduction to Teaching I	2	-	2
EDUC 202	Introduction to Teaching II	-	2	2
IDST 200	Digital Media in Teach Education	3	-	3
ENGL 314	Reading/Writing Literature	3	-	3
GEES 181	Earth Science/Laboratory	4	-	4
GEHI 210	Consumer Economics	3	-	3
DIET 221	Prin. of Food Preparation	-	3	3
FACS 262	Textile/Clothing	-	3	3
FACS 263	Housing & Equipment	-	3	3
PSYC 212	Human Growth and Development	<u>-</u>	<u>3</u>	<u>3</u>
		15	14	29
JUNIOR YEAR				
EDUC 315	Data Driven Instructional Design	3	-	3
SPED 403	Classroom Management in Educational Settings (FE)	-	3	3
SPEE 214	Introduction to Public Speaking	-	3	3
DIET 310	Human Nutrition	3	-	3
FCCS 301	Child Development/Lab	3	-	3
FACS 342	Occupational Family/Consumer	-	3	3
HLTH 346	School and Community Health	2	-	2
DIET 322	Meal Management	-	3	3
HIDG 461	Housing and Society	<u>3</u>	<u>-</u>	<u>3</u>
		14	12	26

SENIOR YEAR

EDUC 424	Critical Issues in Education	2	-	2
FCCS 401	Family Planning/Sexual Education	3	-	3
FACS 403	Home and Financial Management	3	-	3
FACS 440	Contemporary Curr. Tech	3	-	3
FCCS 402	Decision Making	3	-	3
EDUC 427	Readings in the Subject Area	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
FACS 402	Student Teaching FACS	-	3	3
EDUC 402	Student Teaching	-	<u>9</u>	<u>9</u>
EDUC 424		17	15	32

**IDST 100/101 are not counted in semester hours or toward graduation requirement

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
FAMILY AND CONSUMER SCIENCES MAJOR**

Textile, Apparel Merchandising Management (TAMM) Concentration

Bachelor of Science Degree

		Semester Hours		
		1st Sem	2nd Sem	Total Hours
FRESHMAN YEAR				
HIDG 161	Principles of Art and Design	3	-	3
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Composition II	3	3	6
GEMA 112, 113	MATH	3	3	6
HPER _____	Wellness/Health	2	-	2
FACS 141	Persp on Prof	1	-	1
TAMM 272	Clothing Construction	-	3	3
GEHI 122	US History	-	3	3
BIOL 100	Biology I and Lab	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
CHEM 101	General Chemistry I/Lab	4	-	4
GE _____	Humanities Elective	3	-	3
FACS 201	Cons. Economics	3	-	3
ENGL 201	Literature	3	-	3
GEPS 124	Introduction to Psychology	3	-	3
SPEE 214	Introduction to Public Speaking	-	3	3
PHIL 180	Critical Thinking	-	3	3
ECON 210	Principles of Economics	-	3	3
TAMM 371	Family Clo Problems	-	3	3
PSYC 212	Human Growth	-	3	3
		16	15	31
JUNIOR YEAR				
HIDG 362	Adv Design & Display	3	-	3
MKTG 300	Principles of Marketing	3	-	3
HIDG 361	Adv. Int. Design	3	-	3
TAMM 372	History of Fashion	3	-	3
TAMM 473	Textile Design	3	-	3
GE _____	Technology Elective	-	3	3
TAMM 373	Fashion Illustration	-	3	3
HEBU 381	Internship	-	3	3
TAMM 374	Business World of Fashion	-	3	3
GE _____	Humanities Elective	-	<u>3</u>	<u>3</u>
		15	15	30

SENIOR YEAR

HEBU 381	Internship	3	-	3
FINC 350	FIN MGMT	3	-	3
FCCS 402	Decision Making	3	-	3
TAMM 471	Flat Pattern	3	-	3
FACS	Elective	3	2	5
TAMM 474	Advanced Clothing	-	3	3
TAMM 476	Advanced Textiles	-	3	3
GE _____	Global Studies	=	<u>3</u>	<u>3</u>
		15	11	26

Total hours required for graduation - 120

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
HOSPITALITY MANAGEMENT
Bachelor of Science Degree**

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMGT 101	Introduction to Hospitality	3	-	3
GEEN 110	Freshman Writing	3	-	3
GEEN 111	Reading Writing and Literature I	-	3	3
GEMA 112	Basic Mathematics I	3	-	3
GEMA 113	Basic Mathematics II	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMGT 107	Food Sanitation and Safety	-	3	3
HMGT 111	Professional Development	-	1	1
GEHI 122/123	United States History	3	-	3
GE	Wellness/Health Elective	2	-	2
FRST 101	Freshman Studies	<u>2</u>	=	<u>2</u>
		16	17	33
SOPHOMORE YEAR				
AGRI 150	Environmental Science	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HMGT 203	Lodging Management	3	-	3
ENGL	Introduction to Literature	3	-	3
HMGT 211	Professional Development	1	-	1
SPEE 214	Introduction to Public Speaking	-	3	3
HMGT 200	Tourism Management	-	3	3
HMGT 221	Principles of Food Preparation	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMGT 299	Internship I	-	1	1
GE _____	Technology Elective	=	<u>3</u>	<u>3</u>
		17	16	33
JUNIOR YEAR				
HMGT 201	Hospitality Technology Applications	3	-	3
HMGT 301	Lodging Operations Management	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HMGT 322	Meal Management	3	-	3
HMGT 303	Hospitality Law and Ethics	-	3	3
HMGT 311	Professional Development	-	1	1
HMGT 399	Internship (360 Hours)	-	2	2
HMGT	Hospitality Restrictive Elective	-	3	3
MGMT	Organization Behavior	-	3	3

		15	12	27
	SENIOR YEAR			
HMGT	Restrictive Elective	3	-	3
GE	Spanish/French 110	3	-	3
HMGT 404	Hospitality Accounting & Purchasing	3	-	3
HMGT 409	Hospitality Facilities Management	3	-	3
HMGT 449	Hospitality Marketing Management	3	-	3
HMGT 402	Hospitality Human Resources Management	-	3	3
HMGT 407	Conference & Exposition Management	-	3	3
HMGT 435	Leadership Management & Decision Making	-	3	3
HMGT 450	Senior Seminar	-	<u>3</u>	<u>3</u>
		15	12	27

Total hours required for graduation – 120

Electives:

HMGT 300	International Study Tour	3
HMGT 302	Catering and Event Management	3
HMGT 304	Club Management	3
HMGT 305	Hospitality Management and Operations	3
HMGT 306	Financial Analysis and Planning	3
HMGT 320	Tourism Development	3
HMGT 321	Service Management	3
HMGT 330	International Hospitality Management	3
HMGT 444	Hospitality and Tourism Research	3
HMGT 499	Hospitality Management Seminar	3

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
RESTAURANT MANAGEMENT AND CULINARY CONCENTRATION
Bachelor of Science**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMGT 101	Introduction to Hospitality	3	-	3
ENGL 110, 111	Composition I, II	3	3	6
GEMA 112	Basic Mathematics	3	-	3
GEHI 122 or 123	United States History	3	-	3
HPER _____	Wellness/Health Elective	2	-	2
FRST 101	Freshman Studies	2	-	2
GEMA 113	Basic Mathematics	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMGT 107	Food Sanitation & Safety	-	3	3
HMGT 111	Professional Development	-	<u>1</u>	<u>1</u>
				33
SOPHOMORE YEAR				
AGRI 150	Environmental Science/Lab	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HMGT 221	Principles of Food Preparation	3	-	3
ENGL 201	Introduction to Literature	3	-	3
HMGT 211	Professional Development	1	-	1
SPEE 214	Introduction to Public Speaking	-	3	3
HMGT 223	Introduction to Baking and Pastry	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMGT 299	Internship I	-	1	1
GE _____	Technology Elective	-	<u>3</u>	<u>3</u>
				30

JUNIOR YEAR

HMGT 303	Hospitality Law	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HMGT 322	Meal Management	3	-	3
HMGT 201	Hospitality Technology Applications	3	-	3
HMGT 304	Food and Beverage Controls	-	3	3
HMGT 311	Professional Development	-	1	1
HMGT 399	Internship	-	2	2
HMGT _____	Hospitality Restrictive Elective	-	3	3
GE _____	Spanish/French 110	-	3	3
MGMT 330	Organization Behavior	-	3	3
		15	15	30

SENIOR YEAR

HMGT ____	Restrictive Elective	3	-	3
HMGT 432	Advanced Food Preparation	3	-	3
HMGT 404	Hospitality Accounting & Purchasing	3	-	3
HMGT 409	Hospitality Facilities Management	3	-	3
HMGT 449	Hospitality Marketing Management	3	-	3
HMGT 402	Hospitality Human Resources Management	-	3	3
HMGT 407	Conference and Exposition Management	-	3	3
HMGT 435	Decision-Making	-	3	3
HMGT 450	Senior Seminar	-	3	3
				27

MINOR IN HOSPITALITY MANAGEMENT

A minor in this area will open up the possibilities and opportunities for employment in the field of Hospitality and Tourism Management; this could be seen as a career management strategy. The HMGT minor is designed to provide useful information and will enhance awareness regarding various fundamental aspects of the hospitality field. This is a very competitive field and the expectations are very high. Our students have an outstanding record of success upon graduation in the industry. 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. Hotels, resorts, theme parks, restaurants, cruise ships, casinos, airlines, convention centers, travel agencies and country clubs need professionals with knowledge in a variety of fields and offer careers that provide competitive salaries and benefits.

A sampling of the Hospitality Management courses for the minor are listed below. Students will be advised for selection of classes based on their career interest. Internship placement will support the area of interest.

Sample Program Requirements for
MINOR IN HOSPITALITY MANAGEMENT

Required courses:		7 credits
HMGT 101	Introduction to Hospitality Management	3 crs
HMGT 402	Hospitality Human Resources Management	3 crs
HMGT 299	Internship in Hospitality Management	1 cr
Choose any two from the following:		6 credits
HMGT 449	Hospitality Marketing	3 crs
HMGT 407	Conference and Exposition Management	3 crs
HMGT 302	Catering and Event Management	3 crs
HMGT 322	Meal Management	3 crs
HMGT 107	Food Sanitation and Safety	3 crs
Choose any two from the following:		6 credits
HMGT 200	Tourism Management	3 crs
HMGT 203	Lodging Management	3 crs

HMG 201	Hospitality Technology Applications	3 crs
HMG 303	Hospitality Law and Ethics	3 crs
HMG 409	Hospitality Facilities Management	3 crs

OTHER REQUIREMENTS

- Minimum GPA of 2.0 to be accepted into program and maintained for all courses used to satisfy the minor.
- It is the responsibility of the student to meet with a Hospitality Management Program Advisor to determine their study plan and for orientation and program guidelines.

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
HOSPITALITY MANAGEMENT MAJOR**

Bachelor of Science Degree

B.S. in Hospitality Management

Restaurant Management and Culinary Concentration

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMG 101	Introduction to Hospitality	3	-	3
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Mathematics I	3	-	3
GEHI 122/123	United States History	3	-	3
HPER	Wellness/Health Elective	2	-	2
FRST 101	Freshman Studies	2	-	2
ENGL 111	Composition II	-	3	3
GEMA 113	Basic Mathematics II	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMG 107	Food Sanitation and Safety	-	3	3
HMG 111	Professional Development	-	<u>1</u>	<u>1</u>
		16	17	33
SOPHOMORE YEAR				
AGRI 150	Environmental Science/Lab	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HMG 221	Principles of Food Preparation	3	-	3
ENGL 201	Introduction to Literature	3	-	3
HMG 211	Professional Development	1	-	1
SPEE 214	Introduction to Public Speaking	-	3	3
HMG 223	Introduction to Baking and Pastry	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMG 299	Internship I	-	1	1
GE _____	Technology Elective	-	<u>3</u>	<u>3</u>
		17	13	30
JUNIOR YEAR				
HMG 303	Hospitality Law and Ethics	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HMG 322	Meal Management	3	-	3
HMG 201	Hospitality Technology Applications	3	-	3
HMG 304	Food and Beverage Controls	-	3	3
HMG 311	Professional Development	-	1	1
HMG 399	Internship (360 Hours)	-	2	2
HMG	Hospitality Restrictive Elective	-	3	3
GE	Spanish/French 110	-	3	3
MGMT 330	Organization Behavior	-	<u>3</u>	<u>3</u>

SENIOR YEAR

HMGT	Restrictive Elective	3	-	3
HMGT 432	Advance Food Preparation	3	-	3
HMGT 404	Hospitality Accounting & Purchasing	3	-	3
HMGT 409	Hospitality Facilities Management	3	-	3
HMGT 449	Hospitality Marketing Management	3	-	3
HMGT 402	Hospitality Human Resources Management	-	3	3
HMGT 407	Conference & Exposition Management	-	3	3
HMGT 435	Leadership Management & Decision Making	-	3	3
HMGT 450	Senior Seminar	-	3	3
		15	12	27

Electives:

HMGT 302	Catering and Event Management
HMGT 321	Service Management
HMGT 324	Introduction to Beverage Service
HMGT 325	Culture and Cuisine
HMGT 326	Garde Manager

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
LODGING OPERATIONS MANAGEMENT CONCENTRATION
Bachelor of Science Degree**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMGT 101	Introduction to Hospitality Management	3	-	3
ENGL 110, 111	Composition I, II	3	3	6
GEMA 112	Basic Mathematics	3	-	3
GEHI 122 or 123	United State History	3	-	3
HPER	Wellness/Health Elective	2	-	2
FRST 101	Freshman Studies	2	-	2
GEMA 113	Basic Mathematics	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMGT 203	Lodging Management	-	3	3
HMGT 111	Professional Development	-	1	1
				33
SOPHOMORE YEAR				
AGRI 150	Environmental Science/Lab	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HMGT 200	Tourism Management	3	-	3
ENGL 201	Introduction to Literature	3	-	3
HMGT 211	Professional Development	1	-	1
SPEE 214	Introduction to Public Speaking	-	3	3
HMGT 301	Lodging Operations Management	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMGT 299	Internship I	-	1	1
GE	Technology Elective	-	3	3
		17	13	30
JUNIOR YEAR				
HMGT 303	Hospitality Law	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HMGT 330	International Hospitality Management	3	-	3
HMGT 201	Hospitality Technology	3	-	3
HMGT 400	Rooms Division Management	-	3	3

HMG 311	Professional Development	-	1	1
HMG 399	Internship (360 Hours)	-	2	2
HMG	Hospitality Restrictive Elective	-	3	3
GE	Spanish/French 110	-	3	3
MGMT 330	Organization Behavior	-	<u>3</u>	<u>3</u>
		15	15	30

SENIOR YEAR

HMG	Restrictive Elective	3	-	3
HMG 420	Resort Management	3	-	3
HMG 404	Purchasing	3	-	3
HMG 409	Hospitality Facilities Management	3	-	3
HMG 449	Hospitality Marketing Management	3	-	3
HMG 407	Conference and Exposition Management	-	3	3
HMG 430	Revenue Management and Strategic Planning	-	3	3
HMG 435	Leadership, Management & Decision-Making	-	3	3
HMG 450	Senior Seminar	-	<u>3</u>	<u>3</u>
		15	12	27

**DEPARTMENT OF AGRICULTURE AND HUMAN ECOLOGY
HOSPITALITY MANAGEMENT MAJOR**

Bachelor of Science Degree**B.S. in Hospitality Management****Lodging Operations Management Concentration**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
HMG 101	Introduction to Hospitality	3	-	3
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Mathematics I	3	-	3
GEHI 122/123	United States History	3	-	3
GE	Wellness/Health Elective	2	-	2
FRST 101	Freshman Studies	<u>2</u>	-	<u>2</u>
ENGL 111	Reading Writing and Literature I	-	3	3
GEMA 113	Basic Mathematics II	-	3	3
GEBI 116	Biological Science/Lab	-	4	4
GEPS 124	Introduction to Psychology	-	3	3
HMG 203	Lodging Management	-	3	3
HMG 111	Professional Development	-	<u>1</u>	<u>1</u>
		16	17	33
SOPHOMORE YEAR				
AGRI 150	Environmental Science	4	-	4
ECON 210	Principles of Microeconomics	3	-	3
ACCT 201	Introduction to Accounting	3	-	3
HGMT 200	Tourism Management	3	-	3
ENGL 201	Introduction to Literature	3	-	3
HMG 211	Professional Development	1	-	1
SPEE 214	Introduction to Public Speaking	-	3	3
HGMT 301	Lodging Operations Management	-	3	3
STAT 210	Elementary Statistics	-	3	3
HMG 299	Internship I	-	1	1
GE _____	Technology Elective	-	<u>3</u>	<u>3</u>
		17	13	20
JUNIOR YEAR				
HMG 303	Hospitality Law and Ethics	3	-	3
DIET 310	Human Nutrition	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
HGMT 330	Intl. Hospitality Management	3	-	3
HMG 201	Hospitality Technology Applications	3	-	3
HMG 400	Rooms Division Management	-	3	3
HMG 311	Professional Development	-	1	1

HMGT 399	Internship (360 Hours)	-	2	2
HMGT	Hospitality Restrictive Elective	-	3	3
GE	Spanish/French 110	-	3	3
MGMT	Organization Behavior	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
HMGT	Restrictive Elective	3	-	3
HGMT 420	Resort Management	3	-	3
HMGT 404	Hospitality Accounting & Purchasing	3	-	3
HMGT 409	Hospitality Facilities Management	3	-	3
HMGT 449	Hospitality Marketing Management	3	-	3
HMGT 407	Conference & Exposition Management	-	3	3
HGMT 430	Revenue Management and Strategic Planning	-	3	3
HMGT 435	Leadership Management & Decision Making	-	3	3
HMGT 450	Senior Seminar	-	<u>3</u>	<u>3</u>
		15	12	27

Electives:

HMGT 300	International Study Tour
HMGT 310	Security and Loss Management
HMGT 333	Quality Management
HMGT 350	Gaming and Cruise-Ship Operations
HMGT 440	Contemporary Issues in Hospitality Management

THE SCHOOL OF BUSINESS

Mission Statement

The mission of the VSU School of Business is to provide quality integrated undergraduate education in business that incorporates information technology and ethics in developing future leaders.

General Objectives

Objective 1: Quality Education - Provide a comprehensive education in a supportive environment to impart up-to-date knowledge, skills, and abilities to meet market demands and graduates' needs.

Objective 2: Curriculum Integration - Develop the knowledge, skills, and abilities in students that "cut across" different disciplines and business functional areas.

Objective 3: Leadership Development - Provide opportunities that enhance the students' abilities to inspire and motivate others toward group or organizational goal attainment.

Objective 4: Information Technology Proficiency - Develop the ability to apply information technology and use certifiable information technology skills to solve business problems and satisfy the work needs of a variety of employers.

Organization of the School

The School of Business is an academic unit of Virginia State University administered by the Dean with the support of an Assistant Dean and three Chairpersons. It 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 School lead to the degree of Bachelor of Science in the following majors:

- Accounting
- Computer Information Systems
- Management
- Marketing

In addition to the three departments, other units in the School are the Office of the Dean, the Assessment Center, and the Student Advisement Center.

Admission to the School of Business

All baccalaureate degree programs in the School of Business will be pursued in two phases. At the Pre-Business Phase, the freshman and sophomore level students are expected to complete most of the University General Education requirements and some additional School requirements. Admission requirements for the Pre-Business Phase are the same as the general admission requirements for the University.

After successful completion of three semesters of study (45 semester hours), the Pre-Business student is eligible to apply, through the Advisement Center of the School of Business, for admission into the Business Phase. At the Business Phase, junior and senior level students will complete the upper-level business requirements, including core business course requirements and major requirements. Unconditional admission into the Business Phase requires the successful completion of the following specific requirements:

- (1) Completion of a minimum of 60 semester hours, including University General Education requirements and ACCT 201, 202; ECON 210, 211; MGMT 270; CISY 155; and CISY 260. (2) A minimum G.P.A. of 2.25 in all courses taken at V.S.U. and in all business courses.

School of Business Policy on Student Conduct

All students currently enrolled in School of Business programs are required to sign an agreement to abide by the School of Business Policy on Student Conduct, which consists of a Code of Ethics, a Code of Conduct, a Computer Lab Code and a Dress Code. The student's signature affirms the following: "I... hereby acknowledge that I have received, read, and understand the School of Business Policy on Student Conduct and Student Dress. I hereby accept this document's provisions as a condition of acceptance into and continuation in programs of the VSU School of Business."

Requirements of the Policy on Student Conduct supplement, but do not replace, any University requirements pertaining to student ethics and conduct. Provisions of the Policy on Student Conduct are intended to represent minimum standards of appropriate student behavior; all business students are expected to strive to the highest levels of behavior while on University property, attending any University event at any location, or otherwise representing the University or School of Business in any manner.

DEPARTMENT OF ACCOUNTING AND FINANCE

Chairperson: Carl Wright, Box 9047, Room 306 Singleton Building, Phone: 524-5841
Professors: Carl Wright
Associate Professors: Cheryl Mitchem, Hari Sharma
Assistant Professors: Yong Sun

Description of Department

The Department of Accounting and Finance offers a program of study to prepare students for professional accounting and finance careers in public, private, and non-profit organizations. The program of study also prepares students for graduate study and for professional certifications.

Mission of Department

The mission of the Department of Accounting and Finance is to prepare students for professional careers in the areas of accounting and finance through a rigorous program of study that incorporates information technology and ethics.

Objectives of Department

To accomplish its mission, the Department identifies its objectives as follows:

- to develop and enhance students' capabilities in oral and written communication skills as well as in research skills;
- to ensure that students are competent information technology (IT) users and designers;
- to develop an understanding of the Conceptual Framework of Accounting, Generally Accepted Accounting Principles, Generally Accepted Auditing Standards, Managerial/Cost Tax concepts associated with business decision making, and International Financial Reporting Standards;
- to provide students with a broad understanding of finance in the management of profit and not-for-profit organizations;
- to develop students' sensitivities to ethical and moral responsibilities in conduct of their professional and personal duties;
- to make students aware of differences in financial gathering and reporting in a global economy; and
- to prepare students for careers in public practice, industry, and government or graduate study in accounting, finance, and related fields.

Learning Goals

Understanding Accounting and Financial Theory - Students will understand the concepts, structure and meaning of accounting and financial data with the ability to produce clear and concise financial reports.

Understanding the Financial Reporting Cycle – Students will understand the process of identifying, gathering, measuring, summarizing, reporting, and analyzing financial data in a business organization.

Internal Controls and Data Integrity – Students will understand the concepts, methods and process of control that provides for accuracy and integrity of financial data and safeguarding of business assets.

Understanding the Attest Function – Students will understand the nature of attest services and conceptual basis for performing audits.

Understanding Tax Issues – Students will understand taxation and its impact on financial and managerial decisions.

Areas of Specialization

The Department of Accounting and Finance offers a Bachelor of Science degree (B.S.) in Accounting with the option of a concentration in Finance. The Finance Concentration is designed to augment students' accounting knowledge with the concepts and skills in the areas of corporate finance and investments that will enhance financial interpretations as part of a management team.

The Department of Accounting and Finance offers a minor in accounting and in finance comprising 18 semester hours for each minor.

Other Departmental Information

- The Virginia State University Chapter of the National Association of Black Accountants (NABA) provides students with opportunities for professional growth.
- The VSU chapters of Financial Management Association (FMA), Global Association for Risk Professionals (GARP), are designed to assist students in the achievement of their career goals.
- Internships and scholarships are available for qualified students.

Course Descriptions

ACCOUNTING

ACCT 201 INTRODUCTORY ACCOUNTING I - 3 semester hours **F, Sp, Su**

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: Sophomore standing

ACCT 202 INTRODUCTORY ACCOUNTING II - 3 semester hours **F, Sp, Su**

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 Introductory Accounting I

ACCT 301 INTERMEDIATE ACCOUNTING I - 3 semester hours **F, Sp**

The course provides an in-depth study of generally accepted accounting principles as they relate to financial statement presentation, together with the theory of valuation underlying the accounts in the statements.

Prerequisite: ACCT 202 Introductory Accounting II

ACCT 302 INTERMEDIATE ACCOUNTING II - 3 semester hours **F, Sp**

This course is a continuation of ACCT 301 that provides and in-depth understanding of accounting issues..

Prerequisite: ACCT 301 Intermediate Accounting I

ACCT 304 MANAGERIAL ACCOUNTING - 3 semester hours

This is a course for the non-accounting major, emphasizing the analysis, interpretation, and use of financial information for managerial decision making.

Prerequisite: ACCT 202 Introductory Accounting II or permission of instructor

ACCT 306 COST ACCOUNTING - 3 semester hours **F**

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 nonroutine decisions are also discussed.

Prerequisite: ACCT 202 Introductory Accounting II

ACCT 307 FEDERAL INCOME TAX I - 3 semester hours **F**

This course is a study of the basic concepts of federal income tax laws as they apply to individuals, businesses, and not-for-profit taxable entities.

Prerequisite: ACCT 202 Introductory Accounting II

ACCT 308 FEDERAL INCOME TAX II - 3 semester hours **Sp**

This course examines federal income tax topics and integrates theory and practice concepts through the use of cases, tax research, and tax planning strategies.

Prerequisite: ACCT 307 Federal Income Tax

ACCT 315 ACCOUNTING INFORMATION SYSTEMS - 3 semester hours **Sp**

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: ACCT 202 Introductory Accounting II

ACCT 375 INTERNSHIP IN ACCOUNTING - 3 semester hours **F, Sp, Su**

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.

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission

ACCT 403 ADVANCED ACCOUNTING - 3 semester hours **F**

The problems related to consolidations, partnerships, foreign currency translations and hedging, and segment reporting are examined.

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission

ACCT 406 ADVANCED COST ACCOUNTING - 3 semester hours **Sp**

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 Cost Accounting

ACCT 407 AUDITING - 3 semester hours **Sp**

The analysis and application of the theory and techniques of auditing and assurance principles and procedures, with emphasis on the duties and responsibilities of the auditor.

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission

ACCT 409 CPA REVIEW - 3 semester hours **Sp**

This course provides an analysis and solutions of accounting and auditing problems presented in current CPA examinations, utilizing accounting concepts and procedures of prior accounting courses as well as recent pronouncements that impact accounting decisions.

Prerequisite: ACCT 403 Advanced Accounting, ACCT 407 Auditing ;
MGMT 271 Business Law, or by special permission

ACCT 410 FORENSIC ACCOUNTING - 3 semester hours **Sp**

Forensic Accounting involves identifying and verifying past financial data or other accounting activities to form a basis for settling current or prospective legal disputes. This course will require a working knowledge of accounting principles and auditing standards.

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission

ACCT 411 SEMINAR IN ACCOUNTING THEORY AND PRACTICE - 3 semester hours **Sp**

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 and the Public Company Accounting Oversight Board

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission

ACCT 415 GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING - 3 semester hours**F**

The course is a study of accounting principles and their application to 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 Intermediate Accounting II or by special permission.

ACCT 495 SPECIAL TOPICS IN ACCOUNTING -1 semester hour**F**

The course offers selected special topics in accounting, which may include: ethics and professionalism, EDP auditing, accounting history, international accounting, and other appropriate subjects. Students may enroll in this course up to six times, but each special topic may be taken only once.

Prerequisite: ACCT 302 Intermediate Accounting II or by special permission.

Course Descriptions**FINANCE****FINC 350 PRINCIPLES OF FINANCE - 3 semester hours****F, Sp, Su**

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.

Prerequisite: ACCT 202 Introductory Accounting, ECON 211 Principles of Macroeconomics

FINC 360 PRINCIPLES OF INVESTMENTS - 3 semester hours**Sp**

This course examines the various types of securities; valuation models for bonds, stocks and options, security markets; and theories of portfolio management.

Prerequisite: FINC 350 Principles of Finance, or the approval of the instructor

FINC 400 CORPORATE FINANCE - 3 semester hours**F**

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: FINC 350 Principles of Finance

FINC 201 PERSONAL MONEY MANAGEMENT - 3 semester hours**Su**

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.

FINC 446 ENTREPRENEURIAL FINANCE - 3 semester hours**F**

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:** FINC 350 Principles of Finance or equivalent

FINC 301 PRINCIPLES OF REAL ESTATE - 3 semester hours**Su**

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.

Prerequisite: FINC 350 Principles of Finance or equivalent

FINC 460 ADVANCED INVESTMENT ANALYSIS - 3 semester hours**F**

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. **Prerequisites:** FINC 350 Principles of Finance, FINC 360 Principles of Investments

FINC 465 MANAGEMENT OF FINANCIAL INSTITUTIONS - 3 semester hours**Sp**

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:** FINC 350 Principles of Finance

FINC 472 RISK MANAGEMENT AND INSURANCE - 3 semester hours

Sp

This is a study of the insurance industry, the different forms of insurance coverage, and an analysis of the concept of risk.

This course examines risk management techniques to neutralize the effect of risk inherent in daily life.

Prerequisite: FINC 350 Principles of Finance

**DEPARTMENT OF ACCOUNTING AND FINANCE
ACCOUNTING MAJOR
Bachelor of Science Degree**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science (GE Menu)	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History (GE Menu)	-	3	3
	Wellness Health (GE Menu)	-	<u>2</u>	<u>2</u>
		15	15	30
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of Microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature (GE Menu)	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
ACCT 301, 302	Intermediate Accounting I & II	3	3	6
ACCT 306	Cost Accounting	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
MGMT 300	Organization and Management	3	-	3
	Global Studies (GE Menu)	3	-	3
ACCT 315	Accounting Information Systems	-	3	3
FINC 350	Principles of Finance	-	3	3
CISY 363	Quantitative Methods and Analysis	-	3	3
MKTG 300	Principles of Marketing	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ACCT 307	Federal Income Tax I	3	-	3
CISY 365	Operations and Production Management	3	-	3
ACCT	Accounting Electives	3	3	6
FINC 400	Corporate Finance	3	-	3
	Restricted Business Elective*	3	-	3
ACCT 407	Auditing	-	3	3
ACCT 411	Seminar in Accounting Theory	-	3	3
MGMT 483	Organization Policy & Strategy	-	3	3
PHIL 290	Business Ethics	-	<u>3</u>	<u>3</u>
		15	15	30

*Accounting Majors pursuing CPA certification *should take* MGMT 271 – Business Law.

DEPARTMENT OF ACCOUNTING AND FINANCE
ACCOUNTING MAJOR
Finance Concentration
Bachelor of Science Degree

		Semester Hours		
		1 st Sem	2 nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science (GE Menu)	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History (GE Menu)	-	3	3
	Wellness Health (GE Menu)	-	<u>2</u>	<u>2</u>
		15	15	30
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of Microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature (GE Menu)	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
ACCT 301, 302	Intermediate Accounting I & II	3	3	6
FINC 350	Principles of Finance	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
MGMT 300	Organization and Management	3	-	3
	Global Studies (GE Menu)	3	-	3
ACCT 315	Accounting Information Systems	-	3	3
FINC 360	Principles of Investment	-	3	3
CISY 363	Quantitative Methods and Analysis	-	3	3
MKTG 300	Principles of Marketing	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ACCT 307	Federal Income Tax I	3	-	3
FINC 400	Corporate Finance	3	-	3
CISY 365	Operations and Production Management	3	-	3
FINC	Finance Electives	3	3	6
	Restricted Business Elective*	3	-	3
ACCT 407	Auditing	-	3	3
FINC 465	Management of Financial Institutions	-	3	3
MGMT 483	Organization Policy & Strategy	-	3	3
PHIL 290	Business Ethics	-	<u>3</u>	<u>3</u>
		15	15	30

DEPARTMENT OF ACCOUNTING AND FINANCE
ACCOUNTING MINOR

This minor will require six courses (18 semester hours). One of the courses may satisfy your restrictive elective requirement. This minor is directed toward the student who is willing to stay in school for a minimum of 4½ years.

A. *PREREQUISITES

ACCT 201	Introductory Accounting I
ACCT 202	Introductory Accounting II

B. REQUIRED COURSES

ACCT 301	Intermediate Accounting I
ACCT 302	Intermediate Accounting II
ACCT 315	Accounting Information Systems
ACCT 407	Auditing
_____	Accounting Elective
_____	Accounting Elective

C. ACCOUNTING ELECTIVES

ACCT 306	Cost Accounting
ACCT 307	Federal Income Tax I
ACCT 308	Federal Income Tax II
ACCT 403	Advanced Accounting
ACCT 406	Advanced Cost Accounting
ACCT 409	CPA Review
ACCT 415	Governmental and Not-For-Profit Accounting
ACCT 495	Special Topics (3 One-Credit Courses)

**DEPARTMENT OF ACCOUNTING AND FINANCE
FINANCE MINOR**

This minor will require six courses (18 semester hours). One of the courses may satisfy your restrictive elective requirement. This minor is directed toward the student who is willing to stay in school for a minimum of 4½ years.

A. *PREREQUISITES

ACCT 201	Introductory Accounting I
ACCT 202	Introductory Accounting II

B. REQUIRED COURSES

FINC 350	Principles of Finance
FINC 360	Principles of Investment
FINC 400	Corporate Finance
FINC 465	Management of Financial Institutions
_____	Finance Elective
_____	Finance Elective

C. FINANCE ELECTIVES

FINC 401	Personal Money Management
FINC 415	International Financial Management
FINC 446	Entrepreneurial Finance
FINC 452	Principles of Real Estate
FINC 460	Investment Analysis and Portfolio Management
FINC 472	Risk Management and Insurance

DEPARTMENT OF COMPUTER INFORMATION SYSTEMS

Chairperson:	Xue Bai, Box 9038, Room 124, Singleton Hall, Phone: 524-6728
Professors:	Adeyemi A. Adekoya, Emmanuel O. Omojokun
Associate Professors:	Xue Bai, Manying Qiu
Assistant Professors:	Somasheker Akkaladevi, Sunyoung Cho, Han Li, Shuting Xu, Yaquan Xu, Seung Yang, Dong Yoo, Jie Zhang,

Description of Department

The Computer Information Systems Department provides students with a solid understanding of the use, design, development and management of information systems and information technology. The Computer Information Systems curriculum provides for an emphasis on systems analysis, design and development.

Computer Information Systems curriculum is designed to give students the opportunity to develop and manage a variety of projects that are derived from and can be applied to real business settings. The curriculum is structured to provide students with a strong foundation in quantitative, modeling and analytical skills; systems orientation; computer programming skills; and information technology (IT) currency. Ethical and global issues are integrated across the curriculum.

Mission of Department

The Computer Information Systems Department provides quality instruction in information systems and decisions sciences, and supports the information technology component of the School's mission.

Objectives of Department

To accomplish this mission, the Department has established its objectives as follows:

- Provide students with effective and state-of-the-art instruction in information systems and decision sciences.
- Enhance the student's knowledge, skills, and abilities that are essential for succeeding in a rapidly changing and competitive workplace.
- Create and develop programs to enhance student placement in career rewarding positions.
- Continue to revise and improve the curricula to prepare students for entry into graduate and professional schools and give them the requisite knowledge needed to meet the demands of the market place.
- Increase the interaction between the department and the business and professional community by organizing forums, seminars, and workshops.
- Encourage faculty to share their research skills with colleagues.
- Encourage collaborative research and group effort among faculty.
- Improve and expand support services and facilities that enhance the scholarly performance of the faculty.
- Increase faculty involvement and participation in professional and service organizations.
- Offer Information Systems expertise to all constituents.

Learning Goals

Quantitative, Modeling and Analytic Skills – VSU students will acquire quantitative and analytical problem solving knowledge and skills. VSU students will have the ability to use analytic skills in decision-making.

Systems Orientation – CIS students will acquire skills to view problems and be able to perform problem-solving from systems analytical approach.

Computer Programming Skills – CIS students will acquire essential programming skills.

IT Currency – Students will be exposed to current information technology issues and trends.

Course Descriptions

COMPUTER INFORMATION SYSTEMS

CISY 155 INTRODUCTION TO INFORMATION SYSTEMS - 3 semester hours

F, Sp, Su

This course is designed to introduce the student to the basic concepts and procedures required in the development and use of computer based management information systems. Topics include: overview of computer concepts and computer literacy, computer hardware, computer software, and data communications. It provides a hands-on experience on four specific computer application packages: word processing, spreadsheets, database, and presentation graphics. **Prerequisite: High school algebra or equivalent**

CISY 201 MICROCOMPUTER CONCEPTS I - 3 semester hours

F, Sp

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, data base, spreadsheet software, and presentation graphics.

Prerequisite: High school algebra or equivalent or permission of instructor

CISY 260 BUSINESS STATISTICS - 3 semester hours

F, Sp, Su

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: CISY 155 Introduction to Information Systems and MATH 122 or its equivalent

CISY 300 COMPUTER INTERNSHIP - 3 semester hours**F, Sp, Su**

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.

Prerequisites: **CISY 155 Introduction to Information Systems, CISY 362 Systems Analysis and Design or permission of department chair.**

CISY 302 INTRODUCTION TO DECISION MAKING - 3 semester hours**F, Sp**

A study of rational decision making in the face of risk and uncertainty for an organization. Quantitative methods and techniques from optimization, probability, statistics, and discrete mathematics are discussed. A variety of business applications are considered.

Prerequisite: **MATH 122 Finite Mathematics**

CISY 305 PROGRAMMING LOGIC AND DESIGN - 3 semester hours**F, Sp**

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: **CISY 155 Introduction to Information Systems**

CISY 311 SYSTEMS ARCHITECTURE AND DESIGN - 3 semester hours**F, Sp**

This course is designed to introduce the student to the hardware components and architecture of general purpose computers. Topics include: data representation, data manipulation and storage technologies, data communication technology, mass storage and input/output technology, machine-level programming, application development, operating systems, mass storage access and management, application support and control, computer networks and distributed systems, advanced computer architecture, and evaluation and acquisition of computer systems.

Prerequisites: **CISY 305 Programming Logic and Design**

CISY 330 INTRODUCTION TO JAVA PROGRAMMING - 3 semester hours**Sp**

This course provides an introduction to JAVA 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: **CISY 155 Introduction to Information Systems and CISY 305 Programming Logic and Design**

CISY 344 INTRODUCTION TO PROGRAMMING USING VISUAL BASIC - 3 semester hours**Sp**

The course introduces the student to visual programming using Visual Basic. The course focuses on the principles of user interface design, general software engineering principles and application development using Visual Basic.

Prerequisites: **CISY 155 Introduction to Information Systems and CISY 305 Programming Logic and Design**

CISY 350 MANAGEMENT INFORMATION SYSTEMS - 3 semester hours**F, Sp, Su**

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: **CISY 155 Introduction to Information Systems or equivalent**

CISY 358 STRUCTURED COBOL PROGRAMMING - 3 semester hours**F**

A first course in business computer COBOL programming that emphasizes the structured methodology. Topics include arithmetic operations, conditional statements, editing printed output, headings, and debugging.

Prerequisites: **CISY 155 Introduction to Information Systems and CISY 305 Programming Logic and Design**

CISY 359 ADVANCED STRUCTURED COBOL - 3 semester hours**Sp**

This course is the second part of a two-semester sequence. It introduces the student to the more advanced and sophisticated features of computer programming using ANSI COBOL.

Prerequisite: **CISY 358 Structured COBOL Programming or equivalent**

CISY 360 BUSINESS STATISTICS II - 3 semester hours**F, Sp, Su**

This course is a continuation of CISY 260. The course will cover several of the more advanced statistical methodologies of importance in analyzing business problems. Coverage includes experimental design, multiple regression, and correlation and non-parametric tests. Real world examples and realistic problems related to business and economics will be used.

Prerequisite: **CISY 260 Business Statistics or equivalent.**

CISY 362 SYSTEMS ANALYSIS AND DESIGN - 3 semester hours**F, Sp**

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 requirements 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 are covered.

Prerequisites: **CISY 350 Management Information Systems, MGMT 300 Organization and Management and a programming language, or permission of instructor**

CISY 363 QUANTITATIVE METHODS AND ANALYSIS - 3 semester hours**F, Sp, Su**

The course covers basic quantitative methods in business and their applications to managerial decision making. Coverage includes such techniques as linear programming, duality and sensitivity analysis; transportation and assignment problems; basic inventory models, queuing theory and computer simulation. Students are exposed to the use of contemporary computer software for problem solving.

Prerequisite: **CISY 260 Business Statistics or equivalent**

CISY 364 INTRODUCTION TO PROGRAMMING USING C++ - 3 semester hours**F**

This course introduces the student to Object-Oriented approach to program design and implementation using C++ programming language. The course exposes the student to objects, classes, data encapsulation, data abstraction, inheritance, structures and polymorphism. The course also covers C++ control constructs, functions, arrays, pointers and associated data structures, input/output streams and files.

Prerequisites: **CISY 155 Introduction to Information Systems and CISY 305 Programming Logic and Design**

CISY 365 OPERATIONS AND PRODUCTION MANAGEMENT - 3 semester hours**F, Sp, Su**

Operational problems are identified in service and manufacturing industries; the associated costs and other relevant factors are discussed; and models that provide guidance to decision making are developed and described. Content includes planning the production and service facilities, planning and control of production volume, and product quality.

Prerequisite: **CISY 260 Business Statistics or equivalent**

CISY 370 EXPERT SYSTEMS - 3 semester hours**F (odd years)**

This course introduces the student to the components of decision support and expert systems. These include user interfaces, knowledge bases, and inference engines. Existing commercial packages are reviewed. The course will work both on design and management of these systems.

Prerequisite: **CISY 350 Management Information Systems**

CISY 430 ADVANCED JAVA PROGRAMMING - 3 semester hours**Sp**

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 Introduction to Java Programming or permission of instructor**

CISY 444 ADVANCED VISUAL BASIC (VB) PROGRAMMING - 3 semester hours**F**

This course is a continuation of CISY 344 - Introduction to Visual Basic (VB) Programming. Topics include advanced event-driven programming techniques including database programming, creating Active-X and COM components, and optimizing and deploying applications.

Prerequisite: **CISY 344 Introduction to Programming Using Visual Basic or permission of instructor**

CISY 460 MANAGING OPERATIONS - 3 semester hours**F**

Analysis of cases on operational activities in business and industry using quantitative and qualitative techniques with recommendations to improve their productivity and profitability. A case study approach to expose students to real-world business operations is used throughout the course.

Prerequisites: **ACCT 202 Introductory Accounting II, CISY 360 Business Statistics II, CISY 363 Quantitative Methods and Analysis; CISY 365 Operations Production Management**

CISY 463 OPERATIONS RESEARCH - 3 semester hours**F, Sp**

A survey of operations research techniques for solving "real world" business decision problems. This course is a continuation of CISY 363. Topics covered include integer, nonlinear and dynamic programming, Markov decision processes, decision theory and games. Emphasis is on modeling and algorithm development.

Prerequisites: **MATH 122 Finite Mathematics and CISY 365 Quantitative Methods and Analysis**

CISY 464 ADVANCED C++ PROGRAMMING - 3 semester hours**Sp**

An advanced C++ programming course which focuses on Object-Oriented approach to program design and implementation using C++ programming language. Topics include objects, classes, data encapsulation, data abstraction, constructors and destructors, functions, arrays, pointers and associated structures, inheritance, virtual function and polymorphism, template, exception handling, input/output streams and file processing.

Prerequisite: CISY 364 Object-Oriented Programming Using C++ or permission of instructor

CISY 465 SIMULATIONS - 3 semester hours**F, Sp (even years)**

This course introduces the student to the basic concepts of simulating complex business systems using the computer. Topics covered include discrete-event modeling, a specialized computer simulation language, and statistical analysis of simulation input and output data.

Prerequisites: CISY 260 Business Statistics or equivalent and a programming language

CISY 466 WEB APPLICATION DESIGN AND IMPLEMENTATION - 3 semester hours**F, Sp**

This course involves a study and application of the principles of web applications design. The design, development and implementation of dynamic web pages using Java Server Pages (SP), JavaBeans and EJB are covered. Students also learn how to use Unified Modeling Language (UML) to build web applications with both server side and client side scripting.

Prerequisite: An introductory level programming language or permission of instructor

CISY 467 NETWORKING - 3 semester hours**F, Sp**

An introduction to the transmission media used in digital communications. The course focuses on the study of concepts, components and issues involved in the design, implementation and management of computer communications networks. Local area networks, wide area networks and distributed networks are studied. Furthermore, most recent developments in the design of digital communications relating to the design of computer networks for voice, data and video transmission are also covered.

Prerequisite: CISY 311 Systems Architecture and Design or permission of instructor

CISY 480 DATABASE AND SECURITY - 3 semester hours**F, Sp**

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: CISY 311 Systems Architecture and Design, CISY 350 Management Information Systems, CISY 362 Systems Analysis and Design, and a programming language or permission of instructor

CISY 486 CURRENT ISSUES IN INFORMATION TECHNOLOGY - 3 semester hours**F, Sp**

The course provides an overview of current changes in information technology and their impact on organizations. This is a capstone course for information systems majors and will integrate material from all required courses and the respective changes that have taken place. This class uses many learning styles to achieve its purpose. The class is based on assigned readings, presentations by business leaders, classroom discussions, hands-on use of technology, research and presentation.

Prerequisite: Senior Standing

CISY 490 PRODUCTION AND RESOURCE PLANNING - 3 semester hours**Sp**

An advanced operations/production course which includes topics on modern production and service facilities, planning and scheduling activities, material requirements planning, resource planning, and quality assurance.

Prerequisite: CISY 460 Managing Operations

CISY 495 SPECIAL TOPICS -1-3 semester hours**F, Sp, Su**

In-depth treatment within a seminar format of a timely topic in Information Systems and Decision Sciences.

Prerequisite: Permission of the instructor

DEPARTMENT OF COMPUTER INFORMATION SYSTEMS
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science (GE Menu)	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History (GE Menu)	-	3	3
	Wellness Health (GE Menu)	-	<u>2</u>	<u>2</u>
		15	15	30
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of Microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature (GE Menu)	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
FINC 350	Principles of Finance	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
CISY 350	Management Information Systems	3	-	3
CISY 305	Programming Logic and Design	3	-	3
MGMT 300	Organization and Management	3	-	3
MKTG 300	Principles of Marketing	-	3	3
CISY 311	Systems Architecture and Design	-	3	3
CISY 362	Systems Analysis and Design	-	3	3
CISY 363	Quantitative Methods and Analysis	-	3	3
CISY	Programming Language Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
CISY 365	Operations and Production Management	3		
CISY	Information Systems Electives	3		
CISY	Advanced Programming Language Elective	3		
PHIL 290	Business Ethics	3		
	Business Non-Major International Course	3		
CISY 480	Database and Security	-		
MGMT 483	Organization Policy and Strategy	-		
CISY 486	Current Issues in Information Technology	-		
	Global Studies Elective	-		
		15		

DEPARTMENT OF MANAGEMENT AND MARKETING

Chairperson:	Venkatapparao Mummalaneni, Box 9209, Room 220, Singleton Hall, Phone: 524-5808
Professors:	Donatus Amaram, David Bejou, Venkatapparao Mummalaneni
Associate Professors:	
Assistant Professors:	Omar Belkhodja, Tejinder Billing, Andrew Feldstein, Mark Kunze, Jun Sang Lim, Ruiliang Yan, Yao Amewokunu

The Department of Management and Marketing provides students with opportunities to develop competencies in the areas of Management and Marketing. Major degree programs are offered in Management and Marketing and a concentration is available in the area of Human Resources Management. The curricula in the Department of Management and Marketing are designed to produce students who will be able to succeed in a highly competitive, global society.

Mission of Department

The Department of Management and Marketing provides a comprehensive, top quality undergraduate education in the management and marketing disciplines that incorporates information technology and ethics to prepare our students for leadership roles in business and society.

Objectives of Department

To accomplish its mission, the Department has identified its objectives as follows:

- To develop in students an appreciation of the requirements involved in the management of complex organizations, and to engender excitement to pursue careers in management and marketing.
- To develop students' communication skills, both oral and written, for the efficient performance of management and marketing functions at all levels of an organization.
- To develop in students, an appreciation for career opportunities in management and marketing.
- To increase the use of instructional technology by faculty and students for application to the various fields of management and marketing.
- To prepare students to become effective managers and marketers in business firms, educational institutions, government, business industries, and other organizations.
- To teach students to have a global perspective of business and other organizations with particular emphasis on the requisite skills needed for effective management and marketing in different cultures.
- To develop students' sensitivities to ethical and moral responsibilities in the conduct of their organizational and personal functions.
- To instill in students a belief in the value of lifelong learning.
- To prepare students to become cognizant of the interrelationships among the sub-fields of business, and of the interrelationship, between management and marketing and other disciplines.
- To encourage scholarly contributions to knowledge, sharing of scholarly information, and efforts to remain at the leading edge of management and marketing research so that faculty can provide the highest quality instructional services to students.
- To encourage scholarly contributions which facilitate faculty contact with professionals who can provide management and marketing opportunities to students so that students can succeed as managers in a changing global society.
- To assure faculty and student involvement and participation in professional, service, community and business organizations.
- To provide community service in the areas of management and marketing.
- To increase departmental visibility in the surrounding community in order to stimulate an awareness and appreciation for

the services offered by the Department.

- To promote service which improves the Department's accomplishment of its goals, provides new opportunities for the Department, and helps ensure that the Department looks to the future and changes with the environment.
- To develop students' understanding of, proclivity for, and commitment to community service.
- To promote non-curricular activities which augment student development.

Management Learning Goals

Understanding Organizations – Each student can diagnose and analyze organizational problems and choose and defend resolutions for practical situations by applying management theories and principles learned in their courses.

Problems Solving Using Theories and Knowledge – To develop students' skills and abilities to solve organizational problems by applying the theories and principles learned in their courses.

Group and Team Interaction – Provide opportunities in our program for students to develop team-work skills.

Employer/Employee Rights and Responsibilities – Expose and sensitize students to rights and responsibilities of employers and employees in the workplace.

Marketing Learning Goals

Foster Customer Relationship Orientation – Students will be learning about the relational perspective and develop an understanding of relationship marketing and its perspectives.

Develop a Perspective on Global Markets – Students will gain global perspective of business and other organizations with particular emphasis on the requisite skills needed for effective marketing in different cultures.

Develop Marketing Research and Analysis Skills – Students will learn to design and apply appropriate research methods for the collection and analysis of data to aid in marketing decision making.

- (1) A Bachelor of Science in Management with the option of specializing in either (a) Management or (b) Human Resources Management
- (2) A Bachelor of Science in Marketing

Management Degree Program

The program leading to a B.S. degree in Management is designed to provide a comprehensive mix of general and professional education suitable for preparing students for managerial leadership in both profit and non-profit organizations. Emphasis is placed on acquiring knowledge of the basic concepts and ideas essential to universal management functions.

The B.S. degree in Management consists of 120 semester hours of academic work. The Management Internship is encouraged for all Management majors. A brief description of each concentration follows:

- A. The General Management Concentration aims to prepare students for positions in industry and government or for graduate study in management and/or other related fields of business.
- B. The Human Resources Management Concentration is designed to provide students with the skills and knowledge needed to manage the workforce and make decisions relative to the sensitive and dynamic relationships between employees and the owners and managers of the organization. Students in this concentration are exposed to an overview of all the core areas of management and business functions.

Marketing Degree Program

The program leading to a B.S. degree in Marketing is designed to provide a comprehensive mix of general and professional education suitable for preparing students for managerial leadership in both profit and non-profit organizations. Emphasis is placed on acquiring knowledge of basic concepts and ideas essential to universal management and marketing functions. The B.S. degree in Marketing consists of 120 semester hours of course work.

Course Descriptions**MANAGEMENT****MGMT 150 PRINCIPLES OF BUSINESS - 3 semester hours**

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 270 LEGAL ENVIRONMENT OF BUSINESS - 3 semester hours**F, Sp**

The legal environment of business 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, real property, agency, ethics and forms of business organizations.

Prerequisite: Sophomore Standing

MGMT 271 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: Sophomore Standing

MGMT 300 ORGANIZATION AND MANAGEMENT - 3 semester hours**F, Sp**

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): Junior status, and MGMT 270 or PHED 202

MGMT 320 INTERNATIONAL BUSINESS - 3 semester hours**F**

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: MGMT 300

MGMT 330 ORGANIZATIONAL BEHAVIOR - 3 semester hours**Sp**

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: MGMT 300

MGMT 340 PERSONNEL/HUMAN RESOURCES 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: MGMT 300

MGMT 375 INTERNSHIP - 3 semester hours**F, Sp**

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: MGMT 300 Junior standing or special permission of the instructor

MGMT 418 ORGANIZATION AND ENVIRONMENT -3 semester hours**F, Sp**

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: 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: MGMT 300

MGMT 444 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT - 3 semester hours

This course is an in-depth analysis of the entrepreneur's role in conceptualizing, developing and managing small business ventures. Key personality and leadership traits of the entrepreneur are examined within the framework of risk-taking and new venture start-ups. The course is also designed to expose students to the problems and opportunities inherent in establishing and managing a small business and the techniques employed in launching and sustaining a new venture.

Prerequisites: MGMT 300 and MKTG 300

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 Senior standing or permission of instructor

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: MGMT 300

MGMT 452 ORGANIZATIONAL CULTURE AND DIVERSITY - 3 semester hours

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 a multicultural workforce.

Prerequisite: 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: 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: 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: 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: 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: 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: MGMT 300, MGMT 330, MGMT 340, MGMT 450.

MGMT 483 ORGANIZATIONAL POLICY AND STRATEGY - 3 semester hours**F, Sp**

Organization policy and strategy is a capstone course designed to probe the interrelationships of the functional areas within the organization. Students will apply management skills and processes to integrate these areas, make decisions and formulate policies and strategies to accomplish organizational goals.

Prerequisites: MGMT 300, FINC 350 AND MKTG 300

MGMT 484 INDUSTRIAL RELATIONS AND COLLECTIVE BARGAINING - 3 semester hours**Sp**

This course is a survey of the labor union movement and collective bargaining in the United States. It 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: MGMT 300 and MGMT 340

MGMT 490 SEMINAR: ISSUES IN MANAGEMENT - 3 semester hours**Sp**

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.

Prerequisite: MGMT 300, Senior Standing

**DEPARTMENT OF MANAGEMENT AND MARKETING
MANAGEMENT MAJOR
General Management Concentration Bachelor of
Science Degree**

		Semester Hours		
		1 st Sem	2 nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science Electives	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History Elective	-	3	3
	Wellness Health	-	3	3
		<u>15</u>	<u>15</u>	<u>30</u>
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature Elective	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	-	3	3
		<u>15</u>	<u>15</u>	<u>30</u>
JUNIOR YEAR				
FINC 350	Principles of Finance	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
MKTG 300	Principles of Marketing	3	-	3
MGMT 300	Organization and Management	3	-	3
PHIL 290	Business Ethics	3	-	3
MGMT 330	Organizational Behavior	-	3	3
MGMT 340	Personnel and Human Resources Management	-	3	3
CISY 350	Management of Information Systems	-	3	3
CISY 363	Quantitative Methods and Analysis	-	3	3

	Global Studies Elective	=	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
CISY 365	Operations and Production Management	3	-	3
MGMT 320	International Business	3	-	3
MGMT 418	Organization and Environment	3	-	3
MGMT 450	Organizational Theory	3	-	3
MGMT	Management Electives	3	3	6
MGMT 483	Organization Policy and Strategy	-	3	3
MGMT 490	Seminar – Issues in Management	-	3	3
	Restricted Elective	-	3	3
		=	<u>3</u>	<u>3</u>
		15	15	30

**DEPARTMENT OF MANAGEMENT AND MARKETING
MANAGEMENT MAJOR
Human Resources Management Concentration
Bachelor of Science Degree**

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science Electives	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History Elective	-	3	3
	Wellness Health	=	<u>2</u>	<u>2</u>
		15	15	30
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of Microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature Elective	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	=	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
FINC 350	Principles of Finance			
GEEN 310	Advanced Communication Skills	3	-	3
MGMT 300	Organization and Management	3	-	3
MKTG 300	Principles of Marketing	3	-	3
	Global Studies Elective	3	-	3
MGMT 330	Organizational Behavior	-	3	3
MGMT 340	Personnel and Human Resources Management	-	3	3
CISY 350	Management Information Systems	-	3	3
CISY 363	Quantitative Methods and Analysis	-	3	3
PHIL 290	Business Ethics	=	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
CISY 365	Operations and Production Management	3	-	3
MGMT 320	International Business	3	-	3
MGMT 450	Organizational Theory	3	-	3
MGMT 464	Employment Laws and Policies	3	-	3

MGMT	Management Electives	3	3	6
MGMT 466	Compensation Management	-	3	3
MGMT 483	Organization Policy and Strategy	-	3	3
MGMT 484	Operations and Production Management	-	3	3
	Restrictive Elective	-	<u>3</u>	<u>3</u>
		15	15	30

Course Descriptions

MARKETING

MKTG 300 PRINCIPLES OF MARKETING - 3 semester hours

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 PROMOTION MANAGEMENT - 3 semester hours

This course provides a broad overview of the promotional mix elements including advertising, public relations, personal selling, and sales promotion. Emphasis is placed on developing a strategic understanding of the marketing communication process and its integration into the mission and objectives of an organization. In addition, the course serves as a foundation for other promotion courses in the marketing curriculum.

Prerequisite: MKTG 300

MKTG 305 PRODUCT AND PRICE MANAGEMENT - 3 semester hours

Sp

The course examines policy and strategic issues in product management, focusing on such areas as new product development, managing existing products, product positioning and repositioning, product elimination decisions, etc. In addition, the alternative pricing strategies that accompany different product, distribution and promotion strategies of the firm are explored.

Prerequisite: MKTG 300

MKTG 306 MARKETING CHANNELS AND PHYSICAL DISTRIBUTION MANAGEMENT - 3 semester hours

This course covers, in broad terms, all the managerial activities in the distribution of a firm's finished products from the factory to the ultimate customer. These managerial activities include model choice and carrier choice decisions, choices among storage alternatives and different channels of distribution. Functions of different channel members such as distribution centers, wholesalers, retailers and other distribution specialists and their impact on a distribution system will be also be covered. In addition, this course serves as the foundation course for the distribution courses in the marketing curriculum.

Prerequisite: MKTG 300

MKTG 372 INTERNSHIP - 3 semester hours

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 experiences as a marketing manager in a real business world under the critical supervision of an on-site administrator and a faculty member.

Prerequisite: MKTG 300, MKTG 303, MKTG 305, MKTG 306 and/or permission of instructor

MKTG 401 - MARKETING RESEARCH - 3 semester hours

F

The course covers the concepts and techniques of marketing research with special emphasis on sampling methods, interviews, statistical analysis of data and their implications. Methods of developing and evaluating research design for actual problems, collection of the information, and its analysis are stressed.

Prerequisite: MKTG 300, ISDS 260

MKTG 402 ADVERTISING - 3 semester hours

This course places emphasis on planning, budgeting, research, media selection, and preparation of advertising messages. The evaluation of advertising from an economic and social viewpoint by clients and agencies is emphasized.

Prerequisite: MKTG 300

MKTG 404 CONSUMER BEHAVIOR - 3 semester hours

F

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: MKTG 300

MKTG 405 SEMINAR IN MARKETING - 3 semester hours

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: MKTG 300

MKTG 408 INTERNATIONAL MARKETING - 3 semester hours**Sp**

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: MKTG 300

MKTG 411 PURCHASING AND MATERIALS MANAGEMENT - 3 semester hours

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: MKTG 300 or MGMT 300

MKTG 413 TRANSPORTATION SYSTEMS - 3 semester hours

This course provides a basic knowledge of the modes, characteristics, and roles of the transportation system in the United States. The course will highlight the system network and transportation service for performing the movement function of various firms. Emphasis is placed on how the role of transportation and its complexities are strategically integrated into the marketing program.

Prerequisite: MKTG 306

MKTG 414 RETAIL MANAGEMENT - 3 semester hours

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: MKTG 300

MKTG 415 LOGISTICS MANAGEMENT - 3 semester hours

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: MKTG 306

MKTG 460 DIRECT MARKETING - 3 semester hours

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 organizational goals and functions will be emphasized.

Prerequisite: MKTG 300

MKTG 461 SALES MANAGEMENT - 3 semester hours

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 salespersons, theories and techniques of sales and recognition of individual value. Also covered will be the management of the selling functions, including staffing, planning, evaluation, and control.

Prerequisite: MKTG 300

MKTG 462 INDUSTRIAL MARKETING - 3 semester hours

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: MKTG 300

MKTG 470 SERVICES MARKETING - 3 semester hours

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: MKTG 300

MKTG 478 INDEPENDENT STUDY - 3 semester hours

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 semester hours

Sp

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.

Prerequisite: MKTG 300; MKTG 401; MKTG 404 and Senior Standing

**DEPARTMENT OF MANAGEMENT AND MARKETING
MARKETING MAJOR
Bachelor of Science Degree**

		Semester Hours		
		1st Sem	2nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I, II	3	3	6
MATH 120	College Algebra and Trigonometry	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
	Science Electives	4	4	8
FRST 101	Freshman Studies	2	-	2
MATH 122	Finite Mathematics	-	3	3
	History Elective	-	3	3
	Wellness Health	-	2	2
		15	15	30
SOPHOMORE YEAR				
ACCT 201, 202	Introduction to Accounting I & II	3	3	6
ECON 210, 211	Principles of Microeconomics/Macroeconomics	3	3	6
PHIL 180	Critical Thinking	3	-	3
MATH 212	Introduction to Calculus	3	-	3
	Literature Elective	3	-	3
CISY 260	Business Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	3	3
SPEE 214	Introduction to Public Speaking	-	3	3
		15	15	30
JUNIOR YEAR				
GEEN 310	Advanced Communication Skills	3	-	3
MGMT 300	Organization and Management	3	-	3
MKTG 300	Principles of Marketing	3	-	3
CISY 363	Quantitative Methods and Analysis	3	-	3
PHIL 290	Business Ethics	3	-	3
FINC 350	Principles of Finance	-	3	3
CISY 350	Management of Information Systems	-	3	3
MKTG 303	Promotion Management	-	3	3
MKTG 305	Product and Price Management	-	3	3
MKTG 306	Marketing Channels and Physical Distribution	-	3	3
		15	15	30
SENIOR YEAR				
MKTG 404	Consumer Behavior	3	-	3
MKTG 408	International Marketing	3	-	3
MGMT 483	Organization Policy and Strategy	3	-	3
MKTG 401	Marketing Research	3	-	3
MKTG	Marketing Electives	3	3	6
MKTG 489	Strategic Marketing	-	3	3

CISY 365	Operations and Production Management	-	3	3
	Global Studies Elective	-	3	3
	Restrictive Elective	=	<u>3</u>	<u>3</u>
		15	15	30

SCHOOL OF ENGINEERING, SCIENCE AND TECHNOLOGY

The School of Engineering, Science 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, science and mathematics professions. The School 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, Engineering Technology, Industrial Technology, Mathematics, Science, Technology 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

The Mission of the School of Engineering, Science and Technology is to provide quality undergraduate and graduate education in engineering, engineering technology, mathematics, natural sciences, computer science, industrial technology and education; and to produce graduates who are well prepared to practice in their field of study and/or to pursue advanced education.

General Objectives

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.

Organization of the School

The School of Engineering, Science and Technology is an academic unit of Virginia State University administered by the Dean with the support of five Chairpersons. It is organized into five departments:

- Department of Biology
- Department of Chemistry and Physics
- Department of Nursing
- Department of Engineering, and Technology
- Department of Mathematics and Computer Science
- Department of Psychology

Other Pertinent School Information

The School also offers programs leading to the Master of Science. These programs are discussed in more detail in the Graduate School Catalog.

DEPARTMENT OF BIOLOGY

Chairperson: Shaukat Siddiqi, Box 9064, Room 102 Owens Hall, Phone: 524-5025
Professors: Larry Brown, Dilip Sen, Shaukat Siddiqi, W. Eric Thomas
Associate Professors: Regina Knight-Mason, Stephen d'Orgeix, Brian Sayre, Hua Shen
Assistant Professors: Omar Faison, Paul Kaseloo, Sherman Ward

Description of the Department

The Department of Biology seeks to provide the student with a common background for the diversity of specializations which satisfy the academic needs of undergraduate biology majors for career options in medicine, dentistry, nursing, pharmacy, podiatry, optometry, physical therapy, veterinarian science, research and teaching in secondary schools. Also, the department provides the professional assistance needed to develop insight into biological research and preparation for a vocation or graduate study.

The Department of Biology also offers graduate programs leading to the Master's degree in biology. For courses open to graduate students, see Virginia State University Graduate Catalog.

Mission of Department

The mission of the Department of Biology is to provide the professional assistance needed to develop insight into biological research and preparation for medical or graduate study.

General Statement of Objectives

The department offers, for the Bachelor of Science degree, a major curriculum in biology which is designed to do the following:

1. Prepare students for graduate studies and professional schools in the medical and para-medical sciences.
2. Prepare students for employment in the fields of biology.

The department offers the BS in Biology with a minor in Secondary Education designed to prepare the student to teach in secondary schools.

Course Descriptions

BIOLOGY

BIOL 120 PRINCIPLES OF BIOLOGY I - 3 semester hours **F, Sp**

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 required of all Biology majors and is open to other science majors.

BIOL 120 PRINCIPLES OF BIOLOGY I LABORATORY - 1 semester hour **F, Sp**

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 exercise related to selected lecture topics.

Corequisite: BIOL 120 Principles of Biology I

BIOL 121 PRINCIPLES OF BIOLOGY II - 3 semester hours **F, Sp**

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

BIOL 121 PRINCIPLES OF BIOLOGY II LABORATORY - 1 semester hour **F, Sp**

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 exercise related to selected lecture topics.

Corequisite: BIOL 121 Principles of Biology II

BIOL 200 TECHNICAL WRITING IN BIOLOGY - 3 semester hours **F, Sp**

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 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 **F, Sp**

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

BIOL 201 CELL AND MOLECULAR BIOLOGY LABORATORY - 1 semester hour **F, Sp**

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 compliment their lecture material. The laboratory will expose students to the eukaryotic cell structure and function, and molecular biology techniques.

Corequisite: BIOL 201 Cell and Molecular Biology

BIOL 220 PRINCIPLES OF GENETICS - 3 semester hours**F, Sp**

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 121 Principles of Biology II; CHEM 101 General Chemistry I; CHEM 103 General Chemistry Laboratory

BIOL 220 PRINCIPLES OF GENETICS LABORATORY - 1 semester hour**F, Sp**

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.

Corequisite: BIOL 220 Principles of Genetics

BIOL 241 INTRODUCTION TO MICROBIOLOGY - 3 semester hours**F, Sp, Su**

The study of fundamental principles of microbiology. Emphasis will be placed on medical, environmental, agricultural, and industrial microbiology.

Prerequisite: BIOL 121 Principles of Biology I or consent of instructor

BIOL 241 INTRODUCTION TO MICROBIOLOGY LABORATORY - 1 semester hour**F, Sp, Su**

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.

Corequisite: BIOL 241 Introduction to Microbiology

BIOL 310 PLANT MORPHOLOGY - 3 semester hours**F, Sp**

A study of the structure and life histories of plants and the development and evolution of plant structures and habitats which contribute to an understanding of the relationship among groups of plants.

Prerequisite: BIOL 121 Principles of Biology II or PLSC 140 Principles of Plant Science or consent of instructor

BIOL 310 PLANT MORPHOLOGY LABORATORY - 1 semester hour**F, Sp**

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 relationship among groups of plants.

Corequisite: BIOL 310 Plant Morphology

BIOL 311 COMPARATIVE VERTEBRATE ANATOMY - 3 semester hours**F even years**

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.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 324 Ecology

BIOL 311 COMPARATIVE VERTEBRATE ANATOMY LABORATORY - 1 semester hour**F even years**

Dissection of vertebrate types found in the five basic classes of vertebrate for comparative purposes.

Corequisite: BIOL 311 Comparative Vertebrate Anatomy

BIOL 313 GENERAL ZOOLOGY - 3 semester hours**Sp odd years**

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.

Prerequisite: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 324 Ecology or consent of instructor

BIOL 313 GENERAL ZOOLOGY LABORATORY - 1 semester hour**Sp odd years**

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.

Corequisite: BIOL 313 General Zoology

BIOL 315 HUMAN ANATOMY - 3 semester hours**F, Sp, Su**

A lecture course for science and non-science majors of functional anatomy and organogenesis based on historical examinations, demonstrations, and dissections in man or selected anthropoids.

Prerequisites: GEBI 116 Biological Science or BIOL 120 Principles of Biology I

BIOL 315 HUMAN ANATOMY LABORATORY - 1 semester hour**F, Sp, Su**

A laboratory course for BIOL 315.

Corequisite: BIOL 315 Human Anatomy

BIOL 316 HUMAN PHYSIOLOGY - 3 semester hours**F, Sp, Su**

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: **GEBI 116 Biological Science or BIOL 120 Principles of Biology I**

BIOL 318 HUMAN ANATOMY AND PHYSIOLOGY I (FOR NURSING PROGRAM) - 3 semester hours**F**

BIOL 318 is the first half of a two-semester course (with lab) for nursing students describing the structures and function of the human body as it relates to nursing practice. Course content is geared to nursing applications and provides the knowledge, skills and abilities to complete the NCLEX-RN examination. This course is required for all nursing students.

Prerequisites: **BIOL 120 Principles of Biology I, BIOL 241 Microbiology, MATH 120 College Algebra and Trigonometry I**

BIOL 318 HUMAN ANATOMY AND PHYSIOLOGY I (FOR NURSING PROGRAM) LABORATORY - 1 semester hour

A laboratory to accompany BIOL 318 lecture. This course is required for all nursing students.

Corequisite: **BIOL 318 Human Anatomy and Physiology I (For Nursing Program)**

BIOL 319 HUMAN ANATOMY AND PHYSIOLOGY II (FOR NURSING PROGRAM) - 3 semester hours**Sp**

BIOL 319 is the second half of a two-semester course (with lab) for nursing students describing the structure and function of the human body as it relates to nursing practice. Course content is geared to nursing applications and provides the knowledge, skills and abilities to complete the NCLEX-RN examination. This course is required for all nursing students.

Prerequisite: **BIOL 318 Human Anatomy and Physiology I (For Nursing Program)**

BIOL 319 HUMAN ANATOMY AND PHYSIOLOGY II LABORATORY (FOR NURSING PROGRAM) - 1 semester hour

A laboratory to accompany BIOL 319 lecture. This course is required for all nursing students.

Corequisite: **BIOL 319 Human Anatomy and Physiology II (For Nursing Program)**

BIOL 324 ECOLOGY - 3 semester hours**F, Sp**

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.

Prerequisites: **BIOL 121 Principles of Biology II**

BIOL 324 ECOLOGY LABORATORY - 1 semester hour**F, Sp**

A field study of the relationships of organisms to their environment.

Corequisite: **BIOL 324 Ecology**

BIOL 352 INTRODUCTION TO MATHEMATICAL BIOLOGY - 3 semester hours**F**

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 200 Calculus I, BIOL 120 Principles of Biology I and BIOL 121 Principles of Biology II, or consent of instructor.**

BIOL 405 ANIMAL BEHAVIOR - 3 semester hours**Sp**

A course in the study of the mechanisms and evolution of animal behavior. 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.

Prerequisite: **BIOL 320 (Genetics) or consent of instructor.** This course may be used as a Biology restrictive elective.

BIOL 405 ANIMAL BEHAVIOR LABORATORY - 1 semester hours**Sp**

The study of animal behavior and field to be taken as a corequisite 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.

Corequisite: **BIOL 405 Animal Behavior Lecture**

BIOL 410 SYSTEMATIC BOTANY - 3 semester hours **Sp even years**
 A laboratory field and lecture course devoted to classifying seed plants, ferns, and mosses found in Virginia. Numerous field trips.

Prerequisites: BIOL 310 Plant Morphology

BIOL 410 SYSTEMATIC BOTANY LABORATORY - 1 semester hour **Sp even years**
 A laboratory field course devoted to classifying seed plants, ferns and mosses found in Virginia.

Corequisite: BIOL 410 Systematic Botany

BIOL 411 PROTOZOOLOGY - 3 semester hours **F odd years**
 The biology of parasitic protozoa with emphasis on taxonomy, life histories, morphology and basic principles of physiology; general considerations given to epidemiology, prevention and control, as well as therapeutic measures against protozoan infections.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics

BIOL 411 PROTOZOOLOGY LABORATORY - 1 semester hours **F odd years**
 A taxonomic study of the protozoa.

Corequisite: BIOL 411 Protozoology

BIOL 412 INVERTEBRATE ZOOLOGY - 3 semester hours **F even years**
 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.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics BIOL 324 Ecology

BIOL 412 INVERTEBRATE ZOOLOGY LABORATORY - 1 semester hour **F even years**
 A systematic and morphological study of the invertebrates.

Corequisite: BIOL 412 Invertebrate Zoology

BIOL 413 VERTEBRATE BIOLOGY - 3 semester hours **F**
 A study of various vertebrate groups emphasizing their origin, comparative morphology, taxonomy, life histories, habitats, distribution and economic importance.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics BIOL 324 Ecology

BIOL 413 VERTEBRATE BIOLOGY LABORATORY - 1 semester hour **F**
 A systematic and morphological study of the vertebrates.

Corequisite: BIOL 413 Vertebrate Biology

BIOL 414 TECHNIQUES OF MOLECULAR BIOLOGY - 3 semester hours **Sp**
 A course designed to acquaint students with the latest techniques in molecular biology, including restriction enzyme analysis.

Prerequisites: BIOL 201 Cell and Molecular Biology, BIOL 220 Principles of Genetics; BIOL 241 Introduction to Microbiology or consent of instructor

BIOL 414 TECHNIQUES OF MOLECULAR BIOLOGY LABORATORY - 1 semester hour **Sp**
 A laboratory course devoted to the study of molecular biology techniques.

Corequisite: BIOL 414 Techniques of Molecular Biology

BIOL 415 VERTEBRATE HISTOLOGY - 3 semester hours **Sp**
 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, BIOL 220 Principles of Genetics or consent of instructor

BIOL 415 VERTEBRATE HISTOLOGY LABORATORY - 1 semester hour **Sp**
 A study of the identifying characteristics of animal tissues.

Corequisite: BIOL 415 Vertebrate Histology

BIOL 416 QUANTITATIVE BIOLOGY – 3 semester hours **F**
 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.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 324 Ecology

- BIOL 416 QUANTITATIVE BIOLOGY LABORATORY - 1 semester hours** **F**
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.
Corequisite: **BIOL 416 Quantitative Biology**
- BIOL 417 GENERAL PHYSIOLOGY - 3 semester hours** **Sp**
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 and receptor mechanisms; muscle biochemistry, muscle irritability and contractibility are also considered, as well as humoral integration, nutrition, respiration and circulation.
Prerequisites: **BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; CHEM 305 Organic Chemistry I**
- BIOL 417 GENERAL PHYSIOLOGY LABORATORY - 1 semester hour** **Sp**
A demonstration of the various body functions.
Corequisite: **BIOL 417 General Physiology**
- BIOL 418 PLANT PHYSIOLOGY - 3 semester hours** **F even years**
A course involving studies of the internal and external factors affecting water relations, mineral nutrition, respiration, photosynthesis, growth and differentiation of plants, with emphasis on plant metabolism.
Prerequisites: **BIOL 310 Plant Morphology**
- BIOL 418 PLANT PHYSIOLOGY LABORATORY - 1 semester hour** **F even years**
Plant metabolism functions.
Corequisite: **BIOL 418 Plant Physiology**
- BIOL 419 CELL PHYSIOLOGY - 3 semester hours** **F**
Designed to give the student an overview of cellular structure and function. Special emphasis will be given to the biochemical processes and where they occur within the cell. Topics include: cellular respiration, glycogenolysis, lipogenesis, lipolysis, beta oxidation, photophosphorylation, carbon fixation, transcription, translation, and regulation of protein synthesis.
Prerequisites: **BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 241 Introduction to Microbiology; CHEM 305 Organic Chemistry I; or consent of instructor**
- BIOL 419 CELL PHYSIOLOGY LABORATORY - 1 semester hour** **F**
A study of the structure and functions of cellular organelles.
Corequisite: **BIOL 419 Cell Physiology**
- BIOL 423 CONSERVATION BIOLOGY - 3 semester hours** **F**
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 a conservation solutions such as the design of protected areas and conservation legislation will be covered.
Prerequisite: **BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 324 Ecology. Offered as a non-required biology restrictive elective.**
- BIOL 425 EMBRYOLOGY - 3 semester hours** **F**
A study of the fundamental developmental stages of echnoids, 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.
Prerequisite: **BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics**
- BIOL 425 EMBRYOLOGY LABORATORY - 1 semester hour** **F**
A descriptive study of the early developmental sequences of the vertebrate animals.
Corequisite: **BIOL 425 Embryology**
- BIOL 427 SCIENCE PROCESS SKILLS - 3 semester hours** **F, Sp**
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.
- BIOL 427 SCIENCE PROCESS SKILLS LABORATORY - 1 semester hour** **F, Sp**
Practical experiences in conducting elementary science investigations.
Corequisite: **BIOL 427 Science Process Skills**

BIOL 428 TEACHING SCIENCE IN SECONDARY SCHOOLS - 3 semester hours**F, Sp**

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.

BIOL 440 VIROLOGY - 3 semester hours**Sp even years**

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 241 Introduction to Microbiology is recommended

BIOL 440 VIROLOGY LABORATORY - 1 semester hour**Sp even years**

Multiplication, cultivation, and control of viruses are demonstrated.

Corequisite: BIOL 440 Virology

BIOL 443 IMMUNOLOGY AND SEROLOGY - 3 semester hours**F**

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 specificities, hypersensitivity, immunological tolerance, autoimmunization, tumor and transplant immunology, and monoclonal antibodies.

Prerequisite: BIOL 241 Introduction to Microbiology

BIOL 443 LABORATORY - 1 semester hours**F**

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 medicolegal importance, the performance of immunochemical methods of antigenic analysis.

Corequisite: BIOL 443 Immunology and Serology

BIOL 445 PATHOGENIC AND DIAGNOSTIC MICROBIOLOGY - 3 semester hours**Sp, odd years**

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 241 Introduction to Microbiology

BIOL 445 PATHOGENIC AND DIAGNOSTIC MICROBIOLOGY LABORATORY - 1 semester hour**Sp, odd years**

Identification, isolation and control of pathogenic bacteria.

Corequisite: BIOL 445 Pathogenic and Diagnostic Microbiology

BIOL 446 INVESTIGATIONS AND RESEARCH - 2 semester hours**F, Sp**

Independent research course designed for the application of biological and chemical techniques under the guidance of a member of the biology faculty.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 241 Introduction to Microbiology; BIOL 324 Ecology; CHEM 305 & 307 Organic Chemistry

BIOL 447 SEMINAR IN BIOLOGY - 2 semester hours**F, Sp**

A survey of current biological literature; the student prepares and presents reports on assigned projects.

Prerequisites: BIOL 201 Cell and Molecular Biology; BIOL 220 Principles of Genetics; BIOL 241 Introduction to Microbiology; BIOL 324 Ecology; CHEM 305 & 307 Organic Chemistry

BIOL 450 Introduction to Bioinformatics - 3 semester hours**Sp**

This course is designed to introduce students to the field of bioinformatics. It will be open to students from majors including Biology, Mathematics, Computer Science and Engineering. Lectures will emphasize the close association between bioinformatics and genomics and investigate the rapid development of both fields. Concepts and techniques of molecular biology and computer science will be substantially reviewed such that advanced knowledge in these areas is not required for this course. Lectures will cover basic molecular biology, online bioinformatic databases, biological sequence alignment, gene prediction, functional and comparative genomics, and proteomics. Special emphasis will be placed on current problems in genomics research and the common bioinformatic tools and resources used to resolve them.

Prerequisite: BIOL 320 Principles of Genetics or BIOL 220 or consent of instructor

BIOL 478 STUDENT TEACHING - 8 semester hours

F, Sp

This capstone course is designed to offer a classroom teaching experience in a public school setting with opportunities for involvement with students on the secondary level. The course culminates in full responsibility for planning, implementing, and evaluating classroom activities. Also, the student teacher will develop the ability to apply skills in research and scholarship, the ability to work with diverse populations, the ability to use computer technology to enhance classroom instruction, and the ability to integrate high ethical standards.

SCED 401 SEMINAR IN SCIENCE EDUCATION - 2 semester hours

F

An interdisciplinary seminar course for chemistry, biology, and physics teacher education majors which fosters critical thinking on controversial topics in modern science. The students will cover topics that highlight the interrelationships among the natural sciences, modern teaching techniques and trends in the sciences, and career opportunities in the natural sciences.

**DEPARTMENT OF BIOLOGY BIOLOGY MAJOR
Biology/Pre-Med Concentration
Bachelor of Science Degree**

		Semester Hours		
		1 st Sem	2 nd Sem	Total Hours
FRESHMAN YEAR				
BIOL 120, 121	Principles of Biology I and II	3	3	6
BIOL 120, 121	Principles of Biology I and II Lab	1	1	2
CHEM 101, 102	General Chemistry I and II	3	3	6
CHEM 103, 104	General Chemistry I and II Lab	1	1	2
MATH 120, 121	College Algebra and Tri. I and II	3	3	6
ENGL 110, 111	Composition I and II	3	3	6
FRST 101	Freshman Studies	2	-	2
GE MENU	Fitness Elective	-	1	1
		16	15	31
SOPHOMORE YEAR				
BIOL 201, 220, 324 ¹	Core Courses (3)	6	3	9
BIOL 201, 220, 324 ¹	Core Courses Lab (3)	2	1	3
CHEM 305,306	Organic Chemistry I and II	3	3	6
CHEM 307. 308	Organic Chemistry Lab I and II	1	1	2
BIOL 200	Technical Writing in Biology	3	-	3
GE MENU	Technology Elective	-	3	3
GE MENU	Humanities Elective	-	3	3
GE MENU	Fitness Elective	-	1	1
		15	15	30
JUNIOR YEAR				
BIOL 241 ²	Microbiology	3	-	3
BIOL 241 ²	Microbiology Lab	1	-	1
BIOL ³	Biology Restrictive Elective	3	-	3
BIOL ³	Biology Restrictive Elective Lab	1	-	1
BIOL 310 ²	Plant Morphology	-	3	3
BIOL 310 ²	Plant Morphology Lab	-	1	1
BIOL ²	Biology Group Course	-	3	3
BIOL ²	Biology Group Course Lab	-	1	1
PHYS 116, 117	General Physics I and II	3	3	6
PHYS 116, 117	General Physics I and II Lab	1	-	1
GE MENU	Global Studies Elective	3	-	3
GE MENU	Humanities Elective	-	3	3
		15	15	30
SENIOR YEAR				
BIOL ²	Biology Group Course	3	-	3
BIOL ²	Biology Group Course Lab	1	-	1
BIOL ³	Biology Restrictive Elective (3)	3	6	9
BIOL ³	Biology Restrictive Elective Lab	1	1 or 2	1
BIOL 446	Investigations and Research	2	-	2
BIOL 447	Seminar in Biology	-	2	2
	Restrictive Elective	3	-	3
GE MENU	Literature Elective	3	-	3

GE MENU	History Elective	-	3	3
GE MENU	Social Science Elective	=	<u>3</u>	<u>3</u>
		15	15	30
		(16)	(16)	(32)

¹Core Courses: Cell/Molecular Biology BIOL 201, Principles of Genetics BIOL 220, Ecology BIOL 324
(All core courses must be completed as prerequisites for upper-division electives and can be taken in any order).

²Biology Group Courses: (One course must chosen from each group):

- Group 1) Cell/Molecular; Microbiology BIOL 241
 Group 2) Organismal (Animal): General Zoology BIOL 313; Comparative Vertebrate Anatomy BIOL 311; Protozoology BIOL 411; Invertebrate Zoology BIOL 412; Vertebrate Biology BIOL 413; Vertebrate Histology BIOL 415; General Physiology BIOL 417; Embryology BIOL 425
 Group 3) Organismal (Botany): BIOL 310 Plant Morphology
 Group 4) Ecology/Evolution: Systematic Botany BIOL 410, Animal Behavior BIOL 405; Quantitative Biology BIOL 416; Conservation Biology BIOL 423

³Biology Restrictive Elective: May be any Biology (BIOL) course not already completed. See list of suggested courses for area interest.

At least one Biology Elective must have a lab. Other course may have labs indicated by the values in parentheses ().
 Total Credit Hours will be between 120 and 123 hours depending upon whether Biology electives have a lab or not.

⁴Restrictive Elective Course: May be any course in the school of Engineering, Science and Technology above the 100 level. This may include additional Biology courses (see list of suggested courses for area of interest).

DEPARTMENT OF BIOLOGY
Biology with a Minor in Secondary Education 6 – 12 (128 hrs)

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100	Analytical Reading, Writing and Reasoning I	2**	-	2**
IDST 101	Analytical Reading, Writing and Reasoning II	-	2**	2
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
MATH 121	College Algebra & Tri II	3	-	3
STAT 210	Statistics	-	3	3
CHEM 101	General Chemistry I	3	-	3
CHEM 103	General Chemistry II Laboratory	1	-	1
CHEM 102	General Chemistry II	-	3	3
CHEM 104	General Chemistry II Laboratory	-	1	1
BIOL 120	Principles of Biology I	3	-	3
BIOL 120	Biology Laboratory I	1	-	1
BIOL 121	Principles of Biology II & Laboratory	-	4	4
HISTORY	Elective	-	3	3
		16	17	33

SOPHOMORE YEAR			
EDUC 201	Introduction to Teaching I	2	- 2
EDUC 202	Introduction to Teaching II	-	2 2
IDST 200	Digital Media in Teacher Education	-	3 3
ENGL 202	Literature Elective	-	3 3
CHEM 305	Organic Chemistry I	3	- 3
CHEM 307	Organic Chemistry I Lab	1	- 1
BIOL 201	Core Course*	3	- 3
BIOL 201	Core Course Laboratory*	1	- 1
BIOL 220	Core Course*	3	- 3
BIOL 220	Core Course Laboratory*	1	- 1
BIOL 224	Core Course* & Laboratory*	-	4 4
	Global Studies Elective	-	3 3
	Humanities Elective	<u>3</u>	<u>- 3</u>
		17	15 32
JUNIOR YEAR			
EDUC 315	Data Driven Instructional Design	3	- 3
PSYC 212	Human Growth and Development	-	3 3
SPED 403	Classroom Management in Educational Settings (FE)	-	3 3
HPER 170	Health and Wellness	-	2 2
BIOL 241	Microbiology & Laboratory	4	- 4
PHYS 116	General Physics I	3	- 3
PHYS 116	General Physics I Laboratory	1	- 1
BIOL 310	Plant Morphology & Laboratory	-	4 4
	Biology Restrictive Elective	3	- 3
GEES 181	Earth Science and Lab	-	4 4
	Humanities Elective	3	- 3
		17	16 33
SENIOR YEAR			
EDUC 424	Critical Issues in Education	2	- 2
	Biology Restrictive Elective and Lab	4	- 4
BIOL 447	Seminar in Biology	2	- 2
BIOL 428	Teaching Science	3	- 3
BIOL 402	Teaching in Biology	-	3 3
EDUC 427	Reading in the Subject Area	3	- 3
EDUC 401	Student Teaching Seminar	-	3 3
EDUC 402	Student Teaching	-	<u>9 9</u>
		14	15 29

Additional Requirements for BS in Biology with a minor in Secondary Education

Freshman Year:

- IDST 100/101 are not needed if PRAXIS I scores or SAT scores requirement are met
- Take and pass PRAXIS I Assessment

**IDST 100/101 are not counted in semester hours or toward graduation requirement

*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.

Sophomore Year:

*BIOL 201 Cell and Molecular Biology, BIOL 220 Genetics, and BIOL 224 Ecology may be taken in any sequence. Students must complete admission to Teacher Education Professional Program.

Senior Year:

Students must take and pass PRAXIS II in Biology prior to student teaching.

DEPARTMENT OF CHEMISTRY AND PHYSICS

Chairperson: Ralph Gatrone, Box 9078, 102Sa Hunter McDaniel, Phone: 524-5438
Professors: Godwin Mbagwu
Associate Professors: Ralph Gatrone, Keshav Srivastava, Colleen Taylor
Assistant Professors: Florence Etop, Abhijit Sarkar, Victor Vilchiz

Description of Department

The Department of Chemistry and Physics offers courses leading to the B.S. degree in Chemistry and to the B.S. degree in Physics. The chemistry program prepares students for employment as professional chemists; further study in graduate schools, professional training in medicine, dentistry, pharmacy, and secondary school science teaching. The physics program prepares students for employment as professional physicists, for engineering positions, for graduate study in physics and related areas. The department in conjunction with the Center for Undergraduate Professional Education Programs offers teaching endorsements in Chemistry Education (6-12) and Physics Education (6-12). The Department's faculty has a long and productive research history in biomedical, biophysical, matter and hall effect nuclear waste remediation, inorganic, organic and physical chemistry research. Students and faculty participate in local and national professional chemistry and physics organizations.

Mission of the Department

The Department's mission is to provide quality and challenging academic programs in chemistry and physics. Additionally, the Department seeks to advance the knowledge of chemistry and physics through research and to promote the understanding of chemistry and physics through offering appropriate courses to meet a variety of student needs.

General Objectives

The Department of Chemistry and Physics will do the following:

- Provide the basic training preparing students to become competent professional chemists and physicists.
- Help students gain knowledge and develop the necessary skills to study chemistry or physics at the doctorate level.
- Prepare students to become secondary school teachers of chemistry or physics.
- Promote research and engage in research activities to advance knowledge.
- Provide appropriate courses for all students seeking or requiring knowledge of chemistry and/or physics.

The Chemistry Programs

The Chemistry Major and Biochemistry concentration prepares students for further training at the graduate level or to perform a variety of functions as scientists in industry or to enter professional or graduate schools in the medical, paramedical, dental and other health-related sciences. The Pre-Pharmacy option prepares students for further study in the School of Pharmacy at Howard University. The student will earn a B. S. degree in Chemistry from Virginia State University and a Doctor of Pharmacy degree from Howard University. The Endorsement of Education in Chemistry prepares students to become teachers in secondary schools.

The Physics Programs

The Physics Major provides basic training for those who plan to enter employment as physicists immediately upon graduation or to pursue graduate study. The Physics and Arts option provides a flexible option that trains persons who want to obtain a broad physics-based liberal arts education. The Endorsement on Education in Physics prepares students to become teachers in secondary schools. The Engineering Physics option is designed to prepare students for careers in engineering and/or advanced study in engineering schools. The Biological Physics option is designed to prepare students for advanced interdisciplinary study.

Course Descriptions

“If a student withdraws from the lecture portion of a chemistry course they MUST withdraw from the laboratory course.”

CHEM 101 GENERAL CHEMISTRY I - 3 semester hours**F, Sp, Su**

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.

Co-requisite: CHEM 103 General Chemistry I Laboratory

CHEM 102 GENERAL CHEMISTRY II - 3 semester hours**F, Sp, Su**

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.

Prerequisite: CHEM 101 General Chemistry I

Corequisite: CHEM 103 General Chemistry Laboratory I

CHEM 103 GENERAL CHEMISTRY LABORATORY I -1 semester hour**F, Sp, Su**

An introduction to the principles and techniques of experimental chemistry with emphasis upon formula investigations, equations, elementary laboratory statistics, and chemical reactivity.

Corequisite: CHEM 101 General Chemistry I

CHEM 104 GENERAL CHEMISTRY LABORATORY I -1 semester hour**F, Sp, Su**

A continuation of CHEM 103 with emphasis upon solution properties, kinetics, equilibrium, acids and bases, and qualitative analysis.

Prerequisite: CHEM 103 General Chemistry Laboratory I

Corequisite: CHEM 102 General Chemistry II

CHEM 111 CHEMISTRY 1 - 3 semester hours**F**

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.

Prerequisite: Chemistry Majors or Special Permission from the Department Chair

Corequisites: MATH 200 Calculus I and CHEM 113 Chemistry Laboratory I

CHEM 112 CHEMISTRY II - 3 semester hours**S**

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. **Prerequisite:** CHEM 111 Chemistry I with a C or better; Chemistry majors only

Corequisite: CHEM 114 Chemistry Laboratory II

CHEM 113 CHEMICAL LABORATORY I - 2 semester hours**F**

An introduction to the principles and techniques of experimental chemistry with emphasis upon the application of course material to problem solving in the laboratory.

Corequisite: CHEM 111 Chemistry I; Chemistry majors only

CHEM 114 CHEMISTRY LABORATORY II - 2 semester hours**S**

A continuation of CHEM 113 with emphasis upon problem solving and presenting professional graphical data while exploring, solution properties, kinetics, equilibrium acids and bases, and qualitative analysis.

Prerequisite: CHEM 113 Chemistry I Laboratory; Chemistry major only

Corequisite: CHEM 112 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.

Prerequisites: CHEM 101 or 111

CHEM 214 INORGANIC CHEMISTRY – 3 semester hours**Sp**

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.

CHEM 301 ANALYTICAL CHEMISTRY I - 2 semester hours**F**

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.

Prerequisites: CHEM 102 General Chemistry II with a C or better;

CHEM 104 General Chemistry Laboratory II

CHEM 303 ANALYTICAL CHEMISTRY LABORATORY I -1 semester hour **F**

Laboratory experiences involving the qualitative and quantitative analysis of chemical compounds including gravimetric, volumetric and spectrophotometric methods.

Prerequisites: CHEM 102 General Chemistry II; CHEM 104 General Chemistry Laboratory II

Co-requisite: CHEM 301 Analytical Chemistry I

CHEM 305 ORGANIC CHEMISTRY I - 3 semester hours **F, Sp, Su**

A survey of the chemistry of carbon compounds, their nomenclature, physical properties, structure and reactions with an introduction to reaction mechanisms and instrumental analysis.

Prerequisite: CHEM 102 General Chemistry II or CHEM 112

Corequisite: CHEM 307

CHEM 306 ORGANIC CHEMISTRY II - 3 semester hours **F, Sp, Su**

A continuation of CHEM 305.

Prerequisite: CHEM 305 Organic Chemistry I

CHEM 307 ORGANIC CHEMISTRY LABORATORY I -1 semester hour **F, Sp, Su**

An examination of fundamentals of and practice in organic synthesis, separation, purification and the identification of organic compounds.

Corequisite: CHEM 305 Organic Chemistry I

CHEM 308 ORGANIC CHEMISTRY LABORATORY II -1 semester hour **F, Sp, Su**

A continuation of the fundamentals of and practice in organic synthesis, separation, purification and the identification of organic compounds.

Prerequisite: CHEM 307 Organic Chemistry Laboratory I

Corequisite: CHEM 306 Organic Chemistry II

CHEM 317 INDEPENDENT STUDY AND RESEARCH - 2-4 semester hours **F, Sp**

An introduction to research through library and laboratory investigation of suitable chemical problems.

Prerequisite: Consent of instructor and Department Chair

CHEM 320 ORGANIC CHEMISTRY III - 2 semester hours **F**

Principles of organic chemistry with emphasis on reaction mechanisms and the interpretation of instrumental data.

Prerequisite: CHEM 306 Organic Chemistry II

CHEM 330 INTRODUCTION TO THE CHEMICAL RESEARCH - 2 semester hours **S**

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.

Prerequisite: CHEM 306/308: Organic Chemistry II and CHEM 306/380 Lab

CHEM 332 SURVIVING PROFESSIONAL LIFE -1 semester hour **F**

A course designed to foster ethical practices in science and related research fields. Topics will include avoiding bias in reporting data, recognizing bias in the literature and media and avoiding plagiarism.

Prerequisite: Permission of Instructor

CHEM 400 SPECIAL TOPICS IN CHEMISTRY – 3 semester hours **F, S**

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.

CHEM 401 PHYSICAL CHEMISTRY I - 3 semester hours **F**

A non-laboratory treatment of physical chemistry with emphasis on chemical thermodynamics, phase equilibria, kinetic theory and chemical kinetics.

Prerequisites: CHEM 102 General Chemistry II; MATH 201 Calculus II or consent of instructor

CHEM 402 PHYSICAL CHEMISTRY II - 3 semester hours **Sp**

A continuation of CHEM 401 with emphasis on the condensed states of matter, atomic and molecular structure, spectroscopy, statistical mechanics and electrochemistry.

Prerequisite: CHEM 401 Physical Chemistry I

CHEM 404 EXPERIMENTAL PHYSICAL CHEMISTRY -1 semester hour **Sp**

An introduction to the advanced techniques of physicochemical measurements and their application to chemistry.

Prerequisite: CHEM 401 Physical Chemistry I

CHEM 411 ANALYTICAL CHEMISTRY II - 3 semester hours **Sp**

An advanced course with emphasis on general principles and applications of analytical instrumental analysis.

Prerequisites: CHEM 301 Analytical Chemistry I; CHEM 303 Analytical Chemistry Laboratory I

CHEM 414 ADVANCED INORGANIC CHEMISTRY - 3 semester hours **Sp**

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.

Prerequisite: CHEM 102 General Chemistry II

CHEM 415 INORGANIC CHEMISTRY LABORATORY -1 semester hour

Laboratory experiments in inorganic synthesis and spectroscopic methods in inorganic chemistry.

Corequisite: CHEM 414 Inorganic Chemistry

CHEM 416 ADVANCED PHYSICAL CHEMISTRY - 3 semester hours

A detailed study of the principles of physical chemistry with emphasis upon thermodynamics, statistical mechanics, kinetics and quantum chemistry.

Prerequisite: CHEM 402 Physical Chemistry II

CHEM 417 BIOINORGANIC CHEMISTRY - 3 semester hours **F, odd years**

Introduction to the structure, reactivity, and spectroscopic methods in the study of metalloproteins from an inorganic perspective. The importance of these enzymes is discussed in regard to drug design and understanding of diseases resulting from mutations. Enzymes covered include hemoglobin, myoglobin and hemerythrin, cytochrome P-450, zinc fingers, super oxide dismutase, hemo-cyanin, cis-platinum and nitrogenase.

Prerequisite: CHEM 422 Introduction to Biochemistry and Lab

Corequisite: CHEM 414 Inorganic Chemistry

CHEM 420 SEMINAR IN CHEMISTRY -1 semester hour **F**

A presentation and discussion of topics of current interest and an introduction to the preparation of technical presentations and presentation methods.

Prerequisite: 15 semester hours of chemistry courses

CHEM 422 INTRODUCTION TO BIOCHEMISTRY - 3 semester hours **F**

An introduction to the chemistry of life processes, the composition of living matter and the changes associated with biological processes

Prerequisites: CHEM 306 Organic Chemistry II; CHEM 308 Organic Chemistry Laboratory II

CHEM 422 INTRODUCTION TO BIOCHEMISTRY LABORATORY -1 semester hour **F**

A laboratory course in which the properties of biochemical molecules are explored and common biochemical reactions are examined.

Corequisite: CHEM 422 Introduction to Biochemistry

CHEM 441 ADVANCED LABORATORY I - 2 semester hours **F, Sp**

Prerequisites: CHEM 320 Organic Chemistry III; CHEM 411 Analytical Chemistry II

CHEM 442 ADVANCED LABORATORY II - 2 semester hours **F, Sp, S**

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.

Prerequisite: CHEM 441 Advanced Laboratory I

CHEM 443 ADVANCED FORENSICS LABORATORY I - 2 semester hours **Sp**

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.

Prerequisites: CHEM 411, CJUS 230

CHEM 444 ADVANCED FORENSICS LABORATORY II - semester hours **F**

A continuation of CHEM 443.

Prerequisites: CHEM 443

CHEM 445 INTERNSHIP IN CRIMINALISTICS - 3 semester hours**F, Sp, S**

This on- and 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. This is a lecture/laboratory course. The site supervisor and faculty supervisor will develop the internship criteria and then evaluate the student's performance.

Prerequisite: C or better in CHEM 444.

CHED 402 STUDENT TEACHING IN CHEMISTRY - 3 semester hours**F, Sp**

This course is designed to provide supervision on the content area for pre-service secondary chemistry candidates.

Prerequisite: Department Approval

Corequisite: EDU 402 Student Teaching Seminar; EDUC 402 Student Teaching

DEPARTMENT OF CHEMISTRY AND PHYSICS**Chemistry Major****Bachelor of Science Degree**

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
CHEM 111, 112	Chemistry I and II	3	3	6
CHEM 113, 114	Chemistry Laboratory I and II	2	2	4
ENGL 110, 111	Freshman Writing	3	3	6
GE	History Elective	-	3	3
MATH 200, 201	Calculus I and II	3	3	6
TECH	Technology Elective	3	-	3
GE	Humanities Elective	-	3	3
FRST 101	Freshman Studies	<u>2</u>	-	<u>2</u>
		16	17	33
SOPHOMORE YEAR				
CHEM 305, 306	Organic Chemistry	3	3	6
CHEM 307, 308	Organic Chemistry Laboratory	1	1	2
ENGL	Literature Elective	3	-	3
GEHE/HEPR	Wellness/Health Elective	-	2	2
Or 2 GEPE				
GE	Humanities Elective	3	-	3
CHEM 301	Analytical Chemistry I	2	-	2
CHEM 303	Analytical Chemistry I Laboratory	1	-	1
MATH/STAT	Restricted Math Elective	-	3	3
PHYS 116, 117 or 112, 113	General Physics I and II	4	4	8
CHEM 210	History of Chemistry	-	<u>1</u>	<u>1</u>
		17	14	31
JUNIOR YEAR				
CHEM 411	Analytical Chemistry	-	3	3
CHEM 404	Exp Physical Chemistry	-	1	1
CHEM 401, 402	Physical Chemistry I and II	3	3	6
CHEM 332	Surviving Professional Life	1	-	1
GE	Global Studies Elective	3	-	3
BIOL 120	Principles of Modern Biology I & Lab	4	-	4
CHEM 214	Inorganic Chemistry	-	3	3
	Restricted Elective	3	3	6
	Unrestricted Elective	-	3	3
CHEM 320	Organic Chemistry III	2	-	2
CHEM 330	Introduction to Chemical Research	-	<u>2</u>	<u>2</u>
		16	18	34
SENIOR YEAR				
CHEM 422	Biochemistry and Lab	4	-	4
CHEM 414	Advanced Inorganic Chemistry	-	3	3
CHEM 415	Inorganic Chemistry Laboratory	-	1	1
CHEM 441, 442	Advanced Chemistry Laboratories	2	2	4
CHEM 420	Seminar in Chemistry	1	-	1
GE	Social Science Elective	-	3	3
	Restricted Elective	3	-	3
	Unrestricted Electives	<u>3</u>	<u>3</u>	<u>6</u>
		13	12	25

Students not ready for Calculus I and II in their freshman year may take Math 120 and 121, 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 300, MATH 350, or STAT 330. Upper level (200 level or above) chemistry, biology or computer science courses may also be used to satisfy restricted electives.

DEPARTMENT OF CHEMISTRY AND PHYSICS
Chemistry Major (Biochemistry Concentration)

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
CHEM 111, 112	Chemistry I and II	3	3	6
CHEM 113, 114	Chemistry Laboratory I and II	2	2	4
ENGL 110, 111	Freshman Writing	3	3	6
GEPE	Wellness/Health Elective	-	2	2
MATH 200, 201	Calculus I and II	3	3	6
TECH	Technology Elective	3	-	3
FRST 101	Freshman Studies	2	-	2
GE	History Elective	-	<u>3</u>	<u>3</u>
		16	16	32
SOPHOMORE YEAR				
CHEM 305, 306	Organic Chemistry	3	3	6
CHEM 307, 308	Organic Chemistry Laboratory	1	1	2
CHEM 301	Analytical Chemistry I	2	-	2
CHEM 303	Analytical Chemistry I Laboratory	1	-	1
GE _____	Humanities Elective	3	-	3
CHEM 214	Inorganic Chemistry	-	3	3
BIOL 120	Principles of Modern Biology I & Lab	4	-	4
BIOL 121	Principles of Modern Biology II & Lab	-	4	4
GE _____	Social Science Elective	3	-	3
BIOL 241	Introduction to Microbiology/Lab	-	<u>4</u>	<u>4</u>
		17	15	32
JUNIOR YEAR				
CHEM 411	Analytical Chemistry	-	3	3
BIOL 201	Cell and Molecular Biology	3	-	3
BIOL 220	Genetics	4	-	4
CHEM 330	Introduction to Chemical Research	-	2	2
CHEM 401, 402	Physical Chemistry I and II	3	3	6
CHEM 404	Exp Physical Chemistry	-	1	1
CHEM 332	Surviving Professional Life	1	-	1
CHEM 320	Organic Chemistry III	2	-	2
CHEM 210	History of Chemistry	-	1	1
PHYS 116, 117	General Physics	<u>4</u>	<u>4</u>	<u>8</u>
Or 112, 113		17	14	31
SENIOR YEAR				
GE _____	Humanities Elective	3	-	3
BIOL 414	Molecular Biology	-	4	4
BIOL 419	Cell Physiology & Lab	4	-	4
CHEM 441, 442	Advanced Chemistry Lab I and II	2	2	4
CHEM 422	Introduction to Biochemistry & Lab	4	-	4
GE _____	Global Studies Elective	-	3	3
GE _____	Literature Elective	-	<u>3</u>	<u>3</u>
		13	12	25

Students not ready for Calculus I and II in their freshman year may take MATH 120 and 121, 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 300, MATH 325, MATH 350, or STAT 330. Upper level chemistry or biology courses may also be used to satisfy restricted electives including CHEM 417, CHEM 400, BIOL 425, BIOL 440, or BIOL 443.

DEPARTMENT OF CHEMISTRY AND PHYSICS

Prepharmacy 3 + 3 Concentration

Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
CHEM 111, 112	Chemistry I and II	3	3	6
CHEM 113, 114	Chemistry Laboratory I and II	2	2	4
ENGL 110, 111	Freshman Writing	3	3	6
GEHE/HEPR	Health/Wellness Elective	-	2	2
or 2 GEPE				
FRST 101	Freshman Studies	2	-	2
MATH 200, 201	Calculus I and II	3	3	6
GE _____	Humanities Elective	-	3	3
GE _____	History Elective	<u>3</u>	<u>=</u>	<u>3</u>
		16	16	32
SOPHOMORE YEAR				
CHEM 305, 306	Organic Chemistry	3	3	6
CHEM 307, 308	Organic Chemistry Laboratory	1	1	2
BIOL 120	Principles of Modern Biology I & Lab	4	-	4
GE _____	Social Science Elective	3	-	3
PHYS 116, 117	General Physics	4	4	8
or 112, 113				
GE _____	Tech Elective	-	3	3
CHEM 214	Inorganic Chemistry	-	3	3
ENGL _____	Literature Elective	-	3	3
GE _____	Humanities Elective	<u>3</u>	<u>=</u>	<u>3</u>
		18	17	35
JUNIOR YEAR				
CHEM 332	Surviving Professional Life	1	-	1
CHEM 301, 411	Analytical Chemistry I and II	2	3	5
CHEM 303	Analytical Chemistry Lab	1	-	1
CHEM 404	Exp Physical Chemistry	-	1	1
CHEM 401, 402	Physical Chemistry I and II	3	3	6
CHEM 441, 442	Advanced Chemistry Lab I and II	2	2	4
GE _____	Global Studies	-	3	3
CHEM 320	Organic Chemistry III	2	-	2
	Restricted Elective	<u>3</u>	<u>5</u>	<u>8</u>
		14	17	31

Total Virginia State University campus credits required 98

Total credits to be transferred from Howard University 22

Students not ready for Calculus I and II in their freshman year may take MATH 120 and 121, however, the credits do not count toward the total number of semester hours needed to meet the degree requirements. Restricted electives may be selected from upper level chemistry, math, physics, biology, or computer science courses.

DEPARTMENT OF CHEMISTRY AND PHYSICS
Chemistry with a Minor in Secondary Education 6-12 (123 hrs)

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100	Analytical Reading, Writing and Reasoning I	2**	-	2**
IDST 101	Analytical Reading, Writing and Reasoning II	-	2**	2
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
MATH 200	Calculus I	3	-	3
MATH 201	Calculus II	-	3	3
CHEM 111	Chemistry I	3	-	3
CHEM 113	Chemistry I Laboratory	2	-	2
CHEM 112	Chemistry II	-	3	3
CHEM 114	Chemistry II Laboratory	-	2	2
HISTORY	Elective	-	3	3
HPER 170	Health and Wellness	-	<u>2</u>	<u>2</u>
		13	16	29
SOPHOMORE YEAR				
EDUC 201	Introduction to Teaching I	2	-	2
EDUC 202	Introduction to Teaching II	-	2	2
IDST 200	Digital Media in Teacher Education	3	-	3
ENGL 202	African American Lit	-	3	3
CHEM 305	Organic Chemistry I	3	-	3
CHEM 307	Organic Chemistry I Lab	1	-	1
CHEM 301	Analytical Chemistry I	2	-	2
CHEM 303	Analytical Chemistry I Lab	1	-	1
PHYS 116	General Physics I	3	-	3
PHYS 116	General Physics I Lab	1	-	1
CHEM 306	Organic Chemistry II	-	3	3
CHEM 308	Organic Chemistry II Lab	-	1	1
BIOL 112	Principles of Modern Biology and Lab	-	4	4
MATH ____	Restricted Math Elective	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
EDUC 315	Data Driven Instructional Design	3	-	3
PSYC 212	Human Growth and Development	-	3	3
SPED 403	Classroom Management in Education Settings (FE)	-	3	3
Lang Elective	100 or above	3	3	6
CHEM 401	Physical Chemistry I	3	-	3
CHEM 411	Analytical Chemistry II	-	3	3
CHEM 320	Organic Chemistry III	2	-	2
GEES 181	Earth Science and Lab	4	-	4
_____	Social Science Elective	<u>3</u>	-	<u>3</u>
		18	12	30

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
SENIOR YEAR				
EDUC 424	Critical Issues in Education	2	-	2
CHEM 422	Biochemistry and Lab	4	-	4
CHEM 420	Seminar in Chemistry	1	-	1
CHEM 414	Inorganic Chemistry	3	-	3
CHEM 415	Inorganic Chemistry Lab	1	-	1
CHED 473	Teaching Science	3	-	3
EDUC 427	Reading in the Subject Area	3	-	3
CHED 402	Student Teaching in Chemistry	-	3	3
EDUC 401	Student Teaching Seminar	-	3	3
EDUC 402	Student Teaching	-	9	9
		17	15	32

Recommend Spanish, one fulfills Humanities elective and one fulfills Global Studies elective.

****IDST 100/101 are not counted in semester hours or toward graduation requirement**

DEPARTMENT OF CHEMISTRY AND PHYSICS
CHEMISTRY MAJOR (Concentration in Forensic Chemistry)

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
CHEM 111, 113	Chemistry I & Lab	5	-	5
CHEM 112, 114	Chemistry II & Lab	-	5	5
ENGL 110, 111	Composition I, II	3	3	6
MATH 200, 201	Calculus I, II	3	3	6
TECH _____	Technology Elective	3	-	3
FRST 101	Freshman Studies	2	-	2
CJUS 116	Introduction to Criminal Justice	-	3	3
GEHE/HPER or GEPE	Wellness/Health Elective	-	<u>2</u>	<u>2</u>
		16	16	32
SOPHOMORE YEAR				
CHEM 214	Inorganic Chemistry	-	3	3
CHEM 305, 307	Organic Chemistry I & Lab	4	-	4
CHEM 306, 308	Organic Chemistry II & Lab	-	4	4
CHEM 301	Analytical Chemistry I	3	-	3
CHEM 411	Analytical Chemistry II	-	3	3
BIOL 120	Principles of Modern Biology I & Lab	4	-	4
BIOL 121	Principles of Modern Biology II & Lab	-	4	4
CJUS 212	American Law Enforcement	3	-	3
GE	History Elective	<u>3</u>	-	<u>3</u>
		17	14	31
JUNIOR YEAR				
PHYS 116, 117 or 112, 113	General Physics	4	4	8
BIOL 241	Introduction to Microbiology & Lab	-	4	4
BIOL 201	Cell and Molecular Biology & Lab	4	-	4
BIOL 220	Genetics & Lab	4	-	4
GE	Global Studies	-	3	3
CJUS 380	Criminal Procedures	3	-	3
GE	Humanities Elective	-	3	3
CHEM 443	Advanced Forensics Lab	-	<u>2</u>	<u>2</u>
		15	16	31
SENIOR YEAR				
CHEM 401	Physical Chemistry I	3	-	3
CHEM 402	Physical Chemistry II	-	3	3
CHEM 404	Experimental Physical Chemistry Lab	-	1	1
BIOL 414	Molecular Biology	4	-	4
CHEM 444	Advanced Forensics Lab II	2	-	2
CHEM 422	Introduction to Biochemistry & Lab	4	-	4
CHEM 445	Internship in Criminalistics	-	3	3
GE	Humanities Elective	-	3	3
GE	Literature Elective	-	<u>3</u>	<u>3</u>
		13	13	26

Students not ready for Calculus I and II in their freshman year may take MATH 120 and 121, however, the credits do not count toward the total number of semester hours needed to meet the degree requirements.

Course Descriptions**Physics**

PHYS 105 INTRODUCTION TO PHYSICS I - 3 semester hours **F, Sp**
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.

PHYS 105 INTRODUCTION TO PHYSICS I LABORATORY - 1 semester hour **F, Sp**
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 - 3 semester hours **Sp, Su**
A continuation of PHYS 105 treating electrostatics, magnetism, circuits, optics, relativity, atomic structure, the nucleus and fundamental particles.

Prerequisite: PHYS 105 Introduction to Physics I

PHYS 106 INTRODUCTION TO PHYSICS II LABORATORY - 1 semester hour **Sp, Su**
Laboratory experiments in electromagnetism, wave motion, optics, atomic structure, and nuclear physics designed to complement PHYS 105.

Prerequisite: PHYS 105 Introduction to Physics I

Corequisite: PHYS 106 Introduction to Physics II

PHYS 112 GENERAL PHYSICS I - 3 semester hours **F, Sp**
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.

Corequisite: MATH 200 Calculus I

PHYS 112 GENERAL PHYSICS I LABORATORY - 1 semester hour **F, Sp**
Laboratory experiments in mechanics, fluids, and heat designed to compliment PHYS 112.

Corequisite: PHYS 112 General Physics I

PHYS 113 GENERAL PHYSICS II - 3 semester hours **F, Sp**
A continuation of PHYS 112 treating electromagnetism and optics.

Prerequisite: PHYS 112 General Physics I

Co-requisite: MATH 201 Calculus II

PHYS 113 GENERAL PHYSICS II LABORATORY - 1 semester hour **F, Sp**
Laboratory experiments in electromagnetism and optics designed to complement PHYS 113.

Prerequisite: PHYS 112 General Physics I Laboratory

Corequisite: PHYS 113 General Physics II

PHYS 214 GENERAL PHYSICS III - 3 semester hours **F**
A study of vibrations, wave motion, interference, diffraction, polarization, special relativity, the quantum theory of radiation, the Bohr atom, quantum mechanics, x-rays, radioactivity, nuclear reactions, fundamental particles, solid state physics, and electronics.

Prerequisites: PHYS 113 General Physics II; MATH 201 Calculus II

Pre or Corequisite: MATH 300 Calculus III

PHYS 214 GENERAL PHYSICS III LABORATORY -1 semester hour **F**
Experiments involving physical optics including diffraction, interference, polarization of light will be performed. Also, selected experiments from atomic, molecular, and nuclear physics will be included. Additionally, fundamental constants will be measured. The analysis of data and errors will be further developed.

Prerequisites: PHYS 113 General Physics II

Corequisite: PHYS 214 General Physics III

PHYS 217 INTERMEDIATE LABORATORY I - 2 semester hours **Sp**
A study of elementary workshop practice, basic instruments for the measurement of mechanical, electromagnetic, optical and thermal quantities, and the effect of uncertainties in measurements on calculated quantities. Selected experiments are also performed and written up by the students.

Prerequisite: PHYS 214 General Physics III

PHYS 218 INTERMEDIATE LABORATORY II - 2 semester hours **F**
A continuation of PHYS 217.

Prerequisite: PHYS 217 Intermediate Laboratory I

PHYS 301 CONTEMPORARY ISSUES IN PHYSICS - 4 semester hours **Sp**

A course for students who plan to study the current issues in the physical sciences as they relate to: industrial policy, waste disposal, global warming, nuclear energy, the ozone layer and etc. Solutions to the above problems will be explored using the scientific method. A laboratory will accompany the course.

PHYS 302 CONCEPTUAL PHYSICS - 3 semester hours **F, Sp**

A survey of selected topics in physics which are designed to meet the needs of students preparing to teach at the middle school level.

PHYS 302 CONCEPTUAL PHYSICS LABORATORY - 1 semester hour **F, Sp**

A set of laboratory experiences designed to support the topics covered in the lectures.

Corequisite: PHYS 302 Conceptual Physics

PHYS 311 OPTICAL PHYSICS - 3 semester hours **F**

A study of wave motion, interference, diffraction, polarization, dispersion, scattering, and spectra with an introduction to quantum optics.

Prerequisites: PHYS 214 General Physics III; MATH 300 Calculus

PHYS 312 THERMAL PHYSICS - 3 semester hours **Sp**

A unified approach to the thermal properties of matter based on the quantum viewpoint. Intuitive concepts of probability used to discuss entropy, temperature, chemical potential, free energy, and various thermodynamic potentials. The laws of thermodynamics are developed from simple models of physical systems. Elements of statistical mechanics are introduced. The thermal properties of the monatomic ideal gas are derived using the Boltzmann distribution, and classical kinetic theory is discussed.

Prerequisites: PHYS 214 General Physics III; MATH 300 Calculus III

PHYS 313 PHYSICAL MECHANICS - 3 semester hours **F**

A study of vector analysis, kinematics, particle dynamics, the gravitational field, oscillations, motion of particles in two and three dimensions, planetary motion, motion of groups of particles, rigid bodies, and introduction to Lagrangian and Hamiltonian methods.

Prerequisites: PHYS 214 General Physics III; MATH 300 Calculus III

PHYS 319 ADVANCED LABORATORY I - 3 semester hours **Sp**

A study of thermionic emission vacuum and solid state diodes and triodes in the linear approximation; simple oscillators and amplifiers including frequency response, gain and stability consideration; basic oscilloscopes; devices for detecting and measuring radiation and particle; fundamental considerations involved in pulse analysis and counting methods of measurements and accuracy of determination of several of the fundamental constants.

Prerequisites: PHYS 217 Intermediate Laboratory I; PHYS 218 Intermediate Laboratory II

PHYS 320 ADVANCED LABORATORY II - 2 semester hours **F**

A continuation of PHYS 319.

Prerequisite: PHYS 319 Advanced Laboratory I

PHYS 321 PHYSICS DEMONSTRATIONS - 3 semester hours **F**

A study of some procedures used in handling demonstration equipment used in teaching the basic laws and principles of physics. This course is designed primarily for students following the Endorsement in Education curriculum and high school teachers.

Prerequisite: Permission of instructor

PHYS 350 CONTINUUM MECHANICS - 3 semester hours **Sp**

Study of elasticity and fluid mechanics. Topics include stress, strain, elastic moduli, elastic properties of rods, sheets and shells, basics of fluid mechanics, and viscous flows in simple geometries.

Prerequisites: PHYS 313 Physical Mechanics; MATH 350 Differential Equations

PHYS 414 ELECTROMAGNETISM I - 3 semester hours **F even years**

A study of vector calculus, electrostatics, dielectric materials, special relativity, and the four vector notation.

Prerequisites: PHYS 214 General Physics III; MATH 300 Calculus III

Pre or Corequisite: MATH 301 Multivariate Calculus

PHYS 415 ELECTROMAGNETISM II - 3 semester hours **Sp odd years**

A continuation of PHYS 414 including magnetic fields, electromagnetic induction, magnetic properties of matter, Maxwell's equations, electromagnetic waves, and radiation.

Prerequisite: PHYS 414 Electromagnetism I; MATH 301 Multivariate Calculus

PHYS 416 QUANTUM MECHANICS I - 3 semester hours **F odd years**

A study of the foundations of the quantum theory, the Schrodinger equation, wave packets, free particles, particle in a box, the harmonic oscillator, coherent states, angular momentum and spin, Pauli spin matrices, addition of angular momenta, the hydrogen atom, complex atoms, Heisenberg matrix mechanics, and quantum computation.

Prerequisites: PHYS 313 Physical Mechanics

PHYS 417 QUANTUM MECHANICS II – 3 semester hours**Sp even years**

Continuation of the study of quantum mechanics. Perturbation theory – time independent and time dependent, variational techniques, applications to atomic and molecular states, interaction of atoms and molecules with external electric and magnetic fields, relativistic quantum mechanics.

Prerequisites: PHYS 416 Quantum Mechanics I

PHYS 418 MATHEMATICAL METHODS OF PHYSICS - 3 semester hours**F odd years**

Mathematical techniques for solving physics problems are developed. Infinite series, vector analysis, boundary and initial value problems, complex analysis, special functions, Fourier analysis, probability theory, variational methods, stochastic processes and simulations, numerical methods for integrals, Fourier transforms, and linear algebra, and statistical methods for point and interval estimation and hypothesis testing are discussed..

Prerequisites: MATH 300 Calculus III

PHYS 419 INTRODUCTION TO CONDENSED MATTER PHYSICS – 3 semester hour**F odd years**

A study of many-particle systems. Topics include electronic states in crystals, statistical mechanics of polymers and membranes, liquid crystals, superconductivity, phase transitions, defects, Brownian motion, ordering kinetics.

Prerequisites: PHYS 312 Thermal Physics; PHYS 313 Physical Mechanics

Pre or Co-requisite: PHYS 416 Quantum Mechanics I

PHYS 421 PHYSICS DEMONSTRATION II - 3 semester hours**Sp**

Primarily for Associate in Education majors; procedures in handling demonstration equipment used in teaching the basic laws and principles of physics.

Prerequisites: PHYS 214 General Physics III, MATH 300 Calculus

PHYS 422 ATOMIC AND MOLECULAR PHYSICS - 3 semester hours**Sp even years**

A study of the photoelectric effect, the Compton effect, matter waves, the atomic nature of matter, Rutherford's and Bohr's models of the atom, wave mechanics, one-electron atoms, magnetic moments, spin, transition rates, the exclusion principle, multielectron atoms, the periodic table, quantum statistics, molecules, ionic and covalent bonds, molecular spectra, rotational and vibrational spectra and the Raman effect..

Prerequisites: PHYS 311 Optical Physics; PHYS 312 Thermal Physics; PHYS 416 Quantum Mechanics I

Pre or Corequisite: Quantum Mechanics II

PHYS 424 SENIOR THESIS - 2 semester hours**F, Sp**

For senior physics major only; independent research/study on an approved topic of particular interest to the student. The student must submit a written thesis and pass a comprehensive oral examination.

PHYS 480 SPECIAL TOPICS – 3 semester hours**F, Sp**

An introduction to topics in physics of current research interest.

Prerequisites: PHYS 312 Thermal Physics; PHYS 313 Physical Mechanics

PHYS 481 BIOPHYSICS - 3 semester hours**Sp odd years**

This course will cover concepts and techniques from experimental and theoretical physics useful in analyzing biological problems at the molecular, cellular, whole organism, and eco-system levels. Topics include statistical mechanics of polymers, membranes, and other flexible objects, basics of low-Reynolds number fluid dynamics, physics of complex fluids – equilibrium and dynamics, single molecule fluorescence and micromechanical techniques – theory and experiments, elastic response of cells to mechanical perturbations, mechanics of bird and insect flight, and evolutionary dynamics.

Prerequisites: Junior level or above and permission of instructor

PHED 402 STUDENT TEACHING IN PHYSICS – 3 semester hours**F, Sp**

This course is designed to provide supervision on the content area for pre-service secondary physics candidates.

Prerequisite: Departmental Approval

Corequisites: EDUC 402 Student Teaching Seminar; EDUC 402 Student Teaching

DEPARTMENT OF CHEMISTRY AND PHYSICS

Physics Major

Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
PHYS 112, 113	General Physic I and II	4	4	8
ENGL 110, 111	Composition I/II	3	3	6
	Wellness Elective	2	-	2
MATH 200, 201	Calculus I and II	3	3	6
FRST	Freshman Studies	2	-	2
HIST	History Elective	-	3	3
ECON 100	Basic Economic	-	3	3
	Global Studies (GE List)	<u>3</u>	<u>-</u>	<u>3</u>
		17	16	33
SOPHOMORE YEAR				
PHYS 214, 215	General Physics III/Optical Physics	4	3	7
PHYS 217	Intermediate Lab	-	2	2
PHIL 180	Critical Thinking	3	-	3
MATH 300, 301	Calculus III/Multivariate Calculus	3	3	6
	Technical Elective	3	-	3
ENGL	Literature Elective	-	3	3
	Unrestrictive Elective	-	3	3
	Restrictive Elective	<u>3</u>	<u>3</u>	<u>6</u>
		16	16	32
JUNIOR YEAR				
PHYS 218	Intermediate Lab	2	-	2
PHYS 312	Thermal Physics	-	3	3
PHYS 313	Physical Mechanics	3	-	3
PHYS 319	Advanced Lab I	-	3	3
PHYS 350	Continuum Mechanics	-	3	3
MATH 350	Differential Equations	-	3	3
CHEM 101, 102	General Chemistry	3	3	6
CHEM 103, 104	Laboratory	1	1	2
	Humanities Elective	<u>3</u>	<u>-</u>	<u>3</u>
		12	16	28
SENIOR YEAR				
PHYS 320	Advanced Lab II	3	-	3
PHYS 414, 415	Electromagnetism I & II	3	3	6
PHYS 418	Mathematical Methods of Physics	3	-	3
PHYS 419	Introduction to Condensed Matter Physics	3	-	3
PHYS 424	Senior Thesis	-	2	2
PHYS 416/417	Quantum Mechanics I & II	3	3	6
PHYS 481	Biophysics	-	3	3
MCET 102	Machines Laboratory	-	<u>1</u>	<u>1</u>
		15	12	27
				120

Restricted electives can be selected from upper level engineering/physics/math/statistics/computer science courses.

**DEPARTMENT OF PHYSICS
ENGINEERING PHYSICS CONCENTRATION
Bachelor of Science Degree**

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
PHYS 112, 113	General Physic I and II	4	4	8
ENGL 110, 111	Composition I/II	3	3	6
	Wellness Elective	2	-	2
MATH 200, 201	Calculus I and II	3	3	6
FRST	Freshman Studies	3	3	6
HIST	History Elective	-	3	3
	Humanities Elective	3	-	3
ENGT 100	Introduction to Engineering Technology		2	2
		17	15	32
SOPHOMORE YEAR				
PHYS 214, 215	General Physics III/Optical Physics	4	3	7
PHYS 217	Intermediate Lab	-	2	2
	Introduction to Philosophy	3	-	3
MATH 300, 301	Calculus III/Multivariate Calculus	3	3	6
	Technical Elective	3	-	3
ENGT 105	Engineering Problem Solving	-	1	1
ELET 101, 102	Circuit Analysis I, II	4	4	8
	Unrestrictive Elective	-	<u>2</u>	<u>2</u>
		17	15	32
JUNIOR YEAR				
PHYS 218	Intermediate Lab	2	-	2
PHYS 312	Thermal Physics	-	3	3
ENGT 301	Computer Programming	3	-	3
MATH 350	Differential Equations	-	3	3
CHEM 101, 102	General Chemistry	3	3	6
CHEM 103, 104	Laboratory	1	1	2
	Humanities Elective	-	3	3
PHYS 313	Physical Mechanics	3	-	3
ENGL	Literature Elective	<u>3</u>	-	<u>3</u>
		15	13	28
SENIOR YEAR				
PHYS 414, 415	Electromagnetism I & II	3	3	6
PHYS 424	Senior Thesis	-	2	2
ELET 203	Introduction to Electronics	4	-	4
CPEG 403	Engineering Computations	3	-	3
	Global Studies	3	-	3
PHYS 416, 417	Quantum Mechanics I & II	3	3	6
MCET 102	Machines Laboratory	-	1	1
	Restrictive Elective	-	<u>3</u>	<u>3</u>
		16	12	28

Restricted electives can be selected from upper level engineering/physics/math/statistics/computer science courses.

DEPARTMENT OF CHEMISTRY AND PHYSICS
Physics with a Minor in Secondary Education 6-12 (128 hrs)
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
EDRC 100	Analytical Reading and Reasoning	3	-	3
EDUC 100	Practicum	1	-	1
EDUC 101	Foundations of Education	2	-	2
MATH 200, 201	Calculus I & II	3	3	6
PHYS 112, 113	General Physics I & II	4	4	8
FRST	Freshman Studies	2	-	2
ENGL 110, 111	Composition I & II	3	3	6
	History Elective	-	3	3
	Wellness Elective	-	<u>2</u>	<u>2</u>
		15	15	20
SOPHOMORE YEAR				
EDUC 200	Practicum	1	-	1
PSYC 212	Human Growth and Development	3	-	3
PHYS 214	General Physics III	4	-	4
MATH 300/301	Calculus III/Multivariate Calculus	3	3	6
GEES 181	General Earth Science/Lab	-	4	4
	Technical Elective	-	3	3
	Literature Elective	3	-	3
	Global Studies Elective	-	3	3
	Humanities Elective	<u>3</u>	<u>3</u>	<u>6</u>
		17	16	33
JUNIOR YEAR				
EDUC 300	Practicum	1	-	1
EDUC 315	Generic Teaching Skills	3	-	3
PSYC 314	Educational Tests and Measurements	-	3	3
BIOL 120	Principles of Biology I	4	-	4
PHYS 300	Practicum	1	-	1
PHYS 313	Physical Mechanics	3	-	3
PHYS 312	Thermal Physics	-	3	3
PHYS 321	Physics Demonstrations	3	-	3
MATH 350	Differential Equations	-	3	3
CHEM 101, 102	General Chemistry I & II	3	3	6
CHEM 103, 104	General Chemistry I & II Lab	<u>1</u>	<u>1</u>	<u>2</u>
		19	13	32
SENIOR YEAR				
EDUC 401	Student Teaching Seminar	-	1	1
EDUC 402	Student Teaching	-	11	11
EDUC 427	Reading in the Subject Area	3	-	3
SPED 403	Management of Children and Youths in Educ. Setting	-	3	3
PHYS 414, 415	Electromagnetism I & II	3	3	6
PHYS 416, 417	Quantum Mechanics I & II	3	3	6
PHYS 430	Physics Teaching in the Secondary Schools	3	-	3
		12	21	33

DEPARTMENT OF PHYSICS
BIOLOGICAL PHYSICS CONCENTRATION
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN				
PHYS 112, 113	General Physics I and II	4	4	8
MATH 200, 201	Calculus I and II	3	3	6
ENGL 110/111	Composition I/II	3	3	6
	Wellness Elective	2	-	2
FRST _____	Freshman Studies	2	-	2
HIST _____	History Elective	-	3	3
	Humanities Elective	3	-	3
	Humanities Elective	-	<u>3</u>	<u>3</u>
		17	16	33
SOPHOMORE YEAR				
PHYS 214, 311	General Physics III/Optical Physics	4	3	7
PHYS 217	Intermediate Lab	-	2	2
MATH 300, 301	Calculus III/Multivariate Calculus	3	3	6
	Technical Elective	3	-	3
GEPI 140	Introduction to Philosophy	3	-	3
ENGL _____	Literature Elective	-	3	3
BIOL 120, 121	Principles of Biology I, II	<u>4</u>	<u>4</u>	<u>8</u>
		17	15	32
JUNIOR YEAR				
PHYS 218	Intermediate Lab	2	-	2
PHYS 312	Thermal Physics	-	3	3
PHYS 313	Physical Mechanics	3	-	3
MATH 350	Differential Equations	-	3	3
CHEM 101, 102	General Chemistry	3	3	6
CHEM 103, 104	Laboratory	1	1	2
BIOL 201	Cell and Molecular Biology	4	-	4
BIOL 220	Principles of Genetics	-	4	4
	Restrictive Elective	<u>2</u>	-	<u>2</u>
		15	14	29
SENIOR YEAR				
PHYS 414, 415	Electromagnetism I & II	3	3	6
PHYS 424	Senior Thesis	-	2	2
PHYS 418	Methods of Mathematical Physics	3	-	3
PHYS 419	Introduction to Condensed Matter Physics	3	-	3
PHYS 416, 417	Quantum Mechanics I & II	3	3	6
PHYS 481	Biophysics	-	3	3
	Global Studies	-	<u>3</u>	<u>3</u>
		12	14	26

DEPARTMENT OF ENGINEERING AND TECHNOLOGY

Chairperson:	Keith M. Williamson, Box 9212, 145W Hunter McDaniel, Phone: 524-5193
Professors:	Ali Ansari, Ephrem Eyob, Singli Garcia-Otero, Ben Nwoke
Associate Professors:	Sandeep Ahuja, Shahzad Akbar, Jahangir Ansari, Nasser Ghariban, Amir Javaheri, Nasser H. Rashidi, Nancy Study, Steve Tompkins, Keith Williamson, Stephen Tompkins, Keith M. Williamson
Assistant Professors:	Salame Amr, Yoon Kim, Ehsan Sheybani, Gymama Slaughter
Instructors:	Kwame Adom

Mission of Department

The Department of Engineering, and Technology has the mission of specifically promoting and sustaining Bachelor of Science degree programs which meet the needs of industry and society, particularly, in the central/south-side Virginia.

Description of Department

The Department of Engineering, and Technology consists of three units: Engineering, Engineering Technology, and Industrial Technology, and offers five degrees: B.S. in Computer Engineering, B.S. in Manufacture Engineering, B.S. in Electronics Engineering Technology, B.S. in Mechanical Engineering Technology, and B.S. in Industrial Technology.

Engineering Unit

Engineers work very closely with other members of the engineering team consisting of scientists, technologists, technicians, and craftsmen. The engineers typically design, develop, optimize systems and processes.

1. a fundamental understanding of the analytical tools and physical models that provide the foundation of engineering science and problem solving;
2. the synthesis and creative application of engineering science to current practical engineering systems;
3. a system view, critical thinking, and an ability to communicate in preparation for leadership roles;
4. a broad intellectual and academic training that develops individuals beyond disciplinary boundaries; and
5. a scientific and professional education that prepares students for success as career engineers, and in the lifelong process of learning.

Computer Engineering

Computer Engineering is concerned with the analysis, design, and application of computer systems. It includes design of computer based real-time data acquisition systems, analysis and design of computer hardware, software, and their tradeoffs. Computer engineering is more concerned with the physical implementation of computing devices, the interaction between hardware and software, and the methodologies for designing digital systems.

An industry involved with electronics and computers has many positions classified as computer engineering. Since most industries rely heavily on computers and automation, there are indeed many computer engineering positions for graduates in this field.

Course Requirements for the B.S. in Computer Engineering:

Earn at least a "C" or higher in major courses, MATH 200, and MATH 201.

Manufacturing Engineering

The manufacturing engineering is responsible for helping design manufacturing processes as well as deciding how to build the product after the design specifications are determined. Students will learn about engineering materials and their transformations through manufacturing processes into products. To practice this profession, students must have a special knowledge of manufacturing processes and a working knowledge of many other related disciplines. Manufacturing engineering graduates are in demand by all types and sizes of manufacturing companies because of their diversified training in traditional as well as new areas of manufacturing. The rapid growth of new technologies in computer-integrated manufacturing has opened an entirely new world of opportunities for manufacturing engineers. The trend in industry is toward utilizing design engineers and manufacturing engineers as a team in order to produce more economical and functional products.

Course Requirements for the B.S. in Manufacturing Engineering:

Earn at least a "C" or higher in major courses, MATH 200, and MATH 201.

Engineering Technology Unit

Engineering Technologists work very closely with other members of the engineering team consisting of scientists, engineers, technicians, and craftsmen. The engineering technologist typically organizes the manpower, materials and equipment to design, construct, operate, maintain and manage technical engineering projects.

Engineering Technology unit consist of Electronics Engineering Technology and Mechanical Engineering Technology. These two engineering technology programs are accredited by the Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (TAC or ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700. The goals of the Engineering Technology unit are as follows:

1. To prepare graduates to be productive technical employees immediately upon graduation and throughout their professional careers.
2. To prepare graduates to function effectively as individuals and as members of an increasingly technological and global society.
3. To prepare students to be competent system problem solvers with knowledge of currently established design and laboratory techniques.
4. To maintain programs and activities that prepare graduate to enter the work force of the 21st century, pursue advanced study, assume leadership roles, and be competitive in a global society.

Electronics Engineering Technology

The future electronics engineering technologist will study theory and practice in all areas of electronics using modern electronic and microprocessor laboratories. He/she will become familiar with all the areas of electronics, including analog and digital integrated circuits, instrumentation, discrete power devices, electronic communications and control devices. This hardware oriented program provides students with a knowledge of currently established design and laboratory techniques. The laboratory facilities will be supplemented by the use of video resources, microprocessor trainers, and the use of computers to solve problems and design analog and digital circuits.

Course Requirements for the B.S. in Electronics Engineering Technology:

Earn at least a “C” or higher in major courses, MATH 120, and MATH 121.

Mechanical Engineering Technology

Mechanics and thermal processes form the core of the program. Mechanics examines the forces acting on machines and their tendency to cause failure. Thermal processes cover energy conversion principles as applied to engines, refrigeration, and other systems. Laboratory experiences include mechanical measurements, computer aided drafting, materials testing, and hydraulic and pneumatic systems. Emphasis is given to the use of computers in the program. Overall, the program provides students with a practical approach to problem solving in such areas as machine design and production and manufacturing.

Course Requirements for the B.S. in Mechanical Engineering Technology:

Earn at least a “C” or higher in major courses, MATH 120, and MATH 121.

Industrial Technology Unit

Industrial Technologists work very closely with other members of the engineering and marketing team consisting of scientists, engineers, technicians, craftsmen, marketers, trainers, and managers, within a broad variety of industries. The industrial technologists typically assume positions in training, production management, quality management, facilities management, industrial sales and marketing, and manufacturing management.

Industrial Technology unit offers a Bachelor of Science Degree in Industrial Technology with concentrations in Computer Aided Drafting and Design, Technology Management, and Industrial Distribution and Logistics Management. The program is designed to produce technical/management professional who are typically involved with:

- a. application of theories, concepts, and principles found in the humanities and the social and behavioral sciences, including a thorough grounding in communications skills.
- b. understanding of the theories and the ability to apply the principles and concepts of mathematics and science and the application of computer fundamentals.
- c. application of concepts derived from, and current skills developed in, a variety of technical and related disciplines which may include, but are not limited to, materials and production processes, industrial management and human relations, marketing, communications, electronics, graphics, distribution and logistics management.
- d. completion of a field of specialization, for example, electronic data processing, computer aided design, computer integrated manufacturing, manufacturing, construction, energy, polymers, printing, safety, or transportation.

The Computer Aided Drafting and Design option is designed to prepare computer aided drafters, designers and management technical/management-oriented professionals for employment in industry, business, education, and government establishments.

The Technology Management option is designed to prepare young men and women as technical managers in a variety of positions in industry, business, education and government related to production, processing and manufacturing. The programs deals with tools, materials, machines, equipment, products, processes, occupation and management.

Course Requirements for the B.S. in Industrial Technology:

Earn at least a "C" or higher in MATH 121 and the capstone senior project course INTC 490.

Course Descriptions

COMPUTER ENGINEERING

CPEG 201 SOPHOMORE LABORATORY I (CIRCUIT ANALYSIS & DIGITAL DESIGN) - 1 semester hour F
Measurement techniques and experiments on fundamental laws and analysis techniques of circuit analysis, such as, Ohm's law, Kirchhoff's current and voltage laws, the law of conservation of energy, Norton's and Thevenin's Theorems, DeMorgan's theorem, mesh and nodal analysis, superposition, source transformations, Boolean algebra and K-Map.
Corequisites: CPEG 207 Introduction to Digital Systems, and ENGR 201 Circuit Analysis

CPEG 202 SOPHOMORE LABORATORY II (MICROPROCESSOR) - 1 semester hour Sp
Microprocessor-based laboratory utilizing computer programming language. Emphasis is on writing and running programs on the 8088/86 based microprocessor systems. Lab includes both software and hardware.
Corequisite: CPEG 208 Microprocessors

CPEG 207 INTRODUCTION TO DIGITAL SYSTEMS - 3 semester hours F
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.
Corequisite: CPEG 201 Sophomore Lab I

CPEG 208 MICROPROCESSORS - 3 semester hours Sp
Principles of operation of 80x86 family of microprocessors, including assembly language programming, internal architecture of 80x86 processors, timing analysis, and interfacing techniques. Special emphasis will be placed on hardware-software interactions, design of memory systems for microprocessors, and on utilization of programmable peripheral devices.
Prerequisite: CPEG 207 Introduction to Digital Systems
Corequisites: CPEG 202 Sophomore Laboratory II

CPEG 301 JUNIOR LABORATORY I (ELECTRONICS) - 1 semester hour F
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.
Corequisite: CPEG 303 Introduction to Electronics

CPEG 302 JUNIOR LABORATORY II (ADVANCED DIGITAL DESIGN) - 1 semester hour Sp
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.
Corequisite: CPEG 309 Advanced Digital System Design

CPEG 303 INTRODUCTION TO ELECTRONICS - 3 semester hours F
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
Corequisite: CPEG 301 Junior Laboratory I

CPEG 305 OPERATING SYSTEMS - 3 semester hours Sp
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: CPEG 208 Microprocessors

CPEG 306 COMPUTER ARCHITECTURE I - 3 semester hours Sp
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 semester hours**F**

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

Corequisite: MATH 350 Differential Equations

CPEG 308 ANALOG COMMUNICATION - 3 semester hours

Filter design, noise, signal-to-noise ratio, amplitude modulation, frequency modulation.

Prerequisites: CPEG 303 Introduction to Electronics; PHYS 113 General Physics II

CPEG 309 ADVANCED DIGITAL SYSTEM DESIGN - 3 semester hours**Sp**

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

Corequisite: CPEG 302 Junior Laboratory II

CPEG 320 INTEGRATED CIRCUIT DEVICE DESIGN - 3 semester hours**Sp**

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 400 SENIOR SEMINAR - 1 semester hour (3 contact hours)**Sp**

Engineering design, literature searches, industry vs. graduate school career options, ethics, professionalism, and safety. The Fundamentals of Engineering (FE) Exam review for students seeking certification as an Engineer-in-Training (EIT) and subsequently as a professional Engineer (PE). A departmental assessment exam on fundamentals of engineering will be administered.

Prerequisite: senior standing

CPEG 401 SENIOR LABORATORY I -1 semester hour**F**

Project oriented laboratory course in the areas on microprocessor based systems and micro-controllers.

Prerequisite: CPEG 208 Microprocessors

Corequisite: CPEG 416 Advanced Microprocessors and MicroControllers

CPEG 402 SENIOR LABORATORY II -1 semester hour

Project oriented laboratory course in the areas of advanced digital and computer based systems.

Prerequisite: senior standing

CPEG 403 ENGINEERING COMPUTATIONS - 3 semester hours

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 ACQUISITION AND CONTROL SYSTEM - 3 semester hours**Sp**

Advanced course in design of microcomputer-based systems. Emphasis is on the application of state-of-the-art microprocessors, microcomputers for data collection using A/D converters; D/A converter. Includes Laboratory.

Prerequisite: senior standing

CPEG 406 COMPUTER ARCHITECTURE II - 3 semester hours

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 semester hours

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; PHYS 112 General Physics I

CPEG 408 SENIOR DESIGN – 3 semester hours

A major design project that focuses the student's attention on professional practice, accumulated background of curricular components, and recent developments in the field. This major design emphasis is directed to topics within the field of computer engineering. Includes design projects that require laboratory work.

Prerequisite: Senior standing

CPEG 410 DIGITAL COMMUNICATION - 3 semester hours**Eve**

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; CPEG 308 Analog Communication

CPEG 411 COMMUNICATION SYSTEM DESIGN - 3 semester hours**Eve**

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 ORGANIZATION AND DESIGN OF DIGITAL SYSTEMS AND COMPUTERS - 3 semester hours

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 PROCESSING AND FILTER DESIGN - 3 semesters hours**F**

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

CPEG 414 INTRODUCTION TO PATTERN RECOGNITION - 3 semester hours**Odd**

Design of learning and adaptive machines. Elementary decision theory, perceptron 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 INTRODUCTION TO DIGITAL IMAGE PROCESSING - 3 semester hours**Odd**

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 ADVANCED MICROPROCESSORS AND MICROCONTROLLERS - 3 semester hours**F**

Project oriented course in development system with cross-compilers and emulation capability. Interfacing and hardware/software trade offs in interrupt driver applications.

Prerequisite: CPEG 208 Microprocessors

CPEG 420 NANOTECHNOLOGY FABRICATION PRINCIPLES - 3 semester hours**Odd**

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 ADVANCED INTEGRATED CIRCUIT DESIGN -3 semester hours**Odd**

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 parasitics for optimizing the speed, area or power. CAD Tools for layout, extraction and simulation will be used for assignments.

CPEG 499 SPECIAL TOPICS -1 to 3 semester hours

Topics relating to basic design and current practice. Maximum three hours.

Prerequisite: Completion of all junior CPEG courses or consent of instructor

ENGINEERING**ENGR 101 INTRODUCTION TO ENGINEERING I - 2 semester hours****F**

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 semester hours**F**

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 (Lab included) - 2 semester hours **Sp**
Freehand sketching, lettering scales, use of instruments, layout drawings, orthogonal projection, descriptive geometry, pictorials, and basic dimensioning. Communicating technical information in engineering design and research. Introduction to computer-aided design drafting. Introduction to solid modeling.

ENGR 201 CIRCUIT ANALYSIS - 3 semester hours **F**
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 201 Calculus II
Corequisite: CPEG 201 Sophomore Lab I

ENGR 203 INTRODUCTION TO PROGRAMMING - 3 semester hours **F**
An introduction to the computer, to the algorithmic process, and to programming in C/C++ using standard control structures. Windows and/or UNIX operating systems are used.

Prerequisite: ENGR 101 Introduction to Engineering I; ENGT 105 Engineering Problem Solving or Permission of the instructor

ENGR 204 INTRODUCTION TO OBJECT ORIENTED PROGRAMMING - 3 semester hours **Sp**
Advanced program design and implementation in the C++ programming language. Object-oriented programming with concepts including class structure and behavior, objects, inheritance and reuse, virtual functions and polymorphism, exception handling, templates, and the Standard Template Library. The Windows and/or UNIX operating are used.

Prerequisite: ENGR 203 Introduction to Programming

ENGR 210 STATICS/STRENGTH OF MATERIALS - 3 semester hours
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: PHYS 112 General Physics I
Corequisite: MATH 300 Calculus III

ENGR 301 ENGINEERING STATISTICS - 3 semester hours **F, Sp**
Engineering applications of the concepts of probability, statistical distributions, statistical analysis, regression and correlation analysis, analysis of variance and covariance, design of experiments.

ENGR 305 MATERIALS ENGINEERING - 3 semester hours **Odd**
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.

ENGR 310 ENGINEERING ECONOMICS - 3 semester hours **F**
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 tools of analysis using case studies.

Prerequisite: MATH 200 Calculus I

ENGR 313 THERMAL ENGINEERING - 3 semester hours **Sp**
Basic concepts and definitions, properties of pure substance, work and heat, first law of thermodynamics, second law of thermodynamics, and introduction to conductive, and radiative heat transfer.

Prerequisites: MATH 300 Calculus III; PHYS 112 General Physics I

ENGR 315 DYNAMICS - 3 semester hours **Sp**
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.

Prerequisites: ENGR 210 Statics/Strength of Materials

ENGR 430 QUALITY ENGINEERING - 3 semester hours
An analysis of the basic principles of quality control, including Total Quality Management and design and analysis of process control charts and sampling plans.

MANUFACTURING ENGINEERING

MANE 205 INTRODUCTION TO DESIGN AND MANUFACTURING - 3 semester hours **F**
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: CHEM 101 General Chemistry I

MANE 210 PRODUCTION ENGINEERING - 3 semester hours **Sp**
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

MANE 301 JUNIOR LABORATORY (MATERIALS) -1 semester hour **F**
Effect of processing on material properties and structure, material characterization, etc.

MANE 310 COMPUTED-AIDED MANUFACTURING WITH LAB - 3 semester hours **F**
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 in input to CAM, and graphics-based NC programming. Configuration of CAD/CAM software; post-processor generation.

Prerequisite: MANE 210 Production Engineering

MANE 315 MANUFACTURING AUTOMATION - 3 semester hours **Sp**
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; MANE 210 Manufacturing Process II

MANE 320 WORK DESIGN AND MEASUREMENT - 3 semester hours **F, Sp**
Principles of work simplification and motion analysis. Recording of workflow and methods. Work measurement and standards, time study, synthetic data, predetermined time systems. Allowance and performance rating, productivity measures. Work design improvement. Military standards.

Prerequisite: Permission of the instructor

MANE 340 TOOL ENGINEERING - 3 semester hours **Odd**
Design and engineering of jigs, fixtures, molds, and dies; material selection. Field trips to manufacturing centers.

Prerequisite: ENGR 210 Engineering Statics and dynamics

MANE 400 SENIOR SEMINAR -1 semester hour **Sp**
Engineering design, literature searches, industry vs 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 401 SENIOR LAB (DATA ACQUISITION & CONTROL) -1 semester hour **F**
Computer control of processes and data acquisition and analysis.

Prerequisite: Senior standing in MANE.

MANE 410 PRODUCTION PLANNING AND INVENTORY CONTROL - 3 semester hours **F**
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 ENGINEERING TEST DESIGN AND ANALYSIS - 3 semester hours **F**
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 combine theories, techniques, group activities, and computer tools such as Microsoft Project.

Prerequisite: STAT 330 Introduction to Probability & Statistics

MANE 420 SIMULATIONS - 3 semester hours**F**

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 running on the computer.

Prerequisites: STAT 330 Introduction to Probability and Statistics; ENGR 203 Introduction to Programming

MANE 440 MANUFACTURING STRATEGY/ERP – 3 semester hours**F**

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 IMPLEMENTATION – 2 semester hours**F**

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, 462 SENIOR PROJECT I, II, - 3 semester hours per course**F, Sp**

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: Senior standing in MANE

MANE 499 SPECIAL TOPICS IN MANUFACTURING ENGINEERING – 3 semester hours**F, Sp**

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

DEPARTMENT OF ENGINEERING AND TECHNOLOGY

Computer Engineering Major

Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
MATH 200	Calculus I	3	-	3
ENGL 110	Composition I	3	-	3
FRST 101	Freshman Studies	2	-	2
ENGR 101	Introduction to Engineering I	2	-	2
HPER	Wellness/Health	2	-	2
CHEM 101	General Chemistry	3	-	3
CHEM 103	General Chemistry Lab	1	-	1
MATH 201	Calculus II	-	3	3
ENGL 111	Composition II	-	3	3
GESO	History Elective	-	3	3
ENGR 102	Introduction to Engineering II	-	2	2
PHYS 112	Physics I with Lab	-	<u>4</u>	<u>4</u>
		16	15	31
SOPHOMORE YEAR				
MATH 300	Calculus III	3	-	3
PHYS 113	Physics II with Lab	4	-	4
ENGR 203	Introduction to Programming	3	-	3
CPEG 207	Digital Systems	3	-	3
ENGR 201	Circuit Analysis	3	-	3
CPEG 201	Sophomore Lab I	1	-	1
ENGR 204	Object Oriented Programming	-	3	3
GEEN 310	Advanced Communication Skills	-	3	3
MATH 350	Differential Equations	-	3	3
CPEG 208	Microprocessors	-	3	3
CPEG 202	Sophomore Lab II	-	1	1
MATH 284	Discrete Math	-	<u>3</u>	<u>3</u>
		17	16	33
JUNIOR YEAR				
MATH/SCI	Elective	3	-	3
CPEG 303	Introduction to Electronics	3	-	3
ENGR/CSCI	Elective	3	-	3
CPEG 301	Junior Lab I	1	-	1
ENGR 310	Engineering Economy	3	-	3
CPEG 307	Linear System Analysis	3	-	3
ENGR/CSCI	Elective	-	3	3
CPEG 309	Advanced Digital System Design	-	3	3
CPEG 305	Operating System	-	3	3
ENGL 342	Technical Communication	-	3	3
CPEG 320	VLSIC Device Design	-	3	3
CPEG 302	Junior Lab II	-	<u>1</u>	<u>1</u>
		16	16	32

SENIOR YEAR

CPEG 416	Adv. Micro & Micro-Controllers	3	-	3
ENGR 301	Engineering Statistics	3	-	3
CPEG 408	Senior Design	3	-	3
CPEG 413	Digital Signal Processing and Filter Design	3	-	3
GE	Social Sciences Elective	3	-	3
CPEG 401	Senior Lab I	1	-	1
CPEG 404	Real Time Data Acquisition and Control	-	3	3
GESO	Global Studies Elective	-	3	3
ENGR/CSCI	Elective	-	3	3
PHIL 450	Applied Ethics	-	3	3
ENGL	Literature Elective	-	3	3
CPEG 400	Senior Seminar	-	<u>1</u>	<u>1</u>
		16	16	32

DEPARTMENT OF ENGINEERING AND TECHNOLOGY**Manufacturing Engineering****Bachelor of Science Degree**

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
MATH 200	Calculus I	3	-	3
ENGL 110	Composition I	3	-	3
FRST 101	Freshman Studies	2	-	2
ENGR 101	Introduction to Engineering I	2	-	2
HPER	Wellness/Health	2	-	2
CHEM 101	General Chemistry	3	-	3
CHEM 103	General Chemistry Lab	1	-	1
MATH 201	Calculus II	-	3	3
ENGL 111	Composition II	-	3	3
GESO	History Elective	-	3	3
ENGR 102	Introduction to Engineering II	-	2	2
PHYS 112	Physics I with Lab	-	<u>4</u>	<u>4</u>
		16	15	31
SOPHOMORE YEAR				
MATH 300	Calculus III	3	-	3
PHYS 113	Physics II with Lab	4	-	4
ENGR 210	Statics and Strength of Material	3	-	3
MANE 205	Manufacturing Process I	3	-	3
	Social Science Elective	3	-	3
	Literature Elective	-	3	3
MATH 350	Differential Equations	-	3	3
MANE 210	Manufacturing Process II	-	3	3
	Global Studies Elective	-	3	3
ENGR 315	Dynamics	-	3	3
ENGR 200	Engineering Graphics with Lab	-	<u>2</u>	<u>2</u>
		16	17	33
JUNIOR YEAR				
MANE 310	CAD/CAM with Lab	3	-	3
ENGR 305	Materials Engineering	3	-	3
ENGR 203	Introduction to Programming	3	-	3
ENGR 301	Engineering Statistics	3	-	3
ENGR 201	Electronic Circuits	3	-	3
ENGR 313	Thermal Engineering	-	3	3
ENGR 430	Quality Control with Lab	-	3	3
	Elective Math/Science	-	3	3
ENGL 342	Technical Communication	-	3	3
MANE 315	Manufacturing Automation	-	<u>3</u>	<u>3</u>
		15	15	30

SENIOR YEAR

MANE 410	Production Planning and Inventory Control	3	-	3
ENGR/MANE	Elective	3	-	3
MANE 450	Manufacturing Design Implementation with Lab	3	-	3
MATH 392	Linear Programming	3	-	3
ENGR 310	Engineering Economy	3	-	3
MANE 415	Project Engineering and Management	2	-	2
MANE 420	Simulation	-	3	3
	Elective	-	3	3
ENGR/MANE	Elective	-	3	3
PHIL 275/450	Ethics/Applied Ethics	-	3	3
ENGR/MANE	Elective	-	3	3
MANE 400	Senior Seminar	=	$\frac{1}{16}$	$\frac{1}{33}$
		17	16	33

ELECTRONICS ENGINEERING TECHNOLOGY**ELET 101 CIRCUIT ANALYSIS I - 4 semester hours****F, Sp**

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.

Corequisites: ENGT 100 Introduction to Engineering Technology; MATH 120 College Algebra and Trigonometry I

ELET 102 CIRCUIT ANALYSIS II - 4 semester hours**F, Sp**

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 120 College Algebra and Trigonometry I

Corequisite: MATH 121 College Algebra and Trigonometry II

ELET 203 INTRODUCTION TO ELECTRONICS - 4 semester hours**F**

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 102 Circuit Analysis II

ELET 204 ELECTRONIC CIRCUITS - 4 semester hours**Sp**

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

ELET 207 DIGITAL CIRCUITS - 4 semester hours**F**

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 102 Circuit Analysis II

ELET 208 MICROPROCESSORS - 4 semester hours**Sp**

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 or equivalent

ELET 304 ADVANCED CIRCUIT ANALYSIS - 3 semester hours**Sp**

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 function.

Prerequisites: ELET 102 Circuit Analysis II; MATH 200 Calculus I

ELET 306 ADVANCED ELECTRONICS - 4 semester hours **F**

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 200 Calculus I

ELET 309 ADVANCED DIGITAL CIRCUITS - 4 semester hours **Sp**

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 or equivalent

ELET 399 SPECIAL TOPICS - 3 semester hours **F, Sp**

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.

ELET 401 ELECTRIC MACHINERY - 3 semester hours **Sp**

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 200 Calculus I; PHYS 117 General College Physics II (or equivalent)

ELET 403 CONTROL SYSTEMS - 3 semester hours **F**

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 201 Calculus II; PHYS 116 General College Physics I (or equivalent)

ELET 406 COMMUNICATION SYSTEMS - 3 semester hours **Sp**

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 Microprocessors; ELET 306 Advanced Electronics; ELET 309 Advanced Digital Circuits; PHYS 117 General College Physics II (or equivalent)

ELET 408 ADVANCED MICROPROCESSORS I - 4 semester hours **F**

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

ELET 409 ADVANCED MICROPROCESSORS II - 4 semester hours **F, Sp**

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

ELET 410 INTRODUCTION TO ELECTRICITY/ELECTRONICS - 3 semester hours **F**

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 117 General College Physics II; MATH 121 College Algebra and Trigonometry II

ELET 420, 421 SENIOR PROJECT I, II - 1 to 4 semester hours **F, Sp**

Design, construction, documentation, and demonstration of a chosen project which shows a strong understanding of a selected subject in electronics.

Prerequisite: senior standing in EET Curriculum.

ELET 499 SPECIAL TOPICS - 3 semester hours**F, Sp**

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 the instructor

ENGINEERING TECHNOLOGY**ENGT 100 INTRO TO ENGINEERING TECHNOLOGY - 2 semester hours****F, Sp**

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.

Corequisite: MATH 120 College Algebra and Trigonometry I

ENGT 105 ENGINEERING PROBLEM SOLVING -1 semester hour**F, Sp**

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 321 ENGINEERING ECONOMY - 3 semester hours**F, Sp**

Study of time value of money and evaluation of investment alternatives. Topics include cash flow diagrams, evaluation factor formulas, interest, gradients, depreciation, rate of return, breakeven analysis, corporate taxation, evaluation of multiple alternatives and sensitivity analysis.

Prerequisites: MATH 121 College Algebra and Trigonometry II and Junior standing; ENGT 105 Engineering Problem Solving or permission of the instructor

MECHANICAL ENGINEERING TECHNOLOGY**MCET 102 MACHINES LABORATORY -1 semester hour****F, Sp**

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 semester hours**F**

Force systems, resultants, and equilibrium; trusses, method of joints, method of sections; friction; centroids, moments of inertia.

Prerequisites: MATH 121 College Algebra and Trigonometry II; ENGT 100 Introduction to Engineering Technology

Corequisite: PHYS 116 General College Physics I

MCET 201 STRENGTH OF MATERIALS - 3 semester hours**Sp**

Stress and deformation; axial, tensile and compressive stresses, torsion; shear and moment in beams; stresses in beams; and design of beams. Use of computers in beam design is included.

Prerequisite: MCET 200 Statics

MCET 202 STRENGTH OF MATERIALS LAB -1 semester hour**Sp**

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; MCET 102 Machines Lab

Corequisite: MCET 201 Strength of Materials

MCET 301 INTRODUCTION TO THERMODYNAMICS - 3 semester hours**Sp**

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 200 Calculus I

MCET 305 MANUFACTURING MATERIALS AND PROCESSES - 3 semester hours**Sp**

The study of the physical and mechanical properties of various materials as applied to design, processing, and fabrication methods.

Corequisite: CHEM 101/103 General Chemistry I and Laboratory

MCET 306 MACHINE DESIGN I - 3 semester hours **F**

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; DRFT 261 Computer Aided Drafting; MATH 200 Calculus I

MCET 307 KINEMATICS OF MACHINES - 3 semester hours **F, Sp**

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: DRFT 261 Computer Aided Drafting; MCET 311 Dynamics

MCET 311 DYNAMICS - 3 semester hours **F**

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 201 Calculus II; PHYS 116 General College Physics I

MCET 313 FLUID MECHANICS - 3 semester hours **F**

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; MATH 200 Calculus I

MCET 314 FLUID MECHANICS LABORATORY - 1 semester hour **F**

Laboratory demonstrations, experiments, and exercises dealing with the verification of fluid equations, and principles and characteristics of fluid machinery.

Corequisite: MCET 313 Fluid Mechanics

MCET 401 APPLIED THERMODYNAMICS - 3 semester hours **F**

Study of thermodynamic cycles; includes Carnot, Rankine, Sterling and Application of thermodynamic principles to turbines and compressors.

Prerequisites: MCET 301 Introduction to Thermodynamics; MATH 201 Calculus II

MCET 403 QUALITY CONTROL - 3 semester hours **F, Sp**

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 or permission of the instructor

MCET 404 ENERGY LABORATORY - 1 semester hour **F**

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 semester hours **F, Sp**

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 415 INSTRUMENTATION AND CONTROLS - 3 semester hours **Sp**

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: ELET 410 Introduction to Electricity and Electronics

MCET 416 MEASUREMENTS LABORATORY - 1 semester hour **Sp**

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.

Corequisite: MCET 415 Instrumentation and Controls

MCET 420 SENIOR PROJECT - 1 to 4 semester hours **F, Sp**

Student will design a project to illustrate basic knowledge and skills in one phase of his major field. In many cases a prototype will be built and tested.

Prerequisite: Senior standing in MET curriculum. (All 300 level courses in the MET Program successfully completed)

MCET 421 HYDRAULICS AND PNEUMATICS - 3 semester hours**Sp**

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 AND PNEUMATICS LAB - 1 semester hour**Sp**

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 semester hours**F, Sp**

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 201 and Permission of instructor

MCET 499 SPECIAL TOPICS IN ENGINEERING TECHNOLOGY - 3 semester hours

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

INDUSTRIAL TECHNOLOGY**INTC 111 Introduction to Technical Graphics - 3 semesters hours****F, S**

Introduction to technical drawing designed for students who have a need or would like to communicate and/or record ideas and information using the graphic language. The course is not designed for students in the CADD and Technology Management concentration.

INTC 115 BASIC ELECTRONICS - 3 semester hours**S**

A study of the electron theory, principles of direct current and voltage, conductors, resistors and insulators, magnetism, principles of motor and generator operation, series and parallel circuits. Ohm's and Network Theorems. A study of inductance and capacities and the use of multimeters, oscilloscopes, power supplies and signal generators. Also, an introduction to altering current and voltage.

INTC 141 INTRODUCTION TO LOGISTICS - 3 semester hours**F, S**

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.

INTC 161 ENGINEERING GRAPHICS I - 3 semester hours**F, S**

Introduction to basic 2D technical drawing and drafting, including sketching, lines, points, geometry, orthographic projection, auxiliary views, section views, basic dimensioning, visualization, basic drawing standard. Student projects required (sketching, drawing, and CAD software).

Prerequisite: None

INTC 201 TECHNOLOGY, SOCIETY AND DEVELOPMENT - 3 semester hours**F, S**

A comprehensive study of technology – characteristics, paradigms, and trajectories; advantages and limitations; legislative and regulatory actions. Technological innovations and the process of development. Incisive analysis of the dimensions of technology in society.

INTC 212 PRINCIPLES OF TECHNOLOGY - 3 semester hours**S**

Principles 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.

INTC 217 TECHNICAL GRAPHICS COMMUNICATION - 3 semester hours**F**

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.

Prerequisite: CISY 201

INTC 245 DISTRIBUTION SYSTEMS - 3 semester hours**F**

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.

INTC 247 MATERIAL AND WAREHOUSING - 3 semester hours

The principles of quantitative and operational approaches to the design of handling system including receiving, storage, retrieval, package, palletizing, material handling, order picking, shipping, facility sizing and layout. Information systems and operating policies of material handling and warehousing will be covered.

INTC 250 MANUFACTURING MATERIALS AND PROCESSES - 3 semester hours**S**

A comprehensive study of materials and processes used to produce consumer goods. Include basic concepts of forming, combining, assembling, and finishing techniques. Emphasis on safe use of tools and machines and related research.

INTC 261 ENGINEERING GRAPHICS II - 3 semester hours**F, S**

Introduction to 3D modeling including CSG modeling, primitives, Boolean operators, view extraction, basic parametric modeling, file management, assembly, dimensioning, basic GD&T, and drawing standard, student projects required (sketching, CAD software).

Prerequisites: INTC 161

INTC 280 INDUSTRIAL AND COMMUNITY RELATIONS - 3 semester hours**F, S**

A study of the human factors in industry with emphasis on the area of cooperation between labor, management and the schools.

INTC 281 INDUSTRIAL SAFETY - 3 semester hours**F**

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.

INTC 345 TRANSPORTATION LOGISTICS - 3 semester hours**S**

Introduction to the theory and applications of transportation, logistics, and associated costs will be covered. Topics will 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: INTC 247

INTC 350 INDUSTRIAL CONTROLS - 3 semester hours**F**

Study of the devices, procedures, and techniques essential to industrial measurement and transmission of data in the areas of machine control, process control, and automated testing. Topics include: switches, transformers, relays, actuators, solenoids, transducers, timers, counters, motor starters, ladder diagrams, and power factor correction.

Prerequisite: INTC 212

INTC 353 FLUID POWER - 3 semester hours**F**

Provides students with experiences in the application of the principles of physics and mathematics as they relate to problem solving in 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, and time constants as it relates to fluid power.

Prerequisites: INTC 212

INTC 355 AUTOMATED SYSTEMS - 3 semester hours**F**

General principles of operation and programming of automated systems including; automated assembly, automated manufacturing, inspection systems, automated storage/retrieval systems, computer numerical control, industrial robotics, and computer integrated manufacturing.

Prerequisite: INTC 212

INTC 359 TECHNOLOGY MANAGEMENT AND SUPERVISION - 3 semester hours S

Designed to prepare students in organizing and executing technology/laboratory instruction, maintaining tools and equipment, purchasing and handling materials and supplies, keeping records, making inventories, and responding to problems in setting up and operating laboratory courses. The study of the management of technology, employees, and administrators in project management.

Prerequisite: INTC 201

INTC 362 ENGINEERING GRAPHICS III - 3 semester hours F

Continuation of INTC 261. Advanced parametric modeling, product development and design, technical animation of assemblies – group project required (CAD software).

Prerequisite: INTC 261

INTC 372 ARCHITECTURAL DRAFTING AND DESIGN II - 3 semester hours S

Continuation of INTC 370, focus on material, schedules, HVAC, plumbing, and electrical details. Student projects required (sketching, CAD software).

Prerequisite: INTC 370

INTC 374 STATICS AND STRENGTH OF MATERIALS - 4 semester hours F

Structural principles and concepts linked to real buildings and components. Elementary statics and strength of materials as they relate to the basic principles of mechanics. Gravity and lateral load tracings; determinate structural frame-works. Concepts of stress and strain, and material properties; cross-sectional properties; beam and column analysis and design; steel connections. Use of structural software to generate a graphical display.

Prerequisites: MATH 212, INTC 372 or consent of instructor

INTC 382 WRITING AND PRESENTING TECHNICAL DOCUMENTS - 3 semester hours S

A fundamental course designed to meet the writing and presentation needs on Industrial Technology students. Special attention is placed upon unique applications and use of technical terms associated with the design and development of materials, processes and controls used in construction and manufacturing industries. Students are required to develop, write, present and transmit technical and/or management information typical of technical managers in industry.

Prerequisite: ENGL 111 and GEEN 310

INTC 383 QUALITY MANAGEMENT - 3 semester hours S

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.

Prerequisites: CISO 212 or MATH 210

INTC 385 COST ESTIMATING - 3 semester hours S

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.

Prerequisites: INTC 250 and INTC 261

INTC 444 ENTERPRISE RESOURCE PLANNING SYSTEMS - 3 semester hours F

Analytical approaches to design, planning, and control of logistics management. Core aspects of enterprise resource planning (ERP) infrastructure and applications in industry. ERP planning strategies and implementation, including domestic and international manufacturing and service operations.

INTC 445 PROCUREMENT MANAGEMENT - 3 semester hours F

The role of acquisition 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.

INTC 446 E-BUSINESS IN LOGISTICS - 3 semester hours S

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, organization challenges, implementation trends, and planning strategies.

INTC 447 SUPPLY CHAIN MANAGEMENT - 3 semester hours S

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: INTC 355

INTC 448 GLOBAL LOGISTICS - 3 semester hours**S**

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.

INTC 473 ARCHITECTURAL DRAFTING AND DESIGN III - 3 semester hours**F**

Focus on commercial structures and codes, various international styles of architecture, alternative building materials and energy sources. Student projects required. (sketching, CAD software)

Prerequisite: INTC 372

INTC 480 FACILITIES PLANNING AND MANAGEMENT - 3 semester hours**S**

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 (VisFactory). Industrial facility management.

Prerequisite: INTC 362

INTC 481 MECHANICAL INSPECTION - 3 semester hours**F**

Inspection points, personnel, and planning, using various graphical inspection techniques. Inspection as an appraisal activity in business/industry. Dimensional metrology-application of common and special gages; surface plate tools and techniques. Inspection planning and procedures; sampling and testing methods; non destructive testing. Laboratory activities are included. Industrial visitation is required.

Prerequisite: INTC 383 or Consent of Instructor

INTC 485 PROJECT MANAGEMENT - 3 semester hours**F**

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: INTC 385

INTC 490 SENIOR DESIGN PROJECT - 3 semester hours**F, S**

This course requires the student to complete an individual project that emphasizes the solving of a technical problem using a multidisciplinary technology approach. This project is intended to be a culmination of management and technology theories and will be integrated with design or research. Report and end of semester formal presentation required.

Prerequisite: senior status

INTC 499 SPECIAL TOPICS - 3 semester hours**F, S**

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

DEPARTMENT OF ENGINEERING AND TECHNOLOGY
ELECTRONICS ENGINEERING TECHNOLOGY
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ELET 101, 102	Circuit Analysis/Lab I, II	4	4	8
ENGT 100, 105	Intro Engr Tech, Eng Prob Solving	2	1	3
ENGL 110, 111	Composition I and II	3	3	6
HPER 170 or EQUIVALENT	Wellness/Health	2	-	2
FRST 101	Freshman Studies	2	-	2
MATH 120, 121	College Algebra & Trigonometry I, II	3	3	6
GEPS 124	Intro Psychology	-	<u>3</u>	<u>3</u>
		16	14	30
SOPHOMORE YEAR				
ELET 203, 204	Intro Electro/Lab, Electronic Circ/Lab	4	4	8
ELET 207, 208	Digital Circuits/Lab, Microprocessors/Lab	4	4	8
MATH 200, 201	Calculus I, Calculus II	3	3	6
PHYS 116, 117	Gen College Physic/Lab I, II	<u>4</u>	<u>4</u>	<u>8</u>
		15	15	30
JUNIOR YEAR				
CHEM 101, 103	General Chemistry I & Lab	4	-	4
ELET 309	Adv Digital Circuits/Lab	-	4	4
ELET 306, 304	Adv Electronics/Lab, Adv Circuit Anal	4	3	7
ENGR 203, ENGT 321	Intro to Prog, Engr Economy	3	3	6
ENGL 342	Technical Communication	-	3	3
SPEE 214	Introduction to Public Speaking	3	-	3
GE HISTORY, GE LITERATURE	History Elective, Literature Elective	<u>3</u>	<u>3</u>	<u>6</u>
		17	16	33
SENIOR YEAR				
ELET 403, 401	Control Systems, Electric Machinery	3	3	6
ELET 408, 406	Adv Microprocessors/Lab, Communi Sys	4	3	7
PHIL 450	App Ethics, Global Studies Elective	3	3	6
RESTRICTIVE ELECTIVE	ENGT/ENGR/MATH Elective	3	3	6
ELET 420/421	Senior Project Elective	3	-	3
FREE ELECTIVE	Free Elective	-	<u>3</u>	<u>3</u>
		16	15	31

DEPARTMENT OF ENGINEERING AND TECHNOLOGY
MECHANICAL ENGINEERING TECHNOLOGY
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
INTC 161, 261	Mech Drawing, Comp. Aided Draft	3	3	6
ENGT 100, 105	Intro. Engr. Tech., Engr Probl Solving	2	1	3
ENGL 110, 111	Composition I, II	3	3	6
MATH 120, 121	College Alg, Trig I & II	3	3	6
MCET 102	Machine Lab	-	1	1
FRST 101	Freshman Studies	2	-	2
GEPS 124, HISTORY ELECTIVE	Intro Psychology, History Elective	<u>3</u>	<u>3</u>	<u>6</u>
		16	14	30
SOPHOMORE YEAR				
Global Studies	Global Studies Elective	3	-	3
HPER 170 or EQUIVALENT	Personal Health, Personal Fitness	2	-	2
MATH 200, 201	Calculus I, Calculus II	3	3	6
MCET 200, 201, 202	Statics, Str. of Materials, Lab	3	4	7
PHYS 116, 117	Gen. College Physics/Lab I, II	4	4	8
ENGL 342	Tech. Comm.	-	3	3
SPEE 214	Intro. Public Speaking	-	<u>3</u>	<u>3</u>
		15	17	32
JUNIOR YEAR				
ENGR 203	Intro to Prog	3	-	3
CHEM 101, 103	General Chemistry I, Lab	4	-	4
MCET 301	Intro to Thermodynamics	-	3	3
ENGT 321	Engr. Economy	-	3	3
MCET 305, 306	Mfg. Matl. Processes, Machine Design I	3	3	6
MCET 311	Dynamics	3	-	3
MCET 313, 314	Fluid Mechanics, Lab	4	-	4
GE LITERATURE	Literature Elective	-	3	3
RESTRICTIVE TECHNICAL ELECTIVE	Engr. Tech.	-	<u>3</u>	<u>3</u>
		17	15	32
SENIOR YEAR				
ELET 410	Intro Electricity/Electronics	3	-	3
MCET 401, 404	Applied Thermodynamics, Energy Lab	4	-	4
MCET 415, 416	Instrum and Control, Measurements Lab	-	4	4
RESTRICTIVE TECHNICAL ELECTIVE	Engr Tech	3	3	6
PHIL 450, MCET 441	Applied Ethics, Heat Transfer	3	3	6
MCET 421, 422	Hydraulics/Pneumatics, Lab	-	4	4
TECHNICAL ELECTIVE	Math, Engr., Engr. Tech	<u>3</u>	-	<u>3</u>
		16	14	30

Total program semester hours = 124

**DEPARTMENT OF ENGINEERING AND TECHNOLOGY
INDUSTRIAL TECHNOLOGY-COMPUTER AIDED DRAFTING
AND DESIGN CONCENTRATION**

Bachelor of Science Degree

		Semester Hours		
		1st Sem	2nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I and II	3	3	6
MATH 121, 212	College Algebra and Trig/Intro to Calculus	3	3	6
INTC 161, 261	Engineering Graphics I and II	3	3	6
INTC 201	Technology, Society & Development	3	-	3
FRST 101	Freshman Studies	2	-	2
ELECTIVE	Wellness/Health	2	-	2
GEHI 122 or 123	United States History	-	3	3
INTC 115	Basic Electronics	-	<u>3</u>	<u>3</u>
		16	15	31
SOPHOMORE YEAR				
ELECTIVE	Literature Elective	3	-	3
INTC 217	Technical Graphics Communication	3	-	3
PHYS 116, 117	General College Physics I and II	4	4	8
INTC 281	Industrial Safety	3	-	3
INTC 250	Manufacturing Materials and Processes	3	-	3
MGMT 271	Business Law	-	3	3
ECON 210	Principles of Microeconomics	-	3	3
INTC 212	Principles of Technology	-	3	3
CISY 260 or STAT 210	Business Statistics or Elementary Statistics I	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
GEEN 310	Advanced Communication Skills	3	-	3
GEPI 140	Philosophy	3	-	3
ACCT 201	Introduction to Accounting I	3	-	3
INTC 370	Architectural Drafting and Design I	3	-	3
INTC 365	Mechanical Print Reading	3	-	3
INTC 382	Writing and Presenting Technical Documents	-	3	3
INTC 385	Cost Estimating	-	3	3
INTC 383	Quality Management	-	3	3
INTC 372	Architectural Drafting and Design II	-	3	3
ELECTIVE	Free Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
INTC 485	Project Management	3	-	3
GEPS 124	Introduction to Psychology	3	-	3
INTC 374	Statics and Strength of Materials	4	-	4
INTC 473	Architectural Drafting and Design III	3	-	3
ELECTIVE	Global Studies Elective	3	-	3
INTC 362	Engineering Graphics III	-	3	3
ARTS 205	Basic Art	-	3	3
ELECTIVE	Free Elective	-	3	3
INTC 490	Senior Project	-	<u>3</u>	<u>3</u>
		16	12	28

Students not ready for MATH 121 in their freshman year may take MATH 120 and substitute the credits for their free elective.

DEPARTMENT OF ENGINEERING AND TECHNOLOGY
INDUSTRIAL TECHNOLOGY – TECHNOLOGY MANAGEMENT CONCENTRATION
Bachelor of Science Degree

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEEN 110, 111	Freshman Writing I and II	3	3	6
MATH 121, 212	College Algebra and Trig/Intro to Calculus	3	3	6
INTC 161, 261	Engineering Graphics I and II	3	3	6
FRST 101	Freshman Studies	2	-	2
ELECTIVE	Wellness/Health	2	-	2
INTC 201	Technology, Society & Development	3	-	3
PHYS 116	General College Physics I	-	4	4
INTC 115	Basic Electronics	-	<u>3</u>	<u>3</u>
		16	16	32
SOPHOMORE YEAR				
ELECTIVE	Literature Elective	3	-	3
INTC 217	Technical Graphics Communications	3	-	3
PHYS 117	General College Physics II	4	-	4
INTC 250	Manufacturing Materials and Processes	3	-	3
MGMT 271	Business Law	3	-	3
INTC 281	Industrial Safety	-	3	3
ECON 210	Principles of Microeconomics	-	3	3
INTC 212	Principles of Technology	-	3	3
GEHI 122 or 123	United States History	-	3	3
CISY 260 or STAT 210	Business Statistics or Elementary Statistics I	-	<u>3</u>	<u>3</u>
		16	15	31
JUNIOR YEAR				
GEEN 310	Advanced Communication Skills	3	-	3
INTC 374	Statics and Strength of Materials	4	-	4
ACCT 201	Introduction to Accounting I	3	-	3
INTC 353	Fluid Power	3	-	3
GEPI 140	Philosophy	3	-	3
INTC 382	Writing and Presenting Technical Documents	-	3	3
INTC 385	Cost Estimating	-	3	3
INTC 383	Quality Management	-	3	3
INTC 359	Technology Management and Supervision	-	3	3
INTC 480	Facilities Planning and Management	-	<u>3</u>	<u>3</u>
		16	15	31
SENIOR YEAR				
INTC 485	Project Management	3	-	3
GEPS 124	Introduction to Psychology	3	-	3
ELECTIVE	Free Electives	3	3	6
INTC 355	Automated Systems	3	-	3
INTC 481	Mechanical Inspection	3	-	3
ARTS 205	Basic Art	-	3	3
ELECTIVE	Global Studies Elective	-	3	3
INTC 490	Senior Project	-	<u>3</u>	<u>3</u>
		15	12	27

Total Program Semester hours = 120

**DEPARTMENT OF ENGINEERING AND TECHNOLOGY
INDUSTRIAL TECHNOLOGY DISTRIBUTION
AND LOGISTICS CONCENTRATION
Bachelor of Science Degree**

		Semester Hours		
		1 st Sem	2 nd Sem	Total Hours
FRESHMAN YEAR				
ENGL 110	Composition I	3	-	3
MATH 122 or MATH 121	College Algebra and Trig.	3	-	3
GEPS 124	Introduction to Psychology	3	-	3
HPER	Wellness/Health	2	-	2
FRST 101	Freshman Studies	2	-	2
INTC 141	Introduction to Logistics	3	-	3
MATH 212	Introduction to Calculus	-	3	3
ENGL 111	Composition II	-	3	3
INTC 111	Introduction to Technical Graphics	-	3	3
PHYS 116	General College Physics I	-	4	4
GEHI 122 or GEHI 123	US History	-	<u>3</u>	<u>3</u>
		16	16	32
SOPHOMORE YEAR				
ECON 210	Principles of Microeconomics	3	-	3
PHYS 117	General College Physics	4	-	4
INTC 201	Technology Society and Development	3	-	3
CISY 201	Microcomputers Applications	3	-	3
INTC 212	Principles of Technology	3	-	3
GEPI 140	Philosophy	-	3	3
ACCT 201	Introduction to Accounting	-	3	3
INTC 247	Material and Warehousing	-	3	3
STAT 210 or CISY 260	Introduction to Statistics	-	3	3
MGMT 270	Legal Environment of Business	-	<u>3</u>	<u>3</u>
		16	15	31
JUNIOR YEAR				
GEEN 310	Advanced Communication Skills	3	-	3
INTC 245	Distribution Systems	3	-	3
FINC 350	Principles of Finance	3	-	3
INTC 281	Industrial Safety	3	-	3
MKTG 300	Principles of Marketing	3	-	3
INTC 382	Writing and Presentation	-	3	3
INTC 385	Cost Estimating	-	3	3
CISY 365	Operations and Production Management	-	3	3
ELECTIVE	Literature	-	3	3
INTC 345	Transportation Logistics	-	<u>3</u>	<u>3</u>
		16	15	31
SENIOR YEAR				
INTC 383	Quality Management	3	-	3
ELECTIVE	Global Studies	3	-	3
ELECTIVE	Free Elective	3	-	3
MKTG 415	Logistics Management	3	-	3
INTC 445	Procurement Management	3	-	3
ELECTIVE	Free Elective	-	3	3
INTC 448	Global Logistics	-	3	3
INTC 447	Supply Chain Management	-	3	3
INTC 490	Senior Project	-	<u>3</u>	<u>3</u>
		15	12	27

Total Program Semester hours = 120

DEPARTMENT OF ENGINEERING AND TECHNOLOGY
INDUSTRIAL DISTRIBUTION LOGISTICS MANAGEMENT CONCENTRATION
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEEN 110	Composition	3	-	3
MATH 121	College Algebra & Trig	3	-	3
GEPS 124	Intro to Psychology	3	-	3
HPER	Wellness/Health	2	-	2
FRST 101	Freshman Studies	2	-	2
INTC 141	Intro to Logistics	3	-	3
MATH 212	Introduction to Calculus	-	3	3
GEEN 111	Composition II	-	3	3
INTC 111	Intro to Technical Graphics	-	3	3
GEPI 140	Philosophy	-	3	3
GEHI 122 or 123	US History	-	<u>3</u>	<u>3</u>
		16	15	31
SOPHOMORE				
ECON 210	Principles of Microeconomics	3	-	3
PHYS 105	Gen College Physics I	4	-	4
INTC 201	Tech Society & Dev	3	-	3
CISY 201	Microcomputers	3	-	3
INTC 212	Principles of Tech	3	-	3
PHYS 106	Gen College Physics II	-	4	4
ACCT 201	Intro Accounting	-	3	3
INTC 247	Materials & Warehousing	-	3	3
CISY 260	Bus Stat/ STAT 210	-	3	3
MGMT 207	Legal Environment of Bus	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
GEEN 310	Adv Comm. Skills	3	-	3
INTC 245	Distribution Systems	3	-	3
FINC 350	Principles of Finance	3	-	3
INTC 281	Industrial Safety	3	-	3
MKTG 300	Principles of Marketing	3	-	3
INTC 382	Writing and Present	-	3	3
INTC 385	Cost Estimating	-	3	3
CISY 365	Operations/Production Mgt	-	3	3
ELECTIVE	Literature	-	3	3
INTC 345	Transportation Logistics	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
INTCC 383	Quality Management	3	-	3
ELECTIVE	Global Studies	3	-	3
ELECTIVE	Free Elective	3	-	3
MKTG 415	Logistics Management	3	-	3
INTC 445	Acquisition Management	3	-	3
ELECTIVE	Free Elective	-	3	3
INTC 448	Global Logistics	-	3	3
INTC 447	Supply Chain Management	-	3	3
INTC 490	Senior Project	-	<u>3</u>	<u>3</u>
		15	12	27

Total Program Semester hours = 120

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Chairperson:	Dawit Haile, P.O. Box 9068, 213S Hunter McDaniel, Phone: 524-5920
Professors:	Krishan Agrawal, V. Sagar Bakhshi, Gerald Burton, Dawit Haile, Rana Singh, Bourama Toni, George Wimbush, Jeff Zadeh
Associate Professors:	Kenneth Bernard, Raymond Fletcher, Frances Lane, Diana Perdue, Mohammad Tabanjeh, Hui Qing Yang,
Assistant Professors:	Cheryl Adeyemi, Hui Chen, Fabio Guerinoni, Seonkoo Han, Giti Javidi, Shuhua Lai, Weidong Mao, Shubhabrata Mukherjee, Tariq Qazi, Robert Wieman, Aparna Varde, Zhifu Xie
Instructor:	Azzala Owens

Description of the Department

The Department of Mathematics and Computer Science at Virginia State University offers course work leading to the Bachelor of Science degree with a major in Mathematics with five options or concentrations; and the Bachelor of Science degree with a major in Computer Science. The department, in conjunction with the Center for Undergraduate Professional Education Programs, offers teaching endorsement in Mathematics (6-12). To fulfill requirements for the endorsement, students need to complete a mathematics major and minor in secondary education. The Department also offers Master of Science degrees in Computer Science, Mathematics and Mathematics Education.

The Department offers four (4) curricula of study: Math/Mathematics-Statistics Curriculum (Pure and Applied Mathematics), Computer Science Curriculum, Cooperative Engineering Curriculum, and Mathematics with Minor in Secondary Education. Each of the several areas of specialization in the Department includes a unique selection of required courses from these different areas.

The Department sponsors five student-oriented organizations: (1) the Walter Johnson Mathematics and Computer Science Club, in which the primary emphasis is on topics and activities of interest to mathematics and computer science students and teachers, (2) the Kappa Mu Epsilon Mathematics National Honor Society (Virginia Alpha Chapter), which provides incentive and opportunity for scholarly work in mathematics, (3) a student chapter of the Association of Computing Machinery (ACM), and (4) a student chapter of the Mathematical Association of America (MAA) and (5) Upsilon Pi Epsilon Computer Science Honor Society. All majors qualify for membership in the Mathematics and Computer Science clubs; however, membership in Kappa Mu Epsilon Mathematics National Honor Society and Upsilon Pi Epsilon Computer Science Honor Society is based on high academic achievement. The Department also holds Institutional Membership with the following state and/or national organizations: Mathematical Association of America (MAA), National Association of Mathematicians (NAM), Virginia Council of Teachers of Mathematics (VCTM).

Goals of the Department

The goals of the department are to:

- provide opportunities for students to develop fundamental concepts in mathematics and computer science, thus building a background for more advanced mathematics and computer science study,
- produce students capable of pursuing successful careers as mathematicians, statisticians, computer scientists and engineers in such areas as industry, private business and government service,
- prepare students for teaching mathematics by using new pedagogy and technology,
- offer quality instruction to all persons seeking a strong mathematics and/or computer science background, and promote research by offering technical and professional assistance and engaging in research activities for the advancement of science and the improvement of teaching.

Bachelor of Science (B.S.) Degree in Mathematics**Mission Statement of the Mathematics Program**

The mission of the Mathematics Program at Virginia State University is to produce graduates for productive careers and advanced study in mathematics by providing challenging academic opportunities offered by accomplished, experienced faculty.

The Department offers four curricula of study or concentrations leading to the Bachelor of Science Degree (B.S.) in Mathematics.

- The Mathematics Concentration provides students with a general pure and applied mathematics background, enabling entry to the job market or graduate study in advanced mathematics with relevant science and computer training. A minimum of 63 hours in Mathematics and 7 hours in Computer Science is required.
- The Mathematics/Statistics Concentration develops the proficiency in Mathematics, Probability and Mathematical Statistics necessary for the application of statistical techniques and computer applications. A minimum of 42 hours in Mathematics and 21 hours in Statistics and 7 hours in Computer Science is required.
- The Mathematics with Minor in Secondary Education Program prepares students with an endorsement in mathematics at the secondary school level. The emphasis in the final semester is on student teaching. A minimum of 39 hours in Mathematics and 6 hours in Computer Science is required.
- Cooperative Engineering 3+2 Program enables students to obtain a joint degree in conjunction with Old Dominion University (ODU). This five-year program permits students to complete three years of study at Virginia State University (VSU) and two years of study at ODU. Graduates are awarded a B.S. degree in Mathematics from Virginia State University and a B.S. degree in either Electrical Engineering, Environmental Engineering, Mechanical or Civil Engineering from ODU. The B.S. Degree in Mathematics at VSU is awarded at the end of the first year at ODU. A minimum of 30 hours in Mathematics and 6 hours in Computer Science at VSU is required.

Course Requirements for the B.S. in Mathematics

- Complete a minimum of 120 hours with a cumulative GPA of 2.00 or higher;
- Earn at least a grade of "C" in all Mathematics, Computer Science and Statistics courses;
- Pass the capstone mathematics course, MATH 495 - Mathematics Seminar

Minor in Mathematics

The minor in mathematics consists of a planned sequence of six courses offered by the Mathematics and Computer Science Department. The calculus sequence, MATH 200, MATH 201 and MATH 300, is required. In addition, three more courses at the 300 level or above may be selected from Mathematics and/or Statistics courses. MATH 284 or MATH 290 can be used as a substitute for one of the 300 level courses. A student must earn a grade of "C" or better in all courses pursued toward fulfillment of the requirements for a minor in mathematics.

Bachelor of Science (B.S.) in Computer Science

Mission Statement of the Computer Science Program

The mission of the Computer Science Program at Virginia State University is to provide an undergraduate program in Computer Science that prepares students for a productive career and advanced study in the areas of Computer Science.

Objectives of the Computer Science Program

The objectives of the Computer Science program are consonant with the mission of the University: to provide our students with an education that will serve their needs and the needs of local industries. Our goals of professional responsibility and the understanding of the social impact of computer science tie in with the University's objective of creating citizens who are committed to assuming productive roles in a challenging and ever-changing global society.

The objective of the computer science program is to prepare graduates who will:

1. communicate effectively,
2. work productively,
3. apply techniques, skills, and tools necessary for computing practice,
4. have high standards of professionalism and knowledge of ethical responsibilities in the computing field, and
5. be enrolled in a university program or employed.

The courses listed in the Computer Science Curriculum will provide the student with a firm foundation in both hardware/architecture and software, as well as a "hands-on" understanding of a variety of applications of the fundamental ideas and techniques of Computer Science. Through a selection of advanced electives from Mathematics, Computer Science, Computer Engineering, and Information Systems and Decision Science programs, students will have the opportunity to explore areas of special interest in depth.

Students in the program will interact with their instructors and will be offered timely guidance and advice about the program's requirements and their career alternatives. No computer science classes will have more than 25 students. Faculty will be available to students at least five hours per week during required office hours, and also by appointment. Faculty and students will also interact extensively by e-mail and/or other electronics communication media on the Internet.

The curriculum in Computer Science combines technical requirements with general education requirements and electives to prepare students for a professional career in the computer science field, for further study in computer science, and for functioning in modern society. The technical requirements include up-to-date coverage of basic and advanced topics in computer science as well as an emphasis on science and mathematics.

In addition to high school graduates satisfying the admission criteria, the Mathematics and Computer Science Department welcomes community college graduates and transfer students. Students who have completed an associate's degree with a major in sciences, arts and sciences, computer science, education, or engineering are encouraged to consider applying for admission to the program.

Course Requirements for the B.S. in Computer Science

- Have a minimum of 121 semester hours of credit and have a cumulative GPA of 2.0 or better;
- Earn at least a grade of "C" in all Computer Science, Mathematics and Statistics courses;
- Complete the General Education (Core) requirements;
- Complete a minimum of 45 hours in Computer Science, 27 hours in Mathematics and Statistics, 6 elective hours in Computer Science (CSCI), 6 elective hours in Mathematics (MATH), Computer Information Systems (CISY), Computer Science (CSCI) or Computer Engineering (CEPG)

Minor in Computer Science

The minor in computer science consists of a total of 18 credit hours. A planned sequence of five courses offered by the Department of Mathematics and Computer Science is required. The sequence of courses CSCI 120, CSCI 150, CSCI 250, CSCI 260 and CSCI 386 or CSCI 387 is required. In addition, one other computer science course at the 300 or 400 level is required. A student must earn a grade of "C" or better in all courses pursued towards fulfillment of the requirements for a minor in Computer Science.

Course Descriptions

COMPUTER SCIENCE

Introductory Courses

CSCI 100 INTRODUCTION TO COMPUTER SCIENCE - 3 semester hours **F, Sp, Su**
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 PROBLEM SOLVING USING COMPUTERS - 3 semester hours **F, Sp, Su**
This is a first exposure to the use of an algorithm to solve a problem. Emphasis is in the techniques: sequence, conditional and iteration, implemented through a procedural language such as C++. This course provides a solid foundation to approach more complicated problems using an advanced language.

Core courses

CSCI 150 PROGRAMMING IN C++ I - 3 semester hours **F, Sp**
A formal approach to basic elements, syntax and semantics, of C++. Basic Input/Output. Statement, expressions, precedence rules. Basic control structures. Functions, void functions. Reference and value parameters, Introduction to arrays.

Prerequisites: High school programming or CSCI 120 Introduction to Problem Solving Using Computers

CSCI 250 PROGRAMMING IN C++ II - 3 semester hours**F, Sp**

Arrays, pointers, strings, structures, sorting and searching algorithms, introduction to classes.

Prerequisite: CSCI 150 Programming in C++ I**CSCI 260 OBJECT ORIENTED PROGRAMMING - 3 semester hours****F, Sp**

Pointers and recursive programming. Fundamentals: objects and methods. Object Oriented features of C++. Classes: data abstraction, hiding and encapsulation. Inheritance and derived classes. Static and dynamic binding. Polymorphism and virtual functions.

Prerequisite: CSCI 250 Programming in C++ II**CSCI 281 DISCRETE STRUCTURES - 3 semester hours****F, Sp**

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 303 COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE PROGRAMMING - 3 semester hours****F**

Machine representation of data and instructions. Machine organization, primary storage, registers, arithmetic logic unit, control unit, operations. Assembly language programming, interface to high level languages. Assemblers and loaders.

Prerequisite: CSCI 250 Programming in C++ II**CSCI 356 DATABASE SYSTEMS - 3 semester hours****Sp**

Database Design, Entity-Relationship and Relational Model, Relational Algebra, Query Language SQL, Storage and File Structures, Query Processing, System Architectures.

Prerequisite: CSCI 250 Programming in C++ II**CSCI 387 DATA STRUCTURES - 3 semester hours****F, Sp**

This course emphasized the implementation in a high level language of the most common data structures. Lists: sorted and unsorted. Stacks and Queues. Linked structures. Circular and doubly-linked lists. Use of recursion with data structures. Binary search trees. Advanced sorting and searching.

Prerequisites: CSCI 260 Object Oriented Programming; CSCI 281, Discrete Structures**CSCI 388 ARCHITECTURE AND OPERATING SYSTEMS - 3 semester hours****Sp**

A treatment of computer architecture. Introduction to operating systems. Computer and operating system architectures, processes, inter-process communication, inter-process synchronization, mutual exclusion, deadlocks, memory hierarchy, virtual memory, CPU scheduling, file systems, I/O device management, security.

Prerequisites: CSCI 387 Data Structures; CSCI 303 Computer Organization and Assembly Language Programming**CSCI 389 HUMAN COMPUTER INTERACTION - 3 semester hours****Sp**

Human information processing, user interface design principals, information presentation, visual, auditory and tactile display, speech communication, data entry, controls, tools and feedback, human factors in computer programming, workspace design, environmental, ethical and legal considerations.

Prerequisite: CSCI 250 Programming in C++ II**CSCI 485 PROGRAMMING LANGUAGES - 3 semester hours****Sp**

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 387 Data Structures**CSCI 493 SENIOR PROJECT - 3 semester hours****F, Sp**

The investigation of special problems in computer science on an individual basis. The student must submit a proposal of this investigation. The result of the investigation will be printed in a report.

Prerequisite: Senior level standing in Computer Science or Instructor's Permission**CSCI 495 TOPICS IN COMPUTER SCIENCE - 3 semester hours****F, Sp**

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.

Elective Courses**CSCI 402 INTRODUCTION TO ARTIFICIAL INTELLIGENCE - 3 semester hours****F**

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 387 Data Structures

CSCI 445 COMPUTER COMMUNICATION NETWORKS - 3 semester hours**F**

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 in C++

CSCI 456/556 Advanced Database Applications - 3 semester hours**F**

Applications of advanced database systems. Students will work on a series of projects using industry standard software.

Prerequisite: CSCI 356 or its equivalent.

CSCI 460 COMPUTABILITY AND FORMAL LANGUAGE THEORY - 3 semester hours**Sp**

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

CSCI 462 COMPILER CONSTRUCTION - 3 semester hours**F**

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; CSCI 460 Computability and Formal Language Theory

CSCI 480 COMPUTER GRAPHICS - 3 semester hours**Sp**

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 387 Data Structures; MATH 301 Multivariate Calculus; MATH 325 Linear Algebra

CSCI 482 MATRIX COMPUTATIONS - 3 semester hours**F**

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 in C++ II; MATH 325 Linear Algebra

CSCI 487 SOFTWARE DESIGN AND DEVELOPMENT - 3 semester hours**F, Sp**

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 387 Data Structures

CSCI 488/588 Advanced Systems Architecture - 3 semester hours**F/Sp**

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 388 or its equivalent.

CSCI 492 ALGORITHMS AND COMPLEXITY - 3 semester hours**F, Sp**

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 387 Data Structures

In addition, students may choose any two of the following Mathematics, Information Systems and/or Computer Engineering courses as electives:

MATH 392, MATH 301, MATH 350, MATH 400, MATH 425, MATH 432, MATH 445, MATH 490, CPEG 303, CPEG 307, CPEG 308, CPEG 410, CPEG 411, CPEG 415, CISY 344, CISY 350, CISY 358, CISY 359, CISY 466, CISY 480.

Cognate Courses

MATH 280 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE - 3 semester hours **F, Sp**

The purpose of this course is to introduce fundamental techniques in Discrete mathematics for application in Computer Science. Sets, Mathematical logic, Proof Techniques, Relations, Functions, Mathematical Induction, Counting Principle, Analysis of Algorithms.

Prerequisite: MATH 121 College Algebra and Trigonometry II

STAT 340 PROBABILITY AND STATISTICS FOR COMPUTER SCIENTISTS - 3 semester hours **F, Sp**

Introduction to the concepts of probability, random variables, estimation, hypothesis testing, regression, and analysis of variance with emphasis on application.

Prerequisites: MATH 201 Calculus II; CSCI 281 Discrete Structures

MATHEMATICS WITH A MINOR IN SECONDARY EDUCATION (6-12)

MAED 402 STUDENT TEACHING IN MATHEMATICS - 3 semester hours **F, Sp**

This course is designed to provide supervision in the content area for pre-service secondary mathematics candidates.

Prerequisite: Departmental approval

Corequisites: EDUC 401 Student Teaching Seminar; EDUC 402 Student Teaching

MAED 460 THE TEACHING OF MATH IN ELEMENTARY SCHOOLS - 3 semester hours **F**

Methods, materials, and experiences will be provided to equip the student to teach mathematics in a variety of settings, such as self-contained, open or departmentalized class environments at the early childhood and elementary levels. The activities of the course will develop techniques and strategies of teaching concepts associated with sets, number, numeration systems, intuitive geometry, arithmetic operation, mensuration, functions and relations, graphs, spatial relations, logic number theory and patterns, probability and statistics. Concepts from the psychology of learning will be explored.

Prerequisite: GEMA 113, Basic Mathematics II or MATH 121, College Algebra and Trigonometry II

MAED 473 THE TEACHING OF MATHEMATICS IN SECONDARY SCHOOLS - 3 semester hours **F**

A study of modern instructional strategies for teaching, planning and directing mathematics learning in secondary schools.

Prerequisites: EDUC 201, EDUC 202 Introduction to Teaching I and II

MAED 501 NUMBER AND NUMBER SENSE - 3 semester hours **F, Su**

This course examines number systems and operations, elementary number theory, concepts of integers and whole numbers including selected number sets, basic counting principles, computational algorithms in a problem-solving environment. Appropriate use of technology and manipulatives, NCTM-aligned teaching course that emphasizes the equity principle, and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MAED 502 GEOMETRY AND MEASUREMENT - 3 semester hours **F, Su**

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 emphasized the equity principle and the connections and representation standards. Content delivery will include student investigations and hands-on activities.

MAED 503 PATTERNS, FUNCTIONS, AND ALGEBRAIC REASONING - 3 semester hours **S, Su**

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 emphasized the equity principle and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MAED 504 PROBABILITY AND STATISTICS - 3 semester hours**F, Su**

This course examines descriptive statistics and concepts of probability to include: probability, expectations and counting strategies, measures of central tendency, line of best-fit, simulation, and educational statistics 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.

MAED 505 RATIONAL NUMBERS AND PROPORTIONAL REASONING - 3 semester hours**S, Su**

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 emphasized the equity principle and the connections and representations standards. Content delivery will include student investigations and hands-on activities.

MATHEMATICS**MATH 111 INTRODUCTION TO COLLEGE ALGEBRA - 3 semester hours****F, Sp, Su**

The real number system, factoring, simplifying algebraic expressions, equations and inequalities, problem solving, system of linear equations, functions and their graphs

MATH 120 COLLEGE ALGEBRA AND TRIGONOMETRY I - 3 semester hours**F, Sp, Su**

A pre-calculus course in algebra. Graphs, functions and their graphs, equations and inequalities, polynomial and rational functions, systems of equations and inequalities, and matrices.

Prerequisites: Two units of high school mathematics and placement criteria

MATH 121 COLLEGE ALGEBRA AND TRIGONOMETRY II - 3 semester hours**F, Sp, Su**

Exponential and logarithmic functions, trigonometric functions, analytic trigonometry, and applications of trigonometry.

Prerequisite: MATH 120 College Algebra and Trigonometry I

MATH 122 FINITE MATHEMATICS - 3 semester hours**F, Sp, Su**

Solving systems of Linear Equations and Inequalities, Introduction to Matrices and Linear Programming, Mathematics of Finance, Sets, Counting and Probability.

Prerequisite: MATH 120 College Algebra and Trigonometry I

MATH 130 NUMBER AND OPERATIONS - 3 semester hours**F, Sp**

ONLY for students seeking certification to reach PreK – 3/PreK – 6

Examines number systems and operations, elementary number theory, concepts of integers and rational number, proportions, logic, computational algorithms, and coming techniques in a problem-solving environment. Will include student investigations and hands-on activities.

Prerequisites: Two units of high school mathematics and placement criteria

MATH 131 ALGEBRA AND FUNCTIONS - 3 semester hours**F, Sp**

ONLY for students seeking certification to teach PreK – 3/PreK – 6

Examines 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, symbolic). Will include student investigations and hands-on activities.

Prerequisites: MATH 130 Number and Operations

MATH 150 PRECALCULUS - 5 semester hours**F, Sp, Su**

The purpose of this course is to provide students with the background necessary to begin the formal calculus sequence. Topics include: Functions; Polynomial and rational functions; Inverse functions; Logarithmic and exponential functions; Trigonometric functions; and an introduction to Conic sections. Students successfully completing this course can not take MATH 120 or MATH 121 for credit.

Prerequisites: Permission of the Chairperson for Mathematics & Computer Science

MATH 200 CALCULUS I - 3 semester hours**F, Sp, Su**

Analytic Geometry (introduction to conic sections), review of functions and their graphs, limit and rate of change, continuity, derivatives, derivatives of trigonometric functions, chain rule, implicit differentiation, higher derivatives, related rates, applications of differentiation: maximum and minimum values, The Mean Value Theorem, the first and second derivative tests, optimization problems.

Prerequisite: MATH 121 College Algebra and Trigonometry II

MATH 201 CALCULUS II – 3 semester hours**F, Sp, Su**

Antiderivatives, areas, definite integral, Fundamental Theorem of Calculus, indefinite integrals, areas between curves (in the Cartesian Plane), volumes, integration techniques: substitution rule, integration by parts, trigonometric substitutions, integration of rational functions, table of integration, transcendental functions and their inverses, applications of integration.

Prerequisites: MATH 200 Calculus I

MATH 212 INTRODUCTION TO CALCULUS - 3 semester hours**F, Sp, Su**

Calculus for Non-Science and Non-Mathematics majors. Fundamental concepts of limits, continuity, derivatives and integrals of functions and their application to problems in various disciplines. This course cannot be taken as a Mathematics elective by Mathematics majors.

Prerequisites: Math 121 College Algebra and Trigonometry II; MATH 122 Finite Mathematics

MATH 230 GEOMETRY AND MEASUREMENT - 3 semester hours**F, Sp**

ONLY for students seeking certification to reach PreK – 3/PreK – 6

A basic study of properties and relationships of polygons and polyhedra, 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.

Prerequisites: MATH 131 Algebra and Functions or its equivalent

MATH 284 DISCRETE MATHEMATICS I - 3 semester hours**F, Sp**

Binary number systems; computer codes; computer arithmetic; logic truth tables; sets and relations; Boolean algebra; logic gates; simplifications of logic circuits, graphs, and directed graphs equivalence relations.

Prerequisite: MATH 121 College Algebra and Trigonometry II

MATH 285 DISCRETE MATHEMATICS II - 3 semester hours**Sp**

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

MATH 290 FOUNDATIONS OF MATHEMATICS - 3 semester hours**Sp**

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 201 Calculus II or concurrent with MATH 201

MATH 300 CALCULUS III - 3 semester hours**F, Sp, Su**

Conic sections and polar coordinates, indeterminate forms, improper integrals, Taylor's theorem, L'Hopital's rule, Taylor's polynomials, sequences and series, absolute and conditional convergence, differentiation and integration of power series, vectors in the plane and in space, and cylindrical and spherical coordinates.

Prerequisite: MATH 201 Calculus II

MATH 301 MULTIVARIATE CALCULUS - 3 semester hours**F, Sp**

Vector functions, vector differentiation, parametric equations, differentiation of functions of two and three variables, multiple integration, the triple integral, introduction to vector analysis, line and surface integrals, Green's and Stoke's Theorems.

Prerequisite: MATH 300 Calculus III

MATH 325 LINEAR ALGEBRA - 3 semester hours**F, Sp**

Systems of linear equations, matrices, determinants, vector spaces, bases, dimensions, linear independence, eigenvalues and eigenvectors, and linear transformations.

Prerequisite: MATH 200 Calculus I or MATH 212 Introduction to Calculus

MATH 340 MODERN GEOMETRY I - 3 semester hours**F, Su**

A study of the foundations of Euclidean geometry including transformations deductive and inductive reasoning and an introduction to non-Euclidean geometries.

Prerequisite: MATH 121 College Algebra and Trigonometry II

MATH 341 MODERN GEOMETRY II - 3 semester hours**Sp**

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 Modern Geometry

MATH 350 DIFFERENTIAL EQUATIONS - 3 semester hours**Sp**

Solutions of ordinary differential equations with applications to science and engineering. Linear differential equations with constant coefficients using operator methods. Series solutions and applications.

Prerequisite: MATH 201 Calculus II

MATH 352 INTRODUCTION TO MATHEMATICAL BIOLOGY - 3 semester hours**F**

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 200 Calculus I, BIOL 120 Principles of Biology I and BIOL 121 Principles of Biology II, or consent of instructor.

MATH 392 INTRODUCTION TO LINEAR PROGRAMMING - 3 semester hours**F**

Matrices, vectors and vector spaces, linear programming; simplex method; duality, degeneracy, game theory, applications to transportation, warehouse, nutrition, and investment problems.

Prerequisite: MATH 201 Calculus II

MATH 395 MATHEMATICS PROBLEM SOLVING SEMINAR - 3 semester hours**F**

A seminar-based approach which examines areas including 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 will include Algebra and Number Theory, Measurement, Geometry, Trigonometry, Functions, Calculus, Data Analysis and Statistics, Probability, Matrix Algebra and Discrete Mathematics. Students must register for 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

MATH 400 ADVANCED CALCULUS I – 3 semester hours**F**

Introduction to inductive and deductive reasoning, introduction to proofs, proofs of theorems involving sets, functions and inverse functions, composite functions, Study limit and continuity using delta-epsilon approach, limit theorems, properties of continuous functions.

Prerequisite: MATH 301 Multivariate Calculus

MATH 401 ADVANCED CALCULUS II - 3 semester hours**Sp**

Uniform continuity, differentiability, line and surface integrals, convergence of series, uniform convergence, improper integrals, introduction to completeness, compactness and connectedness; Riemann – Stieltjes Integral.

Prerequisite: MATH 400 Advanced Calculus

MATH 425 MODERN ALGEBRA - 3 semester hours**F**

Abstract groups, subgroups, cyclic groups, groups of symmetries, even and odd permutations, the alternating group cosets, normal subgroups, Lagrange's theorem, quotient groups, solvable groups, mappings, group homomorphisms, isomorphisms.

Prerequisite: MATH 201 Calculus II

MATH 426 MODERN ALGEBRA - 3 semester hours**Sp**

Rings, ring homomorphisms, subrings, ideals, quotient rings, integral domains, polynomial extensions of rings, fields and field extensions.

Prerequisite: MATH 425 Modern Algebra

MATH 432 THEORY OF FUNCTIONS - 3 semester hours**Sp**

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 301 Multivariate Calculus

MATH 445 INTRODUCTION TO POINT SET TOPOLOGY - 3 semester hours**Sp**

Metric spaces, topological spaces, separation axioms, connectedness, compactness, homeomorphisms and product spaces.

Prerequisite: MATH 300 Calculus III or MATH 425 Modern Algebra

MATH 452 NUMERICAL ANALYSIS - 3 semester hours**Sp**

A survey of modern numerical methods with emphasis on those best suited for digital computer application. Polynomial interpolation, iterative methods for solving simultaneous linear and non-linear equations, solutions of algebraic equations, solutions to differential equations.

Prerequisite: MATH 201 Calculus II

MATH 470 HISTORY OF MATHEMATICS - 3 semester hours**F**

An introduction to the chronological history of mathematics and the mathematics who made significant contributions, emphasizing the evolution of basic concepts ranging from primitive number systems through the foundations of set theory. Topics include development of Mathematical concepts in ancient societies, pre-Calculus and Calculus of the seventeenth century; and a historical review of mathematical analysis, probability, statistics, algebra, number theory and geometry.

MATH 490 GRAPH THEORY - 3 semester hours**F, Sp**

Introduction to graphs and digraphs, introduction to algorithms, tree, networks, Eulerian and Hamiltonian graphs, planar graphs, coloring of graphs.

Prerequisites: MATH 201 Calculus II; CSCI 281 Discrete Structures

MATH 495 MATHEMATICS SEMINAR - 3 semester hours**F, Sp**

Required of all senior mathematics majors. A capstone course designed (1) review, unify, and extend concepts and skills developed in previous mathematics courses; (2) give students additional experience in presenting mathematical concepts in oral and written form and improving problem-solving skills; (3) assess students' comprehensive mathematical knowledge through the administration of a departmental Field Test. Students will be expected to achieve a satisfactory level of performance on the Field Test in order to be eligible for graduation.

Prerequisite: Senior academic standing or by permission of instructor

MATH 499 GRE MATHEMATICS REVIEW - 3 semester hours**Sp, Su**

Whole numbers, fractions, decimals, percents, 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.

STATISTICS**STAT 210 ELEMENTARY STATISTICS - 3 semester hours****F, Sp, Su**

An introductory statistics course without a calculus prerequisite. 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 examples of data which occur in daily life. This course cannot be taken as a mathematics elective by mathematics majors.

Prerequisites: GEMA 112 Basic Mathematics I; GEMA 113 Basic Mathematics II or the equivalent

STAT 310 ELEMENTARY STATISTICS II - 3 semester hours

An applied statistics course designed for students who have some background in college algebra. 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 test of correlation coefficients. Some use of Statistical packages for the Social Sciences.

Prerequisite: STAT 210 Elementary Statistics I or equivalent

STAT 330 INTRODUCTION TO PROBABILITY AND STATISTICS - 3 semester hours**F, Su**

An introductory course in probability and statistics with an elementary calculus prerequisite. Elementary descriptive statistics, basic probability rules, conditional probability, independence, Bayes' theorem, discrete and continuous probability distributions, probability density functions, binomial, Poisson, hypergeometric, negative binomial, geometric and normal distributions.

Prerequisite: MATH 201 Calculus II

STAT 380 PROBABILITY AND STATISTICS I - 3 semester hours**Sp**

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 201 Calculus II; STAT 330 Introduction to Probability and Statistics

STAT 382 INTRODUCTION TO SAMPLING METHODS - 3 semester hours **Sp**

A course that presents the basic ideas of sampling: 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 Probability and Statistics I

STAT 385 ANALYSIS OF VARIANCE - 3 semester hours **Sp**

A survey of the 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 310 Elementary Statistics II or STAT 380 Probability and Statistics I

STAT 410 ADVANCED STATISTICAL METHODS - 3 semester hours **F, Su**

A course designed for students who plan to apply statistical methods in the context of research problems in social sciences, natural sciences, agriculture and education. Uses of computers and packaged computer programs are emphasized. **Prerequisite:** STAT 310 Elementary Statistics II or STAT 385 Analysis of Variance

STAT 480 PROBABILITY AND STATISTICS II - 3 semester hours **F**

A course emphasizing the statistical techniques which are useful in the treatment of multiple samples. Topics include the properties of joint discrete and continuous probability distributions, conditional and marginal distributions, covariance, independent random variables, estimation and hypothesis testing of population parameters in the two-sample case, chi-square tests, and simple linear regression and correlation.

Prerequisite: STAT 380 Probability and Statistics I

STAT 481 NONPARAMETRIC STATISTICS - 3 semester hours **F**

A course which examines statistical techniques which are applicable even if the form of the sampled population 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, Tukey's quick test, Friedman and Cochran's test, computer programs.

Prerequisite: STAT 380 Probability and Statistics I

STAT 482 APPLIED MULTIVARIATE STATISTICS - 3 semester hours **Sp**

A course in multivariate methods using matrix algebra and applied statistics to analyze several correlated measurements made on each experimental unit. Multivariate normal distribution, estimation and hypotheses testing in multiple regression, Hotelling's T, one-way multivariate analysis of variance, introduction to discriminant and factor analysis, principal components and canonical correlations. Multivariate analysis programs from BMD and SPSS will also be discussed.

Prerequisite: STAT 310 Elementary Statistics II or STAT 410 Advanced Statistical Methods

STAT 484 APPLIED PROBABILITY - 3 semester hours **Sp**

A course designed to apply probability theory to the study of phenomena in engineering, management science, operations research, and the physical and social sciences. Markov's inequality, conditional expectation, Markov chains, Chapman-Kolmogorov equation, interarrival and waiting time distributions.

Prerequisite: STAT 480 Probability and Statistics II

STAT 490 PROBABILITY THEORY - 3 semester hours **Sp**

A rigorous development of the theory of probability, emphasizing the axiomatic development of the subject. 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 courses or consent of the instructor

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
Bachelor of Science Degree - Computer Science Major

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hour
FRESHMAN YEAR				
CSCI 120	Problem Solving Using Comp	3	-	3
CSCI 150	Programming in C++ I	-	3	3
MATH 120	College Algebra & Trig I	3	-	3
MATH 121	College Algebra & Tri II	-	3	3
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
FRST 101	Freshmen Studies	2	-	2
GEPS 124	Introduction to Psychology	-	3	3
PHYS, CHEM or BIOL	Lab Science	4	-	4
PHYS, CHEM, BIOL	Lab Science II	-	<u>4</u>	<u>4</u>
		15	16	31
SOPHOMORE YEAR				
CSCI 250	Programming in C++ II	3	-	3
CSCI 260	Object Oriented Programming	-	3	3
MATH 200	Calculus I	3	-	3
MATH 201	Calculus II	-	3	3
MATH 280	Discrete Mathematics	3	-	3
CSCI 281	Discrete Structures	-	3	3
LITERATURE	Elective	3	-	3
PHYS, CHEM or BIOL	Lab Science	-	4	4
SOCIAL SCIENCE	Elective	3	-	3
PHIL 450	Applied Ethics	-	3	3
WELLNESS/HEALTH	Elective ¹	<u>2</u>	-	<u>2</u>
		17	16	33
JUNIOR YEAR				
CSCI 387	Data Structures	3	-	3
CSCI 388	Architecture and OS	-	3	3
CSCI 303	Computer Org. and Assembly Pro	3	-	3
CSCI 356	Database System	-	3	3
MATH 325	Linear Algebra	3	-	3
CSCI 389	Human Comp Interaction	-	3	3
MATH 300	Calculus III	3	-	3
STAT 340	Probability and Stat for Comp Science	-	3	3
GEEN 342	Technical Communication ²	3	-	3
CSCI _____	Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
MATH/CSCI/CPEG/CISY	Elective	3	-	3
CSCI 495	Topics in CS	-	3	3
CSCI 493	Senior Project	3	-	3
CSCI 485	Programming Languages	-	3	3
CSCI _____	Elective	3	-	3
MATH 452	Numerical Analysis	-	3	3
HUMANITIES	Elective	3	-	3
CSCI/CPEG/CISY	Elective	-	3	3
HISTORY	Elective	-	<u>3</u>	<u>3</u>
		12	15	27

⁽¹⁾may select two from among identified GEPE courses in the catalog.

⁽²⁾fulfills humanities elective.

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
Mathematics with a Minor in Secondary Education 6-12

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hour
FRESHMAN YEAR				
MATH 200	Calculus I	3	-	3
MATH 201	Calculus II	-	3	3
CSCI 120	Problem Solving	3	-	3
CSCI 150	Programming in C++	-	3	3
FRST 101	Freshman Studies	2	-	2
ELECTIVE	History	-	3	3
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
PHYS, CHEM or BIOL	Laboratory Science I	4	-	4
PHYS, CHEM or BIOL	Laboratory Science II	-	4	4
IDST 100 (if needed)	Analytical Reading/Reasoning I	(2)**	-	-
IDST 101 (if needed)	Analytical Reading/Reasoning II	-	(2)**	-
		15	16	31
SOPHOMORE YEAR				
MATH 300	Calculus III	3	-	3
MATH 301	Multivariate Calculus	-	3	3
MATH 284	Discrete Mathematics	3	-	3
MATH 290	Foundations of Math	-	3	3
EDUC 201	Intro to Teaching I	2	-	2
EDUC 202	Intro to Teaching II	-	2	2
ELECTIVE	Literature	3	-	3
IDST 200	Digital Media in Ed	-	3	3
	Foreign Language ⁽¹⁾	3	-	3
	Foreign Language ⁽¹⁾	-	3	3
WELLNESS/HEALTH	Elective ⁽²⁾	<u>2</u>	-	<u>2</u>
		16	14	30
JUNIOR YEAR				
MATH 325	Linear Algebra	3	-	3
MATH 350	Differential Equations	-	3	3
STAT 330	Intro to Probability & Statistics	3	-	3
MATH 340	Modern Geometry	-	3	3
MATH 395	Math Problem-Solving Seminar	3	-	3
MATH	Elective (MATH 300 or higher)	-	3	3
HUMANITIES	Elective	3	-	3
PSYC 212	Human Growth & Develop	-	3	3
EDUC 315	Data Driven Inst. Design	3	-	3
SPED 403	Classroom Management	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
MATH 425	Modern Algebra	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
MATH 470	History of Mathematics	3	-	3
EDUC 402	Student Teaching	-	9	9
MAED 473	Teaching Mathematics	3	-	3
MAED 402	Student Teaching in Math	-	3	3
EDUC 424	Critical Issues ED	2	-	2
EDUC 427	Reading in Content Area	<u>3</u>	-	<u>3</u>
		14	15	29

⁽¹⁾Recommend Spanish, one fulfills Humanities elective and one fulfills Global Studies elective

⁽²⁾Or may select two from among identified GEPE courses in the catalog

**IDST 100/101 are not counted in semester hours or toward graduation requirement

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
Bachelor of Science Degree - Cooperative Engineering Concentration

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hour
FRESHMAN YEAR				
CSCI 120	Problem Solving Using Comp	3	-	3
CSCI 150	Programming in C++ I	-	3	3
MATH 200	Calculus I	3	-	3
MATH 201	Calculus II	-	3	3
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
FRST 101	Freshman Studies	2	-	2
GEPS 124	Introduction to Psychology	-	3	3
PHYS 112	General Physics I	4	-	4
PHYS 113	General Physics II	-	<u>4</u>	<u>4</u>
		15	16	31
SOPHOMORE YEAR				
MATH 300	Calculus III	3	-	3
MATH 301	Calculus IV	-	3	3
CHEM 101	General Chemistry I	4	-	4
CHEM 102	General Chemistry II	-	4	4
LITERATURE	Elective	3	-	3
MATH 350	Differential Equations	-	3	3
CSCI 250	Programming in C++ II	3	-	3
MATH 325	Linear Algebra	-	3	3
PHYS 214	General Physics III	4	-	4
PHYS 215	General Physics IV	-	<u>4</u>	<u>4</u>
		17	17	34
JUNIOR YEAR				
MATH 400	Advanced Calculus	3	-	3
MATH 432	Theory of Functions	-	3	3
STAT 330	Intro to Probability & Statistics	3	-	3
MATH 495	Mathematics Seminar	-	3	3
PHYS 313	General Physics V	3	-	3
MATH 452	Numerical Analysis	-	3	3
GLOBAL STUDIES	Elective	3	-	3
HISTORY	Elective	-	3	3
GEEN 310	Advanced Communication	3	-	3
HUMANITIES	Elective	-	3	3
GEHE 164	Personal Health	<u>2</u>	-	<u>2</u>
		17	15	32

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
Bachelor of Science Degree – Mathematics/Statistics Concentration

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hour
FRESHMAN YEAR				
CSCI 120	Problem Solving Using Comp	3	-	3
CSCI 150	Programming in C++ I	-	3	3
MATH 120	College Algebra and Trig I	3	-	3
MATH 121	College Algebra and Trig II	-	3	3
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
FRST 101	Freshman Studies	2	-	2
GEPS 124	Introduction to Psychology	-	3	3
PHY, CHEM or BIOL	Lab Science I	4	-	4
PHY, CHEM or BIOL	Lab Science II	-	<u>4</u>	<u>4</u>
		15	16	31
SOPHOMORE YEAR				
MATH 200	Calculus I	3	-	3
MATH 201	Calculus II	-	3	3
PHY, CHEM or BIOL	Lab Science III	4	-	4
PHY, CHEM or BIOL	Lab Science IV	-	4	4
	Foreign Language ¹	3	-	3
	Foreign Language ¹	-	3	3
LITERATURE	Elective	3	-	3
WELLNESS/HEALTH	Elective ²	-	2	2
CSCI 250	Programming in C++ II	3	-	3
GEEN 310	Advanced Communication	-	<u>3</u>	<u>3</u>
		16	15	31
JUNIOR YEAR				
MATH 300	Calculus III	3	-	3
MATH 301	Multivariate Calculus	-	3	3
STAT 330	Intro to Probability & Stat	3	-	3
STAT 380	Probability & Stat I	-	3	3
MATH 325	Linear Algebra	3	-	3
MATH 392 or STAT 382	Linear Programming or Intro to Sampling Methods	-	3	3
SOCIAL SCIENCE	Elective	3	-	3
MATH 350	Differential Equations	-	3	3
MATH 290	Foundation of Math	3	-	3
HISTORY	Elective	-	3	3
GEPE 165	Personal Fitness	<u>1</u>	-	<u>1</u>
		16	15	31
SENIOR YEAR				
MATH 400	Advanced Calculus I	3	-	3
MATH 401 or STAT 484 or STAT 490	Adv Calc II or App Prob. or Probability Theory	-	3	3
MATH 445 or STAT 481	Topology or Nonparametric Stat	3	-	3
MATH 445 or STAT 385	Elective or Analysis of Variance	-	3	3
STAT 480	Probability and Stat II	3	-	3
MATH 452	Numerical Analysis	-	3	3
MATH 425	Modern Algebra	3	-	3
MATH 432	Theory of Functions	-	3	3
MATH 495	Math Seminar	-	<u>3</u>	<u>3</u>
		12	15	27

¹recommend Spanish, one fulfills Humanities elective and one fulfills Global Studies elective.

²Or may select two from among identified GEPE courses in the catalog

DEPARTMENT OF NURSING

Director: Dr. Karen Faison, Box 9059, Room 140NA, Hunter McDaniel, Phone: 524-6722
Associate Professor: Karen Faison
Assistant Professors: Beverly Brown, Delores Couch, Frances Montague
Instructors: Trayce Jefferson, Pattie Lawson
Adjunct: Florence Jones-Clarke, Marie Umar-Kamara

Description of Department

The Department of Nursing offers the associate of science degree in nursing. This is a pre-licensure two year (5 semester) program which prepares graduates for the National Council Licensure Examination for Registered Nurses (NCLEX-RN). As an RN graduates are eligible for employment in a variety of health care delivery settings to include but not limited to hospitals, health centers, ambulatory settings and private physician offices.

MISSION STATEMENT

The Department of Nursing and the University are dedicated to the promotion of knowledgeable, perceptive, and humane citizens secure in their self-awareness, equipped for personal fulfillment, sensitive to the needs and aspirations of others, and committed to assuming productive roles in a challenging and ever-changing global society. The VSU nursing program provides a body of knowledge derived from liberal arts, biological, humanities, behavioral sciences and the nursing sequence. The department supports the mission of the University which is to provide an education that is the foundation for entry into practice and the beginning of life-long learning, "*The education of your life.*"

VISION

The VSU Department of Nursing will promote and sustain an environment of academic excellence and scholarly inquiry to prepare nurses for entry into professional nursing practice through didactic instruction, advanced technology and clinical experiential learning. From this mission, the faculty has developed a holistic philosophy of nursing education.

PHILOSOPHY

The philosophy involves human beings, the environment, health, the healthcare system, nursing practice and nursing education. This holistic system serves as the foundation for the associate degree curriculum at Virginia State University.

ACCREDITATION

The Department of Nursing has provisional approval through the Virginia State Board of Nursing. This is the first step which is required to accept students into a nursing education program. The department of nursing held its first graduation May, 2007. The Department of Nursing has established candidacy status with the National League for Nursing Accrediting Commission, Inc. (NLNAC) 61 Broadway, 33rd Floor, New York, NY 10006. This is the pre-requisite step towards initial accreditation with the NLNAC.

PROGRAM OUTCOMES

The nursing program at VSU provides learning experiences, which will assist the associate degree-nursing student to:

1. Assimilate and integrate knowledge from the humanities, biological, psychosocial, the liberal arts, and nursing theories as a foundation to provide nursing care to clients (across the life span) in a variety of settings;
2. Utilize the nursing process with skills of critical thinking in all nursing services;
3. Utilize nursing theories and related evidence based practice to guide professional nursing services;
4. Develop leadership and management abilities in the practice of nursing and in effecting change.
5. Assume the role of client advocate, teacher, facilitator, collaborator, and coordinator with other health care professionals and consumers to improve delivery of health care to meet the health needs of society;
6. Assume responsibility and accountability for nursing actions and their outcomes, to enhance nursing practice;
7. Demonstrate personal and professional growth as individuals and citizens;

8. Develop technological skills to assist learning, to deliver and document patient care, and to provide professional nursing services;
9. Develop professional values, ethical, moral, legal and political aspects of the practice of nursing; and
10. Acquire the knowledge, skills and abilities to successfully enter into professional nursing practice.

Associate of Science Degree Program Policies

Specific policies related to grading, promotion, and retention in the program are delineated in the Associate of Science Degree in Nursing Student Handbook, published annually and distributed when students begin their associate degree nursing courses. It is the student's responsibility to read the Handbook and follow the policies as described. The Handbook is discussed during the first nursing course, Introduction to Nursing.

ADMISSIONS

Students who desire admission must first meet the admissions requirements of the University. Once the student has been accepted into the University, the student should contact the Department of Nursing for a separate application for the clinical phase of the nursing major. Admission into the clinical phase of the nursing curriculum is very competitive. The clinical phase of the nursing curriculum begins in the second semester with Nursing 100. This begins the hospital rotation.

Pre-Nursing Phase:

1. Students who have been admitted into the University are in the pre-nursing phase of the nursing curriculum.
2. The pre-nursing phase includes 16 semester hours of coursework which prepares students for the clinical phase of the nursing curriculum. This includes general biology and microbiology.

Clinical Phase:

1. Students desiring admission into the clinical phase of the nursing curriculum should complete and submit a separate application during the spring semester prior to the fall semester of coursework.
2. The application process includes a written application which is obtained from the Department of Nursing.
3. In addition to the typed application, the student must submit an essay on their philosophy of nursing.
4. The complete packet also includes a transcript of all completed coursework. This transcript should be submitted to the Department of Nursing.
5. Finally, students should submit the results of the criminal background investigation and current CPR for healthcare providers by the American Red Cross.
6. All of the above should be submitted to the Department of Nursing no later than April 1.
7. Students will be notified of their admission status by June 1.

Nursing Curriculum

1. Students who have completed the pre-nursing requirements will be accepted into the Nursing Program until the class is full. All courses must be completed with a grade of "C" or better. Grades of "C-" or less are not acceptable. Students who are not accepted may reapply during the next application process.
2. When accepted into the nursing program, students must submit current (within 6 months) completed medical, dental and visual examinations. Evidence of current immunization status is required. All supporting health forms are due to the Department of Nursing within 30 days of notification of acceptance into the program.
3. In addition to routine immunizations, students must submit documentation of completion of the Hepatitis-B vaccination series (or be in the process of completion). Students who do not wish to receive the Hepatitis-B vaccination must sign a declination statement. Prior to enrollment, students must also submit evidence of meningitis and varicella immunizations. Students must present evidence of current tuberculosis screening within the previous six months.

4. Students should be free of any mental, physical or chemical dependency condition, which could interfere with their ability to practice nursing. Clinical site affiliations may require students to submit to a urine drug screen and criminal background check. The Virginia Board of Nursing may choose to deny licensure to any applicant who has ever been convicted or pled guilty or nolo contendere to the violation of any federal, state or other statute or ordinance constituting a felony or misdemeanor; or who has a mental, physical or chemical dependency condition that could interfere with his/her current ability to practice nursing. Applicants should confidentially discuss this information with the program director prior to pursuing the nursing program.
5. Students must earn a minimum cumulative grade point average of 2.5 to remain eligible for continued enrollment in the program. In order to take the next course in a sequence, a grade of C or higher must be earned in the previous course. Grades of C-, D or F are unacceptable in nursing or non-nursing co-requisite coursework.
6. Nursing courses are offered once a year. You must pass each nursing course each semester to complete the nursing program.
7. In addition to the costs of college tuition, book and materials, students in the nursing program are required to purchase student uniforms, accessories, and certain laboratory supplies. Students are also responsible for the cost of standardized tests, health examinations, drug screenings, criminal background checks and transportation to and from the University and the various clinical sites. It is recommended that all students carry accident insurance and personal health insurance due to the inherent risk of exposure to disease. The University does not assume responsibility for accidents/incidents that occur in the off campus clinical affiliations. The student assumes financial responsibility for accidents/incidents requiring medical attention.
8. The clinical phase may include hospital/clinical rotations in the tri-cities area, central Virginia, southside Virginia and Hampton Roads area. Clinical rotations are on a weekly basis. You are responsible for your own transportation to and from the clinical site. Attendance is mandatory for each clinical rotation. The University does not provide transportation.
9. While the University does accept transfer courses, all nursing courses must be completed at VSU.

Re-Enrollment

1. The clinical phase is very competitive and requires in-depth study and clinical preparation.
2. Students who are unsuccessful in a nursing course, must re-apply for admission into the clinical phase.
3. Re-enrollment is not guaranteed and is on a space available basis only.
4. Students who have two unsuccessful attempts in the program are not eligible for re-enrollment.

Nursing Curriculum Plan of Study

**Associate of Science in Nursing
69 Semester Hours
Program of Study**

PRE-NURSING

Course	Description	Semester Hours
BIOL 120	General Biology	4
ENGL 110	Composition I	3
FRST 101	Freshman Studies	2
MATH 120	College Algebra	3
BIOL 241	Microbiology*	4
		16 total

CLINICAL PHASE

		Semester	
		Fall	Spring
Second Semester			
NURS 100	Introduction to Nursing	5	
NURS 110	Pharmacology in Nursing**	3	
BIOL 318	Anatomy & Physiology I	4	
CISY 155	Information Systems	3	
		15 total	

Third Semester

NURS 150	Principles of Nursing I		5
BIOL 319	Anatomy & Physiology II		4
PSYC 216	Life Span		3
		12 total	

Fourth Semester

NURS 250	Dimensions of Nursing	1	
NURS 252	Principles of Nursing II	10	
ENGL 111	Composition II	3	
		14 total	

Fifth Semester

NURS 255	Principles of Nursing III		10
NURS 256	Professional Nursing		2
		12 total	

* BIOL 120 prerequisite.

**May complete prior to NURS 100.

COURSE DESCRIPTIONS

NURS 100 INTRODUCTION TO NURSING WITH LAB - 5 semester hours **F**

NURS 100 is a fundamental nursing course required for all entering nursing students. This course introduces theories of nursing practice, the nursing process and beginning application of nursing skills.

Prerequisite: admission into the nursing program.

NURS 110 PHARMACOLOGY FOR NURSING - 3 semester hours **F, Sp**

NURS 110 focuses on the basic concepts of pharmacology with emphasis on the role of the nurse in developing a comprehensive approach to the clinical application of drug therapy through the use of the nursing process. The course is designed to assist in developing skills necessary for the safe preparation and administration of drug dosages.

Prerequisites: MATH 120, admission into the nursing program or permission of the department.

NURS 150-PRINCIPLES OF NURSING I WITH LAB - 5 semester hours**Sp**

NURS 150 continues the application of the nursing process and clinical practice theories acquired in NURS 100 to the management of adult clients with specific health needs related to selected medical-surgical conditions.

Prerequisites: admission into the nursing program, NURS 100 and NURS 110.

NURS 250 DIMENSIONS OF NURSING - 1 semester hour**F**

NURS 250 introduces the nursing student to contemporary factors affecting nursing care. The learner will explore concepts related to managing groups of patients, delegation, prioritization, care delivery strategies and working with two or more patients on the clinical setting.

Prerequisites: admission into the nursing program, NURS 100, NURS 110, and NURS 150.

Corequisite: NURS 252.

NURS 252-PRINCIPLES OF NURSING II WITH LAB - 10 semester hours**F**

NURS 252 has a dual focus: I. Psychiatric Nursing which focuses on comprehensive mental health care across the life span; and II. Obstetrics Nursing which focuses on the health care of child bearing women.

Prerequisites: admission into the nursing program, NURS 100, NURS 110, NURS 150.

Corequisite: NURS 250.

NURS 255 PRINCIPLES OF NURSING III WITH LAB - 10 semester hours**Sp**

NURS 255 has a dual focus: I. Adult Nursing focuses on nursing practice with clients experiencing acute, chronic and rehabilitation disorders; and II. Pediatrics Nursing which focuses on the nursing care of infants, children and adolescents who are experiencing alterations in their health status.

Prerequisites: admission into the program, NURS 100, NURS 110, NURS 150, NURS 250, and NURS 252.

Corequisite: NURS 256.

NURS 256 THE PRACTICE OF NURSING - 2 semester hours**Sp**

NURS 256 is a capstone nursing seminar that prepares students for professional nursing role. This course focuses on role development and NCLEX-RN success.

Prerequisites: admission into the nursing program, NURS 100, NURS 110, NURS 150, NURS 250, NURS 252.

Corequisite: NURS 255.

DEPARTMENT OF PSYCHOLOGY

Chairperson:	Oliver Hill, Box 9079, Room 102 Hunter McDaniel Hall, Phone: 524-5938
Professor:	Oliver Hill
Associate Professor:	Renia Brown-Cobb, Vernessa R. Clark, Reginald Hopkins, Aashir Nasim, Christine Smith, Pamela Trotter, Katrina L. Walker
Assistant Professors:	Kimberly Boyd-Starke, John Fife, Byron Greenberg, Toni Harris ZewelANJI (Zewe) Serpell

Description of the Department

The Department offers a program of general psychology on the undergraduate level. Graduate faculty members from this department offer a graduate program leading to the master's degree, with concentrations in general or, clinical psychology. The undergraduate program emphasizes general psychology, which is basic to all areas of psychology and provides a foundation of pre-professional education for a variety of vocations. Through a departmental advisory system the faculty aids the major to find 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 find 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 of the Department

The mission of the Department of Psychology is to provide a solid background of knowledge in the major areas of psychology and proficiency in the research methods of psychology, to prepare students for graduate study in the discipline, or employment in one of the human service fields.

Objectives of the Department

The objectives of the Department are (1) to provide fundamental training in the science of psychology, thus, preparing psychology majors for advanced study in the field, (2) to contribute to the general education of all students by providing an understanding of the scientific approach to the study of human behavior, and (3) to offer instruction in the principles and applications of psychology for other departments that require psychology in the programs of their majors.

Course Descriptions**PSYCHOLOGY****PSYC 100 DISCOVERING PSYCHOLOGY - 3 semester hours** **F, Sp**

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 semester hours **F, Sp**

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.

Prerequisite(s): Open to majors only or with the permission of the instructor.

PSYC 111 INTRODUCTION TO PSYCHOLOGY II - 3 semester hours **F, Sp**

A basic course in psychology, serving as the foundation for subsequent courses on specialized topics. The major thrust of this course will be on the physiological bases of behavior, including such topics as the brain and neurotransmitters, sensation and perceptions, learning, memory, and motivation. Required of all psychology majors.

Prerequisite(s): Open to majors only or with the permission of the instructor.

PSYC 117 THE PSYCHOLOGY OF EARLY CHILDHOOD – 3 semester hours **F**

A course designed to emphasize personality development of young children at the pre-school and primary levels.

PSYC 210 ADOLESCENT PSYCHOLOGY – 3 semester hours **Sp**

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 - 2 semester hours**F, Sp**

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 some of the methods of child study.

PSYC 214 SOCIAL PSYCHOLOGY - 3 semester hours**F, Sp**

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.

Prerequisite: PSYC 100 or PSYC 110

PSYC 216 DEVELOPMENTAL PSYCHOLOGY - 3 semester hours**F, Sp**

A course which 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 with children.

PSYC 305 PRACTICUM – 8 HRS. PRACTICE - 2 semester hours**F, Sp**

Supervised field experience in mental health.

PSYC 309 EXPERIMENTAL PSYCHOLOGY LABORATORY - 1 semester hour**F, Sp**

Experiments conducted that illustrate techniques of control and statistical analysis in various areas of psychology. Focuses on human performance, equipment and laboratory procedures used in the performance. Must be taken concurrently with PSYC 310.

Prerequisite: PSYC 315 Quantitative Methods

PSYC 310 EXPERIMENTAL PSYCHOLOGY - 3 semester hours**F, Sp**

Experimental design of psychological research involving appropriate techniques of control and statistical analyses. Must be taken concurrently with PSYC 309.

Prerequisite: PSYC 315 Quantitative Methods

PSYC 311 MENTAL HYGIENE - 3 semester hours**F**

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 semester hours**F, Sp**

Focus 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. Practical applications for educators, psychologists, developmentalists, and human service workers.

Prerequisite: PSYC 212 or PSYC 216

PSYC 314 EDUCATIONAL TESTS AND MEASUREMENTS - 3 semester hours**F, Sp**

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: PSYC 212 or PSYC 216

PSYC 315 QUANTITATIVE METHODS IN PSYCHOLOGY - 3 semester hours**F, Sp**

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**Sp**

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 selected agencies.

Prerequisites: PSYC 110 and PSYC 216

PSYC 318 APPLIED PSYCHOLOGY - 3 semester hours**F**

The application of psychological research in the solution of specific problems. Emphasis upon psychology 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.**F, Sp**

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**Sp**

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: PSYC 100 or PSYC 110

PSYC 400 SENIOR SEMINAR - 3 semester hours**F**

An integrative course designed to show the relationship among the separate courses pursued by the student in the undergraduate experience by 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**Sp**

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 410 INTRODUCTION TO PSYCHOLOGICAL TESTING - 4 semester hours**F**

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. Practice in report writing is provided.

Prerequisites: PSYC 216

PSYC 411 DIAGNOSTIC PROCEDURES FOR EXCEPTIONAL CHILDREN - 4 semester hours**Sp**

A study of psychodiagnostic 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: PSYC 410

PSYC 412 PHYSIOLOGICAL PSYCHOLOGY - 3 semester hours**F**

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: BIOL 315 and BIOL 316

PSYC 413 HISTORY AND SYSTEMS OF PSYCHOLOGY - 3 semester hours**Sp**

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 hours**Sp**

The various theories of perception and the experimental research relating to them.

PSYC 415 CULTURE AND PERSONALITY - 3 semester hours**Sp**

A course designed to enhance the general education of students regardless of their majors. A cross-cultural approach to the study of personality and national character by examining the value systems, institutions, culture traits and child-rearing practices of diverse cultures.

PSYC 416 THE TEACHING OF PSYCHOLOGY IN SECONDARY SCHOOL - 3 semester hours**F**

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**F**

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 who have credit for Psychology 117.

PSYC 418 PSYCHOLOGY OF THE DISADVANTAGED - 3 semester hours**Sp**

A course examining the dynamics of the behavior of disadvantage groups. After an analysis of major historical revolutions, the focus is turned to contemporary groups who occupy disadvantaged positions in American society, such as migrants, ghetto dwellers, Native American Indians, Mexican-Americans, et. al

Prerequisite: Upperclass or Graduate Status

PSYC 419 INTRODUCTION TO SCHOOL PSYCHOLOGY - 3 semester hours**Sp**

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**Sp**

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.

Prerequisites: Junior Status and above

PSYC 421 LANGUAGE AND COGNITIVE DEVELOPMENT - 3 semester hours**Sp**

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**F, Sp**

Independent research project done under the supervision of a faculty member.

Prerequisite: PSYC 309 Experimental Psychology Lab and PSYC 310 Experimental Psychology

PSYC 429 CRISIS INTERVENTION STRATEGIES - 3 semester hours**F**

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.

Prerequisite: Consent of Instructor

PSYC 430 THE CLINICAL INTERVIEW - 3 semester hours**S**

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

PSYCH 533 INTRODUCTION TO NEUROSCIENCE - 3 semester hours**Sp**

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.

DEPARTMENT OF PSYCHOLOGY
Bachelor of Science Degree in Psychology

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN				
FRST 101	Freshman Studies	2	-	2
PSYC 110	Introduction to Psych. I	3	-	3
GEPE	Physical Education Elective	1	-	1
FOREIGN LANGUAGE	(200 level or above)	3	-	3
MATH 120	College Algebra and Trig.	3	-	3
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
PSYC 111	Introduction to Psych. II	-	3	3
FOREIGN LANGUAGE	(200 level or above)	-	3	3
HUMANITIES ELECTIVE	(Not philosophy)	-	3	3
GEPI 116	Biological Science & Lab	-	<u>3</u>	<u>3</u>
		15	15	30
SOPHOMORE				
GEHI 114 or GEHI 115	World History	3	-	3
ENGL 201	Intro to Literature	3	-	3
HPER 170	Health and Wellness	2	-	2
PSYC 216	Developmental Psychology	3	-	3
GE NATURAL SCIENCE & LAB	Natural Science & Lab	4	-	4
GEHI 122 or 123	U.S. History	-	3	3
PSYC 214	Social Psychology	-	3	3
GEPE	Physical Education Elective	-	3	3
GE	Technology Elective	-	3	3
GEEN 310	Advanced Comm. Skills	-	3	3
STAT 210	Elementary Statistics	-	<u>3</u>	<u>3</u>
		15	18	33
JUNIOR YEAR				
GEPI 140	Philosophy	3	-	3
PSYC 311	Mental Hygiene	3	-	3
PSYC 325	Personality Development	3	-	3
BIOL 315	Human Anatomy	3	-	3
PSYC 315	Quantitative Methods	3	-	3
PHIL 180 or PHIL 220	Critical Thinking or Logic	-	3	3
BIOL 316	Human Physiology	-	3	3
PSYC 310	Experimental Psych Lec	-	3	3
PSYC 309	Experimental Psych Lab	-	1	1
PSYC 316	Abnormal Psychology	-	<u>3</u>	<u>3</u>
		15	16	31
SENIOR YEAR				
SOCIAL SCIENCE	Restricted Elective	3	-	3
PSYCHOLOGY	Elective	3	-	3
PSYC 412	Physiological Psychology	3	-	3
PSYC 314 or 410	Test & Meas or Intro to Psych Testing	3	-	3
UNRESTRICTIVE ELECTIVE	Unrestricted Elective	-	3	3
UNRESTRICTIVE ELECTIVE	Unrestricted Elective	-	3	3
SOCIAL SCIENCE	Restricted Elective	-	3	3
PSYCHOLOGY	Elective	-	3	3
PSYC 413	History and Systems	-	<u>3</u>	<u>3</u>
		12	15	28

SCHOOL OF LIBERAL ARTS AND EDUCATION**Mission**

The mission of the School of Liberal Arts and Education (SLAE) 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 School'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 SLAE's 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. SLAE 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 SLAE model is designed to ensure that program completers fluently represent the knowledge, skills, and dispositions espoused by each of the School's 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 SLAE 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 has 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. SLAE 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 2020 Vision goals, the SLAE supports and facilitates a three-tiered structure to perpetuate its research agenda: (1) discovery or new knowledge that inform the global community and the discipline; (2) new research/learning opportunities for students; and (3) 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. SLAE 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 School

The School of Liberal Arts and Education consists of seven 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.

The Education programs provide students with a strong foundation in the arts and sciences on which to build their skills in teaching. The teaching endorsement qualifies the students for teaching positions throughout the country. The Education programs are accredited by the National Council for the Accreditation of Teacher Education and approved by the Virginia Department of Education.

Major Programs of Undergraduate Study

Students pursuing undergraduate study may major in the following programs:

Economics

Administrative Systems Management

Center for Undergraduate Professional Education Programs

Interdisciplinary Studies:

- Teaching Endorsement Elementary Education (PreK-6)
- Teaching Endorsement Special Education
 - Emotionally Disturbed (K-12)
 - Learning Disabled (K-12)
 - Mentally Retarded (K-12)

Health, Physical Education, Recreation, and Dance with concentrations in

- Health and Physical Education, PreK-12 Teaching Endorsement
- Recreation
- Sport Management
- Health
- Dance

History and Philosophy

- History
- History, Secondary Teaching Endorsement

Languages and Literature

- English
- English, Secondary Teaching Endorsement
- English with Mass Communications Minor
 - French, German, or Spanish Concentration Mass Communications
- Mass Communications

Military Science (Minor)**Music, Art and Design**

- Art and Design
 - Visual Communications
 - Studio Concentration
- Music
 - Choral Music Teaching Endorsement (Vocal)
 - Instrumental Music Teaching Endorsement (Brass, Percussion, String)
 - Music Performance (Instrument, Keyboard, Vocal)

Political Science and Public Administration

- Political Science
- Public Administration
- Legal Studies Minor Program
- Minor Program in Political Science

Sociology, Social Work and Criminal Justice

- Criminal Justice
- General Sociology
- Social Work

Special Opportunities

In the liberal arts, interdisciplinary study in international affairs enhances opportunities for students to study abroad. Internships and cooperative work assignments provide managerial experiences for students with private firms and government agencies. Special assignments in the Governor's Office and with state legislators provide students with insights into public policy.

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 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. There are organizations whose focus is on individual interests, such as dance, broadcasting, and journalism as well.

The Department of Languages and Literature offers several specific facilities: a digital production studio, a computer writing center, an electronic writing classroom, television editing laboratory, a radio laboratory, a foreign language laboratory, and a multimedia computer classroom.

The Department of Sociology, Social Work and Criminal Justice offers two specialized laboratories: a forensic laboratory and a computer laboratory.

Other Pertinent Information

The School also offers graduate programs in a variety of areas. Please refer to the Graduate Catalog for details.

DEPARTMENT ECONOMICS AND ADMINISTRATIVE SYSTEMS MANAGEMENT

Chairperson: Kwadwo Bawuah, Trinkle Hall, Room 101; Telephone: 804.524.5363
Professor: Kwadwo Bawuah, Maxwell O. Eseonu, Mel David Krohn
Associate Professor: Ceslav Ciobanu, Young Dimkpah, Jae Kwang-Hwang, Richard Omotoye, Claiborne Shelton

DESCRIPTION OF THE DEPARTMENT

The Department offers degree programs in Economics and Administrative Systems Management. Economics and administrative systems management principles underlie the operations and behavior of consumers, business firms, financial institutions, and government in both domestic and global environments. Familiarity with these principles equips one to understand, predict, control and react rationally to the changing world. A student can become a member of Omicron Delta Epsilon which is a student specific organization for Economics. The student must maintain a minimum grade point average of 3.0. Majors follow a curriculum that develops a strong foundation in analytical, verbal, and written skills. There are job opportunities in business, finance, and government.

MISSION OF THE DEPARTMENT

The mission of the Economics program is to provide the practical and theoretical tools of analysis that permit one to solve real world problems. The mission of the Administrative Systems Management program (formerly known as Business Education) is to provide the knowledge, skills, and abilities needed for managing administrative and information processing activities of organizations.

OBJECTIVES

To foster the development of requisite conceptual and analytical skills to apply economic knowledge to contemporary domestic and global business, financial institutions, government, and socio-political issues.

To offer curricula at various levels appropriate to the needs of students.

To provide a variety of courses to meet the needs of non-economics majors so that they may broaden their backgrounds and be more well-rounded individuals.

To provide the University and community with professional services and expertise and increase their awareness and knowledge of Economics and Administrative Systems Management (ASYM).

To provide a strong background for majors interested in graduate work in Economics, Career and Technical Studies (CTST), and other related fields.

MAJORS, MINORS, AND OTHER PROGRAMS OFFERED

- BA in Economics
- Minors in Finance, Management, Marketing, Political Science, Public Administration, and Pre-Law

- BS in ASYM
- M.A. in Economics
- M.S. in CTST

Other Departmental Information

Majors in Economics who have achieved a cumulative Grade Point Average of 3.0 or higher may join Omicron Delta Epsilon which is an International Honor Society for Economics.

The Department also offers a Master of Arts degree with the option of a concentration in Public Administration as well as a Master of Arts in Career and Technical Studies with concentrations in agricultural and business subjects, administrative systems management, family and consumer sciences, industrial technology, project management, and general career and technical studies. See the Graduate Catalog for complete information on this program.

Course Descriptions

ECONOMICS

ECON 100 BASIC ECONOMICS - 3 semester hours (Offered every Fall, Spring, and Summer)

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 semester hours (Offered every Fall, Spring, and Summer)

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 semester hours (Offered every Fall, Spring, and Summer)

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 semester hours (Offered every Fall semester)

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 semester hours (Offered every Spring semester)

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 semester hours (Offered every Spring semester)

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 AND INSTITUTIONS- 3 semester hours (Offered every Fall semester)

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 semester hours (Offered on rotational basis)

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 semester hours (Offered on rotational basis)

It 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 semester hours (Offered on rotational basis)

It 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 AND MINORITY GROUPS - 3 semester hours (Offered on rotational basis)

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 ORGANIZATION AND REGULATION - 3 semester hours (Offered on rotational basis)

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 semester hours (Offered alternate Spring semesters)

It 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 451 INTERNATIONAL ECONOMICS - 3 semester hours (Offered every Fall semester)

It 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 semester hours (Offered on rotational basis)

It 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 semester hour (Offered on rotational basis)

It 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 semester hours Sp (Offered every Spring semester)

It 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 READINGS IN ECONOMICS - 3 semester hours Sp (Offered every Fall semester)

It 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 semester hours Su (Offered every Summer)

It 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 SEMINAR IN ECONOMICS - 3 semester hours Sp (Offered every Spring semester)

It is a capstone course which a student must demonstrate the ability to choose a well-defined research topic or case review under faculty advising then proceed to search for essential information and correct procedures for analysis, write-up, and presentation.

Prerequisite: Senior standing

ADMINISTRATIVE SYSTEMS MANAGEMENT**ASYM 101 KEYBOARDING -3 semester hours F, Sp**

Development of skill in touch keyboarding using microcomputers and other electronic technology; study of basic elements of style, format, and use of simple business forms.

ASYM 130 INTRODUCTION TO MICROCOMPUTERS -3 semester hours F, Sp, Su

A computer literacy course for those who desire to learn about the capability and applications of computers in today's society.

ASYM 201-202 WORD PROCESSING I and II - 3 semester hours F, Sp

Acquisition of skill in microcomputer word processing and word processing applications to include emphasis upon production and decision-making skills.

ASYM 301 BUSINESS COMMUNICATIONS - 3 semester hours F, Sp

Communications as a function of management. Development of language transactional skills, including effective interpersonal communications as tools in solving management problems.

Prerequisite: GE 110, 111

ASYM 306-307 INFORMATION PROCESSING I and II - 3 semester hours F

Study of and development of skill in information processing elements as essential tools for management action. Includes skill development in data base management, spreadsheet use, graphics, multi-media presentations, and work processing; development of systematic methods of starting with raw data and proceeding to a comprehensive report. Study of telecommunications and artificial intelligence as appropriate.

ASYM 315 ADMINISTRATIVE SYSTEMS TECHNOLOGY - 3 semester hours F

Administrative/office systems analysis and design; study of fundamental systems: records management, reprographic, financial, communications, data/word/information processing.

ASYM 401 BUSINESS REPORTING - 3 semester hours S

Oral and written reporting in business. Includes planning, researching, organizing, and presenting oral and report; emphasis upon effective use of graphics and other visual aids; includes broad range of report formats, styles, functions, and content.

Prerequisite: Permission of Instructor

ASYM 410 ADMINISTRATIVE MANAGEMENT - 3 semester hours F

Planning organizing, and installing efficient office methods and systems; review and evaluation of micro-computer software; installation of software for word processing, spreadsheets, data bases, and telecommunications; employee supervision, management, recruitment, and retention; wage, salary, evaluation, and promotion plans.

ASYM 420, 421 ADMINISTRATIVE MANAGEMENT INTERNSHIP I AND II - 3 semester hours F, Sp, Su

Actual and simulated work experience integrating subject matter content of administrative management systems subjects. Includes opportunities for teaching in corporate training programs.

ASYM 451**TEACHING BUSINESS SUBJECTS I - 3 semester hours F**

Methods and techniques of teaching business subjects. Includes curriculum planning, media selection and utilization, classroom management, and lesson planning. Special attention given to the teaching of students with special needs as well as to teaching reading in the content areas of business. Students are required to participate in practicum experiences.

ASYM 453**TEACHING BUSINESS SUBJECTS II - 3 semester hours Sp**

Development of teaching competencies in the basic business, skill, and word/data/information processing subjects. Practicum experiences required.

Prerequisite: Permission of Instructor

ASYM 483**ADMINISTRATIVE SYSTEMS AND PROCEDURES - 3 semester hours F**

A capstone course emphasizing systems and procedures used in managing administrative support functions in the organizational enterprise. Includes use of case studies and research tools.

Prerequisite: ASYM 307

DEPARTMENT OF ECONOMICS
Bachelor of Arts Degree in Economics

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN				
ENGL 110	Freshman Writing	3	-	3
ENGL 111	Reading and Writing Lit.	-	3	3
MATH 120	College Algebra and Trig	3	-	3
MATH 122	Finite Mathematics	-	3	3
ASYM 130	Introduction to Microcomputer	3	-	3
SCIENCE	GE Menu	-	4	4
	Foreign Language	3	3	6
GEHI 122	US History I	3	-	3
GEPI 140	Intro to Philosophy	-	3	3
FRST 101	Freshman Studies	2	-	2
PHYSICAL EDUCATION	HPER Menu	-	<u>2</u>	<u>2</u>
		17	18	35
SOPHOMORE YEAR				
ACCT 201	Intro to Accounting	3	-	3
ECON 210	Prin. of Microeconomics	3	-	3
ECON 211	Prin. of Macroeconomics	-	3	3
STAT 210	Elementary Statistics I	3	-	3
MGMT 270	Legal Environment of Bus.	-	3	3
MATH 212	Intro to Calculus	-	3	3
SCIENCE	GE Menu	4	-	4
ENGL 201	Intro to Literature	3	-	3
GEEN 310	Advanced Communication Skill	-	3	3
	Non-Business Elective	-	<u>3</u>	<u>3</u>
		16	15	31
JUNIOR YEAR				
ECON 310	Microeconomics	3	-	3
ECON 320	Macroeconomics	-	3	3
ECON 321	Finan. Markets and Inst.	3	-	3
FIN 350	Principles of Finance	3	-	3
MKTG 300	Principles of Marketing	-	3	3
	Non-Business Electives	3	3	6
	Upper Level Liberal Arts Electives	<u>3</u>	<u>6</u>	<u>9</u>
		15	15	<u>30</u>
SENIOR YEAR				
ECON 451	International Economics	3	-	3
ECON 470	Economic Thought	-	3	3
ECON 490	Reading in Economics	-	3	3
ECON 499	Seminar in Economics	-	3	3
	Econ Elective	3	-	3
	Non-Business Upper Level Electives	3	3	6
HUMANITIES	GE Menu	3	-	3
	Upper Level Liberal Arts Elective	<u>3</u>	-	<u>3</u>
		15	12	27

**Administrative Systems Management
(formerly Business Education)**

Description of Program/Mission

The mission of the Administrative System Management program is to prepare competent administrative managers who will enter positions in industry, government, and business as contributing members of an education workforce in the state and the nation. The program seeks to provide preparation for managing administrative and information processing activities of organizations. Several career paths are available to graduates of the program.

The Administrative Systems Management Program provides courses to:

- prepare students for careers in administrative systems management,
- provide opportunities for development of leadership ability,
- several local and regional professional communities through provision of courses, workshops, and seminars designed (a) to strengthen existing knowledge and skills, (b) to provide for acquisition of additional and new competencies, and (c) to provide development and analysis tools for administrative systems problem solving.
- prepare students for graduate study in business education

Course Descriptions

ADMINISTRATIVE SYSTEMS MANAGEMENT PROGRAM

ASYM 101 KEYBOARDING -3 semester hours **F, Sp**
Development of skill in touch keyboarding using microcomputers and other electronic technology; study of basic elements of style, format, and use of simple business forms.

ASYM 130 INTRODUCTION TO MICROCOMPUTERS – 3 semester hours **F, Sp, Su**
A computer literacy course for those who desire to learn about the capability and applications of computers in today's society.

ASYM 201-202 WORD PROCESSING I and II – 3 semester hours **F, Sp**
Acquisition of skill in microcomputer word processing and word processing applications to include emphasis upon production and decision-making skills.

ASYM 301 BUSINESS COMMUNICATIONS – 3 semester hours **F, Sp**
Communications as a function of management. Development of language transactional skills, including effective interpersonal communications as tools in solving management problems.
Prerequisite: GE 110, 111

ASYM 306-307 INFORMATION PROCESSING I and II – 3 semester hours **F**
Study of and development of skill in information processing elements as essential tools for management action. Includes skill development in data base management, spreadsheet use, graphics, multi-media presentations, and work processing; development of systematic methods of starting with raw data and proceeding to a comprehensive report. Study of telecommunications and artificial intelligence as appropriate.

ASYM 315 ADMINISTRATIVE SYSTEMS TECHNOLOGY – 3 semester hours **F**
Administrative/office systems analysis and design; study of fundamental systems: records management, reprographic, financial, communications, data/word/information processing.

ASYM 401 BUSINESS REPORTING – 3 semester hours **S**
Oral and written reporting in business. Includes planning, researching, organizing, and presenting oral and report; emphasis upon effective use of graphics and other visual aids; includes broad range of report formats, styles, functions, and content.
Prerequisite: Permission of Instructor

ASYM 410 ADMINISTRATIVE MANAGEMENT – 3 semester hours **F**
Planning organizing, and installing efficient office methods and systems; review and evaluation of micro-computer software; installation of software for word processing, spreadsheets, data bases, and telecommunications; employee supervision, management, recruitment, and retention; wage, salary, evaluation, and promotion plans.

ASYM 420, 421 ADMINISTRATIVE MANAGEMENT INTERNSHIP I AND II – 3 semester hours **F, Sp, Su**
Actual and simulated work experience integrating subject matter content of administrative management systems subjects. Includes opportunities for teaching in corporate training programs.

ADMINISTRATIVE SYSTEMS MANAGEMENT MAJOR
Bachelor of Science Degree

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Freshman Writing	3	3	6
	Physical Education (GE menu)	2	-	2
FRST 101	Freshman Studies	2	-	2
	Humanities Elective	3	-	3
GEHI 122	U.S. History I	3	-	3
GEHI 123	U.S. History	-	3	3
MATH 120, 121	College Algebra and Trigonometry	3	3	6
ASYM 130	Introduction to Microcomputers	-	3	3
	Science (GE Menu)	-	<u>4</u>	<u>4</u>
		16	16	32
SOPHOMORE YEAR				
ACCT 201, 202	Intro Accounting I and II	3	3	6
ASYM 201, 202	Word Processing I and II	3	3	6
ECON 210	Principles of Microeconomics	3	-	3
ECON 211	Principles of Macroeconomics	-	3	3
MGMT 270	Legal Environment	-	3	3
	Restrictive Elective	-	3	3
GEPS 124	Introduction to Psychology	3	-	3
	Science (GE Menu)	<u>4</u>	-	<u>4</u>
		16	15	31
JUNIOR YEAR				
ASYM 301	Business Communications	3	-	3
ASYM 306, 307	Information Processing I and II	3	3	6
ASYM 315	Admin Systems Technology	-	3	3
	Literature Elective (GE Menu)	3	-	3
MKTG 300	Marketing Principles	-	3	3
GEEN 310	Advanced Communication Skills	-	3	3
MGMT 300	Organization and Management	3	-	3
	Global Studies (GE Menu)	3	-	3
ELECTIVE	(See Advisor)	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ASYM 401	Business Reporting	3	-	3
ASYM 410	Administrative Management	3	-	3
ASYM 451	Teaching Business Subjects I	3	-	3
ELECTIVE	(See Advisor)	3	-	3
	Upper-Level Liberal Arts Elective	3	-	3
	Restrictive Elective (See Advisor)	-	3	3
ASYM 483	Systems and Procedures	-	3	3
ELECTIVES	(See advisor)	-	3	3
	ASYM ELECTIVE (See Advisor)	-	<u>3</u>	<u>3</u>
		15	12	27

**DEPARTMENT OF HEALTH, PHYSICAL EDUCATION
RECREATION AND DANCE**

Chairperson: Serena Reese, Box 9066, Daniel Gymnasium, Phone: 524-5033
Professor: Leon Bey, Andrew Kanu
Associate Professor: Benita Brown, Gilbert Gipson, Paulette Johnson, Reginald Overton, Linda Person, Serena Reese
Assistant Professor: Harold Deane, Elijah Johnson

Description of Department

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. 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.

The department in conjunction with the Center for Undergraduate Professor Education Programs offers teaching endorsement programs in Health and Physical Education (PreK-12). This program is listed under the Center for Teacher Education.

The Physical Education, PreK-12 Endorsement Program, is a National Council for Accreditation of Teacher Education (NCATE) and Virginia Department of Education approved curriculum. All departmental concentrations are State approved.

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.

Mission of Department

The Department of Health, Physical Education, and Recreation (HPER) is a component of the School of Liberal Arts and Education (SLAE). In harmony with the mission of the SLAE, the HPER Department's purpose is to prepare professionals to serve the public in the areas of teaching, wellness, leisure and recreation, sports marketing, 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.

General Objectives of the HPER Department

The general objectives of the department are to:

- Provide students an opportunity to acquire a thorough knowledge of the principles of health science, physical education, leisure studies, personnel and program management, and allied professions.
- Prepare students to demonstrate competence in the teaching profession and to become exemplary practitioners in allied fields.
- Produce students who are effective and altruistic participants in community and civic affairs.
- Offer a diverse selection of course options to accommodate varied student interests and occupational pursuits.
- Prepare students to pursue graduate studies and other professional endeavours beyond the undergraduate level.
- Prepare students to remain active with professional organizations and engage in professional development activities.
- Prepare students to assume a variety of leadership roles and serve as productive managers, administrators, coaches, educators, and entrepreneurs.
- Produce students who are fully equipped to compete in a dynamic marketplace.
- Provide a learning environment that includes theoretical and practical experiences among its central foci
- Prepare students to negotiate the challenges of cultural pluralism and gender equity, and to accommodate the needs of the mentally and physically challenged.

Programs (Major) in Department

To accomplish programmatic goals and accommodate the diverse interests of its students, the HPER Department has developed the following programs.

1. Health and Physical Education, PreK-12 Teaching Endorsement: For students seeking certification at the PreK-12 levels as health physical education teachers and for those interested in careers in coaching and athletic administration.

Total hours required for degree: 121 *Students must pass Praxis I and Praxis II before they are allowed to do student teaching.

2. Concentration: Recreation: Prepares students for professional leadership roles in resorts, outdoor educational environments, municipal parks, recreational agencies, tourism departments, correctional institutions, youth service agencies, industrial settings, religious-based agencies, and state and federal governmental agencies.

Total hours required for degree: 120

3. Concentration: Sport Management: Prepares students for careers as entrepreneurs, producers, advertisers, public relations specialists, fund developers, event managers, consultants, sales representatives, sports researchers, and corporate executives in the collegiate, amateur, and professional sports industries. Total hours required for degree: 120

4. Concentration: Health: Enables students to pursue careers in public health departments, hospitals, and private and public health agencies. It also prepares students to design and promote health and wellness programs, and to pursue graduate work in related fields. Total hours required for degree: 120

5. Concentration: Dance: Prepares students for a number of diverse employment opportunities in dance. Students may be employed as performers in a range of professional dance companies, smaller dance companies, public and private schools, colleges, private studios, recreation centers, children's dance programs, and drama departments. Students can find gainful employment as choreographers in dance, opera, musicals, comedy companies, Broadway, television, and videos. They can be employed as dance therapists in hospitals, mental health settings, Wellness centers, or other rehabilitation programs. The dance concentration prepares students for graduate study in dance so they may find jobs as dance critics, historians, and writers of movement notation.

Sankofa is the official theatrical dance company at VSU. It is the professional, performing arts extension of the dance concentration major and minor at Virginia State University. Students perform lyrical, modern, jazz, hip-hop, African-Diaspora, and traditional African dance in professional presentations throughout the University and surrounding community. Upon a successful audition, students must register for dance classes during each semester that the student is involved with Sankofa Dance Theater. Participation in "Sankofa" dance theatre is mandatory for majors and minors

Other Departmental Information

The HPER Department features the Sankofa Dance Troupe. Interested students are encouraged to join this exciting performing arts group.

The HPER Department also offers two endorsement opportunities which are listed below:

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 shall take:

HLTH 143	Principles of Accident Causation and Prevention	3 hrs
HLTH 445	Driver Education Instructional Principles	3 hrs

Course Descriptions

DANCE

DANC 101 BALLETT I - 2 semester hours

Introduction to the basic concepts, movement, and vocabulary of ballet technique.

DANC 102 BALLETT II - 2 semester hours

Further studies in the concepts, movement, and vocabulary of ballet technique.

DANC 110 FRESHMAN REPERTORY - 3 semester hours

This course provides dance majors with a structured rehearsal experience that culminates in a performance.

DANC 111 SPECIAL TOPICS IN DANCE -1 semester hour

For majors and non-majors involved in dance or theatrical productions. Students may register for this course repeatedly during each semester that the student is involved in a dance production.

DANC 201 MODERN DANCE - 2 semester hours

An introduction to the concepts and disciplines of modern dance. Basic movement experiences to promote the understanding and cultivation of the body as an instrument of dance.

DANC 202 MODERN DANCE II - 2 semester hours

Development of basic concepts, theory and technique in Modern Dance in preparation for performance. Students will create and perform their own choreography.

DANC 205 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 and grant writing.

DANC 210 REPERTORY - 3 semester hours

This course provides students with a structured rehearsal experience that culminates in performance. This class is repeatable.

DANC 238 ANATOMY AND KINESIOLOGY FOR THE DANCER - 3 semester hours

A study of the human anatomy, emphasizing basic anatomical structures, kinesthetic movement, motor skills, musculature development, injury prevention and care, maintenance, and wellness for dancers.

Prerequisite: GEBI 116 Biology Science /Lab

DANC 250 DANCERCISE - 3 semester hours

Introduction to the basic concepts, movement, and vocabulary of dance in combination with conditioning and toning exercises specifically for the dancer. Aerobic dance activity, weightlifting and toning of the muscles are included in the course activities.

DANC 301 JAZZ DANCE I -1 semester hour

Introduction to movement experiences in Jazz Dance vocabularies used in contemporary dance an theater.

DANC 302 JAZZ DANCE II - 2 semester hours

Intermediary movement experiences in Jazz Dance vocabularies used in contemporary dance an theater.

DANC 311 APPRENTICESHIP IN DANCE - 3 semester hours

Direct study with an experienced choreographer of the student's choice.

DANC 315 RHYTHMIC TRAINING FOR DANCERS - 3 semester hours

Rhythmic timing and organization of movement in dance are analyzed for the purpose of adding clarity to performance, choreography and teaching skills. Beginning musical notation, scoring and accompaniment skills are developed for the purposes of creating choreographic structures.

DANC 327 DANCE COMPOSITION - 3 semester hours

A structural approach to creating choreography incorporating various themes, music, staging, and movement technique. Students will have laboratory assignments of creating dances with small groups.

DANCE 328 ADVANCED DANCE COMPOSITION - 3 semester hours

The incorporation of various themes, music, staging, and movement technique. 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 theater.

DANC 355 INDEPENDENT STUDY IN DANCE - 3 semester hours

Structured research in dance on a topic of choice as agreed between the student and instructor.

DANC 378 HISTORY OF DANCE AND THE BLACK EXPERIENCE - 3 semester hours

A survey course of 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 hours

Introduction to the movement, history and socio-cultural implications that influence dance movements found in Africa and the Caribbean.

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 THEATER - 3 semester hours

Interwoven interdisciplinary movement techniques exploring the interface of dance and drama. Includes dancing through mental imagery, interpreting stories, scripts, poetry, and technique of improvisation and composition.

DANC 480 FIELD EXPERIENCE - 8 semester hours

Field experience of teaching dance to any population of students in preparation for a dance performance.

Course Descriptions**HEALTH****HLTH 143 PRINCIPLES OF ACCIDENT CAUSATION AND PREVENTION - 3 semester hours****Sp**

This course is designed to present an overview of the dimensions of the accident problem with special attention to accident prevention, concepts and theories. Special attention is directed to the prevention of failures within the highway transportation system and factors that influence performance ability. Emphasis is placed on student safety and other legal issues, signs, signals, pavement markings, and right-of-way 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; behaviour aspects of crash prevention and the natural laws of driving; adverse driving conditions and emergencies; planning ahead for a trip.

HLTH 150,151,248,249,338,339,448**HEALTH EDUCATION LABORATORIES -1 semester hour each****F, Sp**

Courses designed for the prospective health educator to establish life-career goals, identify program strengths and weaknesses and plan and implement necessary measures to complete successfully the prescribed program.

HLTH 210 FOUNDATIONS OF HEALTH SCIENCE - 2 semester hours**Sp**

The historical and philosophical perspectives of the development of health science will be covered in this course. A comparison will be made of the major concepts and theories of health and characteristics of health education programs in schools and communities. Career opportunities in health are reviewed; medical terminology is included for basic preparation in health professions.

HLTH 330 DRUG USE AND DRUG ABUSE EDUCATION - 3 semester hours**F**

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.

Prerequisite: Junior/Senior Standing

HLTH 337 HEALTH PRACTICUM -3 semester hours**F, Sp**

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**F**

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**Sp**

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 HEALTH COUNSELING -3 semester hours**Sp**

A basic introductory course designed to assist prospective health care providers deal with multi-diversified, troubled individuals in a school setting.

HLTH 346 SCHOOL AND COMMUNITY HEALTH PROGRAMS - 2 semester hours**F**

Covers 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.

Co-requisite: PHED 300 Practicum I (See Professional Studies Requirements for Catalog Description)

HLTH 347 FIRST AID AND EMERGENCY MEDICAL CARE - 2 semester hours**F, Sp**

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: student safety and other legal issues, activating the emergency medical services, safety and emergency care (first aid, CPR, universal precaution), injury prevention and rehabilitation, and an understanding of the basic content knowledge needed to teach first aid, and the structure and function of selected body systems.

HLTH 349 SCIENTIFIC READINGS IN HEALTH - 2 semester hours**F**

A course that provides comprehensive knowledge, understanding, and concepts in various areas of health. Readings will be restricted.

HLTH 440 INTRODUCTION TO HUMAN REPRODUCTION AND SEXUAL DEVELOPMENT - 3 semester hours**Sp**

Course 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; conception, prenatal development, labor and delivery; psychosexual development, sources of sexual outlet; and family planning are among discussion topics.

HLTH 441 STRATEGIES OF HEALTH TEACHING - 3 semester hours**F**

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 445 DRIVER EDUCATION INSTRUCTIONAL PRINCIPLES - 3 semester hours**Sp**

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. Emphasis is placed on coordinating schedules for in-car instruction; assessment of knowledge and abilities; safety education and legal issues; juvenile licensing and related statutes; compulsory attendance and other vehicle procurement and equipment requirements and instructional technology; understanding content knowledge for teaching in the classroom and in-car instruction; and use of instructional technology; understanding of content knowledge for classroom teaching in-car instruction that includes: traffic laws and rules of the road, and road signs; vehicle control; time space and risk management; alcohol and drugs; restraint systems; vehicle maintenance; legal responsibilities of operating and owning a vehicle; simulation instruction; administration of written and road skills examination; process for licensing students with disabilities; and understanding in grammar usage and mechanic in writing.

HLTH 447 PROGRAM PLANNING IN HEALTH EDUCATION - 3 semester hours**F**

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 activities in school and community settings, audience analysis, task analysis, and the role of evaluation.

HLTH 449 CARE AND PREVENTION OF ATHLETIC INJURIES - 3 semester hours**Sp**

An introduction to the basic concepts and techniques of the prevention, diagnosis, treatment, and rehabilitation of athletic injuries. The practical application for prevention relative to sports activities and the design and function of protective equipment are examined.

HLTH 450 INSTRUCTIONAL STRATEGIES FOR HEALTH EDUCATION - 2 semester hours**Sp**

Application of innovative strategies for teaching health education on 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.

Co-requisite: PHED 300, Practicum II (See Professional Studies Requirements for Catalog Description)

HLTH 451 INDEPENDENT STUDY- 3 semester hours**F**

Course 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 instructional program. Two specific topics, to be approved by the instructor, will be examined.

HLTH 452 OCCUPATIONAL SAFETY- SAFETY CODES AND STANDARDS - 3 semester hours

An introduction and analysis of the occupational safety and health general industry standards as they apply to the private and federal sector. Emphasis will be given to the following areas: student safety and other legal issues, safety codes and standards, and requirements and opportunities in the field of hazard control.

HLTH 453 PRE-HEALTH INTERNSHIP -1 semester hour**F, Sp**

Course designed to provide opportunities to systematically plan and prepare for the health internship in a community agency for the following semester. Representatives from placement sites and the instructor will establish seminar format or facilitate student acquisition of needed information and experiences.

Prerequisite: Satisfactory completion of the requirements through the Junior Year or by permission of instructor.

HLTH 454 HEALTH INTERNSHIP - 6 semester hours**F, Sp**

An internship designed to afford the prospective health professional various opportunities to work with individuals and groups in a community health agency. It will encompass certain roles of the health educator, including experiences with exceptional individuals.

PHYSICAL EDUCATION**PHED 120 FOUNDATIONS OF PHYSICAL EDUCATION - 2 semester hours****F, Sp**

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**F**

This course is a requirement for all physical education majors. The primary purpose of the 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 AND PRACTICE OF GYMNASTICS AND APPARATUS -1 semester hour**Sp**

Acquaints students with 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, 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**F, Sp**

A 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**F, Sp**

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 130 ELEMENTARY KARATE - 2 semester hours**F, Sp**

Course designed to introduce the student to basic karate, one of the more popular and potent phases of the Oriental Martial Arts, and to broaden his or her horizons and views on oriental culture.

PHED 200 TEAM SPORTS I -1 semester hour**F**

Development of physical skills and an understanding of the knowledge, skills, and processes needed to teach soccer, volleyball, basketball, and softball on the pre K-1 2 levels. Content includes an analysis of skills, progressions, drill, error analysis, and corrections, and the development of rudimentary unit and lesson plans. The cultural significance of team sports, competition, and sportsmanship is also included.

PHED 201 TEAM SPORTS II -1 semester hour**Sp**

The development of basic skills and the ability to perform a variety of team sports including basketball, softball, and flag or soccer.

PHED 211 LIFETIME SPORTS I -1 semester hour **F**

Development of fundamental and advanced skills, knowledge of rules and the ability to perform a variety of individual sports, including archery, badminton, and bowling.

PHED 212 LIFETIME SPORTS II -1 semester hour **Sp**

Development of fundamental and advanced skills, knowledge of rules and the ability to perform a variety of individual sports, including golf, tennis, and track and field.

PHED 214 OUTDOOR EDUCATION AND LEISURE ACTIVITIES -1 semester hour **F, Sp**

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; the cultural significance of dance, 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 -1 semester hour **F, Sp**

Course designed to enable students to meet the requirements for the American National Red Cross Advanced Lifesaving Certificate.

Prerequisites: PHED 127 Beginning Swimming; PHED 128 Intermediate Swimming

PHED 232 COACHING AND OFFICIATING - 2 semester hours **F**

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 236 MODERN DANCE -1 semester hour **F**

An introduction to various modern dance techniques. This course also includes an exploration of the history of modern dance and the contributions of modern dance pioneers.

PHED 238 WATER SAFETY -1 semester hour **Sp**

Satisfactory completion of this course qualifies the student for the American National Red Cross Instructor's Certificate.

Prerequisite: PHED 217 Lifesaving

PHED 272 BASKETBALL OFFICIATING -1 semester hour **F**

The rules and mechanics of officiating basketball. Students will gain practical experience by officiating intramural, recreation league, or other organized games. This course prepares students for future careers in officiating.

PHED 273 FOOTBALL OFFICIATING -1 semester hour **F**

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 AND OBJECTIVES OF PHYSICAL EDUCATION –
3 semester hours** **F**

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 275 SOFTBALL OFFICIATING -1 semester hour **Sp**

The rules and mechanics of officiating softball. 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 327 ADVANCED DANCE SKILLS AND COMPOSITION - 2 semester hours **F, Sp**

Guiding principles of this art form. Dance studies based on ideational stimuli, movement technique and rhythmic elements, and a structural approach to dance composition.

PHED 328 DANCE COMPOSITION AND PRODUCTION - 2 semester hours **F, Sp**

A study of composition based on elements of modern dance background and immediate sponsors of modern art. Laboratory problems with criticism, and preparation problems in staging dance for the theatre.

Prerequisite: PHED 327 Advanced Dance Skills and Composition or by permission of Instructor

PHED 329 MOTOR LEARNING - 2 semester hours **Sp**

Course designed to provide the student with an understanding of motor behaviour. It is specifically concerned with the efficacy of motor skill acquisition and motor skill performance.

PHED 330 SPORTS MARKETING - 3 semester hours**Sp**

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.

PHED 335 RHYTHMIC FORMS -1 semester hour**Sp**

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, 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**Sp**

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: GEBI 116 Biological Science; BIOL 315 Human Anatomy; BIOL 316 Human Physiology; or by permission of instructor

PHED 339 MEASUREMENT AND EVALUATION IN HEALTH AND PHYSICAL EDUCATION - 3 semester hours**F**

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 about different grading techniques.

PHED 343 ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS AND ACTIVITIES - 2 semester hours**F, Sp**

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 placed 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. A review of the scientific principles of movement (personal and skill-related fitness components) is included. Other topics also include rhythmic and dance, childhood growth and motor development, accreditation, legal liability concerns, and an overview of the cultural significance of dance, leisure and sportsmanship.

Field experiences in this course will provide opportunities for pre-candidates to observe, plan, 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 AND SECONDARY SCHOOL PHYSICAL EDUCATION METHODS AND ACTIVITIES**- 3 semester hours****Sp**

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 desired outcomes, and the integration of technology. 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, rhythmic and dance, 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, plan, 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 350 SPORT FACILITY AND EVENT MANAGEMENT - 3 semester hours

This course will provide students with effective management skills for the successful operating of sports facilities in regards to operations, security, and event planning.

Prerequisite: Junior Standing

PHED/MKTG 372 MARKETING INTERNSHIP - 3 semester hours**F, Sp, Su**

Practical work experiences obtained in management-oriented positions of business firms under supervised conditions. The purpose is for the internees to improve their quantitative and qualitative experiences as a marketing manager in a real business world.

PHED 400 ADAPTED PHYSICAL EDUCATION - 4 semester hours**F, Sp**

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 methods appropriate for exceptional students, including gifted and talented, and those with disabling conditions, and the integration of technology.

Field experiences in this course will provide opportunities for pre-candidates to observe, plan, 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 401 ORGANIZATION AND ADMINISTRATION OF HEALTH PHYSICAL EDUCATION AND ATHLETIC PROGRAMS - 3 semester hours**F, Sp, Su**

Provides a basic understanding of the many aspects of administering health, physical education, 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.

Prerequisite: Completion of Junior Year or Permission of Instructor

PHED 403 PHYSIOLOGY OF EXERCISE - 3 semester hours**F**

This course is designed to provide the student with a better understanding of medical and physiological aspects of motor activity, relationships between motor activity 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.

Prerequisites: GEBI116 Biological Science; BIOL 315 Human Anatomy; BIOL 316 Human Physiology or permission of instructor

PHED 405 SPORTS IN AMERICAN SOCIETY - 3 semester hours

Discusses the phenomenon of sports 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.

Prerequisite: Consent of Instructor

PHED 406 SPORTS LAW - 3 semester hours

Identification and application of various areas of law to sports industry. Includes how constitutional law, contract law, anti-trust law, and tort law impact sports management decisions. Special emphasis placed on discrimination in sports (e.g., race, gender, ethnicity, and disability).

Prerequisite: Consent of Instructor

PHED 407 SPORTS PSYCHOLOGY - 3 semester hours

This course involves the study of the psychological basis of coaching strategies, methodologies, and public relations. Emphasis is placed on applying knowledge in a field setting.

Prerequisite: Senior Standing

PHED 408 FINANCIAL ASPECTS OF RECREATION AND SPORTS MANAGEMENT - 3 semester hours This course will investigate fund raising activities and the appropriate use of financial resources within the sports industry. **Prerequisite: Senior Standing**

PHED 471 INTERNSHIP SEMINAR -1 semester hour

To secure enriching experiences in their Internship, 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

PHED 472 INTERNSHIP - 6 semester hours

Supervised work experience at approved sports marketing and management site with emphasis on managerial tasks and administrative procedures. Field experiences should enable students to grow personally and professionally. To secure enriching experiences, students must investigate all aspects of potential sponsoring organizations. **Prerequisite: Senior Standing**

PHED 473 POST INTERN SEMINAR -1 semester hour

Orientation to the internship experience in sports marketing and management. Discussions and analysis of related internship experiences will be facilitated. Students will discuss the expectations of both the department and the respective sport organizations.

Prerequisites: Completion of Lower Division Core Courses

RECREATION**RECR 156 INTRODUCTION TO COMMUNITY RECREATION - 2 semester hours****Sp**

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 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 321 RECREATION PROGRAMMING - 3 semester hours

An examination of the principles and practices of recreation 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.

RECR 322 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.

Prerequisite: None

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.

Prerequisite: Junior Standing

RECR 351 ORGANIZATION AND ADMINISTRATION OF THE COMMUNITY RECREATION PROGRAM - 3 semester hours**Sp**

Problems commonly encountered in establishing and organizing recreation programs, services, playgrounds, youth centers, community centers, campus and other areas and facilities.

RECR 352 CAMP COUNSELING/OUTDOOR LEISURE ACTIVITIES - 3 semester hours**F, Sp**

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 METHODS AND MATERIALS IN SOCIAL RECREATION - 2 semester hours**Sp**

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 - 2 semester hours**F**

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: Junior standing HPER major or consent of instructor

RECR 355, 356 PRE-FIELD WORK EXPERIENCES - 2 semester hours**F, Sp**

Observation and practice of leadership in supervised recreation programs on campus and in the environment. One class meeting per week; other leadership periods by arrangement.

RECR 452 FIELD WORK--6 semester hours**F, Sp, Su**

Off-campus opportunity provided for the student leader to put into use, under expert guidance, the theories and techniques involved in a total community organization for recreation.

RECR 453 THEORY AND PHILOSOPHY OF RECREATION - 3 semester hours**F**

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: Senior standing HPER major or consent of instructor

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, RECREATION AND DANCE
DANCE CONCENTRATION
Bachelor of Science

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEBI 116	Bio-Science/Lab	4	-	4
ENGL 110, 111	Composition I & II	3	3	6
GEMA 112, 113	Basic Math I, II	3	3	6
GEHI 122, 123	U.S. History	3	3	6
GEHE 164	Personal Health	2	-	2
FRST 101	Freshman Studies	-	2	2
DANC 101	Ballet I	-	2	2
DANC 110	Freshman Repertory	3	-	3
PHED 125	Body Mechanics	-	1	1
PHED 126	Theory/Prac/Gym	-	<u>1</u>	<u>1</u>
		18	15	33
SOPHOMORE YEAR				
DIET 101	Nutrition – Contemporary Health Issues/Lab	4	-	4
GEPS 123	Intro to Psychology	3	-	3
	Global Studies Elective	3	-	3
ENGL 311	African American Literature	3	-	3
DANC 102	Ballet	2	-	2
DANC 201, 202	Modern Dance I, II	2	2	4
DANC 210	Sophomore Repertoire	-	3	3
	Technology Elective	-	3	3
DRAM 113	Acting	-	3	3
PSYC 112	Human Growth/Dev	-	3	3
SOCI 102	Intro to Anthropology	-	<u>3</u>	<u>3</u>
		17	17	34
JUNIOR YEAR				
ARTS 205	Basic Art	3	-	3
SPEE 214	Intro to Public Speaking	3	-	3
HLTH 347	First Aid/Emer. Care	3	-	3
DANC 238	Anatomy & Kinesiology	3	-	3
DANC 301, 302	Jazz Dance I, II	2	2	4
DANC 310	Junior Repertory	3	-	3
DANC 311	Apprentice in Dance	-	3	3
DANC 315	Rhythmic Training for Dancers	-	3	3
DANC 327	Dance Composition	-	2	2
DANC 328	Adv. Dance Comp	-	2	2
DRAM 414	Direct & Prod.	-	<u>3</u>	<u>3</u>
		17	15	32
SENIOR YEAR				
GEMU 289	Music and Art	3	-	3
DANC 378	Hist. of Dance and the African-Amer Exper.	3	-	3
DANC 401	African/Carribbean Dance Forms	3	-	3
DANC 404	Somatic/Threat/Movement	3	-	3
DANC 410	Senior Repertory	-	3	3
DANC 480	Field Experience	-	8	8
	Unrestrictive Elective	-	<u>1</u>	<u>1</u>
		12	12	24

PHYSICAL EDUCATION**Recreation Concentration**

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Math	3	-	3
GEHI 122	U.S. History	3	-	3
FRST 101	Freshman Studies	2	-	2
HPER 164	Personal Health	2	-	2
PHED 125	Body Mechanics	1	-	1
	Technology Elective	3	-	3
<hr/>				
GEBI 116	Biol Sci/Lab	-	4	4
ENGL 111	Composition II	-	3	3
GEMA 113	Basic Math	-	3	3
ARTS	Art Elective	-	3	3
PHED 120	Found of PE	-	2	2
PHED 126	Theory/Prac/Gym	-	1	1
PHED 212	Lifetime Sports	-	<u>1</u>	<u>1</u>
		17	17	34
SOPHOMORE YEAR				
DIET 101	Nutrition	4	-	4
RECR 231	Indust & Comm Recr	3	-	3
ENGL 214	World Literature I	3	-	3
PHED	Elective	1	-	1
RECR 352	Camp Counseling	3	-	3
PHED 200	Team Sports	1	-	1
PHED 335	Rhythmic Forms	1	-	1
PHED 274	Hist/Prin?Obj of PE	-	3	3
	Global Elective	-	3	3
<hr/>				
PHED 329	Motor Learning/Beh	-	2	2
PHED 127/128	Beg/Inter Swimming	-	1	1
SOCI 102	Intro to Anthropology	-	3	3
RECR 156	Intro to Community Recr	-	2	2
HPER 165	Personal Fitness	-	<u>1</u>	<u>1</u>
		16	15	31
JUNIOR YEAR				
BIOL 315	Human Anat/Lab	4	-	4
PHED 339	Meas/Eval HPE	3	-	3
GEMU 280	Music and Art	3	-	3
PHED 332	Coaching/Officiating	2	-	2
HLTH 347	First Aid/Emer Care	2	-	2
RECR 355	Pre-Field Work	2	-	2
BIOL 316	Human Physiology	-	3	3
RECR 351	Org/Adm Recr Prog	-	3	3
GEEN 310	Adv. Comm. Skills	-	3	3
HRIM 302 or RECR 321	Club Mgmt or Recreation Pro	-	3	3
RECR 353	Meth/Mat Social Recr	-	<u>2</u>	<u>2</u>
		16	14	30
SENIOR YEAR				
RECR 453	Theory/Phil Recr	3	-	3
PHED 400	Adapted PE	3	-	3
RECR 322	Intro to Therap Recr	3	-	3
PHED 401	Org/Adm PE/Heath	3	-	3
RECR 356	Pre-Field Work	2	-	2
RECR 354	Rec Areas/Facilities	2	-	2
RECR 452	Field Work	-	<u>6</u>	<u>6</u>
		16	6	22

PHYSICAL EDUCATION
Sport Management Concentration

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Math	3	-	3
GEHI 122	U.S. History	3	-	3
CISY 155	Intro to Info Systems	3	-	3
FRST 101	Freshman Studies	2	-	2
PHED 120	Foundation of PE	2	-	2
GEBI 116	Biol Sci/Lab	-	4	4
ENGL 111	Composition II	-	3	3
GEMA 113	Basic Math	-	3	3
GEPS 124	Intro to Psychology	-	3	3
HPER 164	Personal Health	-	2	2
PHED 126	Theory/Prac/Gym	-	<u>1</u>	<u>1</u>
		16	16	32
SOPHOMORE YEAR				
GE _____	Nat. Sci Elective/Lab	4	-	4
PHED 202	Foundation of Sport Mgmt	3	-	3
GE _____	Global Studies Elective	3	-	3
PHED 274	Hist. Prin. Obj. PE	3	-	3
HLTH 347	First Aid/Emergency Care	2	-	2
PHED 332	Coaching and Officiating	2	-	2
GESO 111	Intro to Social Science	-	3	3
ECON 100	Basic Economics	-	3	3
ACCT 201	Accounting	-	3	3
GEEN 310	Adv. Comm. Skills	-	3	3
SPEE 214	Intro to Public Speaking	-	<u>2</u>	<u>2</u>
		17	15	32
JUNIOR YEAR				
BIOL 315	Human Anat/Lab	4	-	4
MKTG 300	Principles of Marketing	3	-	3
PHED 330	Sports Marketing	3	-	3
GEMU 280	Music and Art	3	-	3
MGMT 300	Organization & Management	3	-	3
PHED 407	Sports Psychology	-	3	3
MGMT 444	Entrep & Sm Bus Mgmt	-	3	3
PHED 350	Sport Facility & Event Mgmt	-	3	3
RECR 350	Leisure Service Marketing	-	3	3
PHED 338	Kinesiology	-	3	3
PHED 329	Motor Learning	-	<u>2</u>	<u>2</u>
		16	17	33
SENIOR YEAR				
PHED 401	Org/Adm PE/Health	3	-	3
PHED 406	Sports Law	3	-	3
PHED 408	Financial Aspects of Recr & Sport Mgmt	3	-	3
MGMT 340 or MKTG 303	Person Human Res Mgmt or Pro Mgmt (Restrictive Elec)	3	-	3
PHED 405	Sports in American Society	3	-	3
PHED 471	Internship Seminar	1	-	1
PHED 472	Internship	-	6	6
PHED 473	Post Internship Seminar	-	<u>1</u>	<u>1</u>
		16	7	23

PHYSICAL EDUCATION

Health Concentration

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEBI 116	Bio. Science/Lab	4	-	4
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Math	3	-	3
GEHI 122	U.S. History	3	-	3
FRST 101	Freshman Studies	2	-	2
GECH 119	Chem/Soc/Lab	-	4	4
ENGL 111	Composition II	-	3	3
GEMA 113	Basic Math	-	3	3
	Technology Elect.	-	3	3
HPER 164	Personal Health	-	2	2
HPER 165	Personal Fitness	-	<u>1</u>	<u>1</u>
		15	16	31
SOPHOMORE YEAR				
GEHO 201	Consumer Econ.	3	-	3
GEMU 280	Music and Art	3	-	3
PHED 274	Hist/Prin/Obj PE	3	-	3
GE	Humanities Elective	3	-	3
PHED 120	Found of PE	2	-	2
HLTH 210	Found/Health Science	2	-	2
PSYC 216	Develop. Psychology	-	3	3
BIOL 241	Intro/Microbio/Lab	-	4	4
GESO 211	Intro to Soc. Sci	-	3	3
	Global Studies Elective	-	3	3
HLTH	Elective	-	3	3
PHED 127/128	Beg/Inter. Swimming	-	<u>1</u>	<u>1</u>
		16	17	33
JUNIOR YEAR				
BIOL 315	Hum. Anat./Lab	4	-	4
HLTH 340	Community Health	3	-	3
HLTH 330	Drug Use/Drug Abuse	3	-	3
HLTH 346	Sch/Comm Hlth Prog	2	-	2
HLTH 349	Sci Rdgs Health	2	-	2
HLTH 347	First Aid/Emer Care	2	-	2
BIOL 316	Human Physiology	-	3	3
HLTH 342	Cont. Health Issues	-	3	3
GEEN 310	Adv.Comm. Skills	-	3	3
HLTH 337	Health Practicum	-	3	3
HLTH 343	Health Counseling	-	<u>3</u>	<u>3</u>
		16	15	31
SENIOR YEAR				
PHED 400	Adapted PE	3	-	3
PHED 401	Org/Adm PE/Ath	3	-	3
PHED 402	Physio. of Exercise	3	-	3
HLTH 441	Strat. Hlth Teaching	3	-	3
HLTH 440 or SOCI 301 or FCCS 401	Restrictive Elective	3	-	3
HLTH 453	Pre-Health Internship	1	-	1
HLTH 454	Health Internship	-	6	6
PSYC 316/420	Restrictive Elective	-	<u>3</u>	<u>3</u>
		16	9	25

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

Health and Physical Education with a Minor in Secondary Education (PreK-12)

			SEMESTER HOURS		
			1 st	2 nd	Total
			Sem	Sem	Hours
FRESHMAN YEAR					
IDST 100, 101	Analytical Reading, Writing and Reasoning I & II	2**	2**	4	
FRST 101	Freshman Studies	2	-	2	
ENGL 110, 111	Composition I & II	3	3	6	
MATH 112, 113	Basic Math I & II	3	3	6	
GEBI 116	Biological Science and Lab	-	4	4	
PHED 120	Foundations of Physical Education	-	2	2	
PHED 126	Theory and Practice/Gym	-	1	1	
HPER 165	Personal Fitness	-	1	1	
PHED 125	Body Mechanics	1	-	1	
PHED 127/128	Beg/Inter Swimming	1	-	1	
GEHE 164	Personal Health	2	-	2	
GEHI 122	U.S. History	<u>3</u>	-	<u>3</u>	
		15	14	29	
SOPHOMORE YEAR					
EDUC 201, 202	Introduction to Teaching I, II	2	2	4	
IDST 200	Digital Media in Teacher Education	3	-	3	
SCIENCE	Natural Science/Lab Elective	4	-	4	
ENGL	Advanced Communications	-	3	3	
ENGL 201/201	Literature Elective	3	-	3	
HLTH 347	First Aid/Emergency Care	2	-	2	
PHED 200/201	Team Sports	1	-	1	
PHED 211/212	Lifetime Sports	-	1	1	
PHED 335	Rhythmic Forms	1	-	1	
GESO	Social Science	-	3	3	
GLOBAL STUDIES	Global Studies Electives	-	3	3	
ECON 100	Basic Economics	-	<u>3</u>	<u>3</u>	
		16	15	31	
JUNIOR YEAR					
EDUC 315	Data Driven Instructional Design	3	-	3	
PSYC 212	Human Growth and Development	-	3	3	
SPED 403	Classroom Management in Educational Settings (FE)	-	3	3	
PHED 343	Elementary Methods in PE	2	-	2	
PHED 338	Kinesiology	3	-	3	
HLTH 346	School and Community Health Program	2	-	2	
PHED 344	Secondary Methods in PE	-	3	3	
BIOL 315	Human Anatomy	-	3	3	
BIOL 316	Human Physiology	3	-	3	
PHED	Motor Learning	-	2	2	
PHED 339	Measurements and Evaluation in HPE	<u>3</u>	-	<u>3</u>	
		16	14	30	
SENIOR YEAR					
EDUC 424	Critical Issues in Education	2	-	2	
PHED 401	Org/Adm in HPE and Athletics	3	-	3	
PHED 402	Physiology of Exercise	3	-	3	
PHED 400	Adapted Physical Education	3	-	3	
EDUC 427	Reading in the Subject Area	3	-	3	
PHED 402	Teaching of Health and PE	-	3	3	
EDUC 401	Student Teaching Seminar	-	3	3	
EDUC 402	Student Teaching	-	<u>9</u>	<u>9</u>	
		14	15	29	

**IDST 100/101 are not counted in semester hours or toward graduation requirement

Driver Education Endorsement (Add-on Endorsement)

The applicant seeking an add-on endorsement in driver education shall have an endorsement in a secondary or K-12 subject area and shall take:

HLTH 143	Principles of Accident Causation/Prevention	3
HLTH 445	Driver Education Instructional Principles	<u>3</u>
	Total	6

DEPARTMENT OF HISTORY AND PHILOSOPHY

Chairperson:	Arthur Abraham, Box 9070, Room #101 Colson Hall, Phone: 524-5129
Professor:	Arthur Abraham, Olwyn Blouet,
Associate Professor:	Majid Amini, Renee Hill, Dirk Philipsen
Assistant Professor:	Paul Alkebulan, Christopher Caldwell, Richard Chew, Wesley Hogan, Christina Proenza-Coles, Stephen Rockenbach

DESCRIPTION OF THE DEPARTMENT

The academic programs offered by the History and Philosophy Department, prepare persons for professional positions in History, Philosophy, and History Education. Students who want to study the Black Experience from an academic perspective may take the Black History concentration. The department, in conjunction with the Center for Undergraduate Professional Education Programs offers teaching endorsement in History and Social Sciences (6-12).

The Department's faculty, are active in research, writing and other academic activities that enhance professional growth and development. Both faculty and students participate in organizations and activities for the improvement of the academic performance of the Department's majors. There is an active VSU chapter of Phi Alpha Theta, the National History Honor Society.

MISSION OF THE DEPARTMENT

A History Department was established in 1914, and became one of the first University programs to offer the M.A. Degree. The mission of the Department of History and Philosophy is to engender knowledge of the struggles and achievements of previous generations, foster an appreciation of global interdependence and cultural diversity, and produce students with strong communication and research skills. Majors from the Department are prepared for graduate and professional programs in areas such as History, International Relations or Law, and they possess an essential foundation for a variety of careers in the public sectors, museum and library and archival work, research agencies and Think Tanks and in teaching History at the secondary school level.

OBJECTIVES OF THE DEPARTMENT

The general objectives of the department are to:

- Prepare majors for graduate, professional and advanced studies
- Offer courses in History and Philosophy as part of the University's General Education Program
- Provide a variety of advanced History, Philosophy and Geography courses to meet the needs of non-History majors so as to broaden their educational backgrounds.
- Prepare effective teachers to teach History and Social Sciences at the Secondary level in schools.
- Provide the University and the outside community with professional services and expertise to enhance awareness of the past, the present and plan for the future.

MAJORS, MINORS AND OTHER PROGRAMS OFFERED

There are a number of undergraduate programs in the History and Philosophy Department.

MAJORS:

- The regular History curriculum leads to the degree of **Bachelor of Arts in History** and prepares students for graduate work and for careers as teachers, historians, archivists, and professionals in related areas.
- The History and Social Sciences Endorsement curriculum leads to the degree of **Bachelor of Arts in History and Social Sciences with a Minor in Secondary Education**. The program prepares students to teach in the secondary schools and for careers in related fields.

MINOR:

- Apart from the two degree programs mentioned above, the Department also offers a **Minor in Philosophy**, which enables students to broaden their academic and professional options. As a structured sequence of philosophy courses, the Minor provides an opportunity for students to develop their critical thinking, analytical abilities, and effective communication. People trained in philosophy are very much in demand for professions such as law, journalism, publishing, banking, civil service and many others.

OTHER PROGRAMS:

- The **Black History program is a concentration** in the history curriculum, which places the study of people of African descent at the center of academic interest. It consists of a minimum of 15 semester hours of courses relating to the Black experience, nine of which are core courses and the rest are electives.
- In collaboration with the Department of Political Science and Public Administration, the department offers a **Pre-Law program** to help prepare students with skills necessary for the challenges of a law school environment.

In addition to these formal programs, the Department offers courses to prepare students for other career options.

OTHER DEPARTMENTAL INFORMATION

Undergraduates in the Department are active in the Philosophy and History Clubs. Members participate in campus-wide programs, travel to meetings and sites related to their career goals and engage in cultural and social events. Students who meet the academic requirements become members of Phi Alpha Theta, the National History Honor Society, which has a local Chapter at Virginia State University, the Alpha-Alpha-Eta.

The academic progress and needs of majors are assessed by written and oral tests as well as internships or clinical activities at various stages of their programs.

Course Descriptions**GEHI 114 WORLD HISTORY TO 1500 - 3 semester hours****F, Sp, Su**

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.

GEHI 115 WORLD HISTORY SINCE 1500 - 3 semester hours**F, Sp, Su**

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.

GEHI 122 UNITED STATES HISTORY TO 1865 - 3 semester hours**F, Sp, Su**

Introduces students to the social, political and economic history of the United States from Pre-Columbian America to the end of the Civil War.

GEHI 123 UNITED STATES HISTORY AFTER 1865 - 3 semester hours**F, Sp, Su**

Introduces students to the social, political and economic history of the United States from Reconstruction to Contemporary America.

GEPI 140 PHILOSOPHY - 3 semester hours**F, Sp, Su**

An introduction to methods of critical thinking, and to the major problem areas of philosophy such as epistemology, metaphysics and ethics.

GEOGRAPHY**GEOG 210 WORLD GEOGRAPHY - 3 semester hours****F, Sp, Su**

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 semester hours**F**

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 semester hours**Sp**

A study of the physical and cultural environments of North America with emphasis on regional economic activities.

- GEOG 316 HUMAN GEOGRAPHY - 3 semester hours** **F, Sp**
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 NATIONS - 3 semester hours** **Sp**
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 semester hours** **F**
An examination of the economic basis, regional spacing and internal social and economic organization of cities.
- GEOG 412 SEMINAR ON LAND USE AND DEVELOPMENT - 3 semester hours** **F**
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 semester hours** **Sp**
A study of the relation between natural resources and the development and interdependence of national industrial and trade centers.

HISTORY

- HIST 111 INTRODUCTION TO HISTORY - 3 semester hours** **F**
An introductory course that 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.
- HIST 112 INTRODUCTION TO BLACK HISTORY - 3 semester hours** **F, Sp.**
An introductory course that allows flexibility to both student and professor to explore a historical topic or theme related to the Black Experience in depth, different from a survey format. Mainly intended for history or related majors interested in the Black History Concentration, the course will emphasize a critical thinking approach to analysis of historical events, thus preparing students for higher courses in the Concentration, historical methodology and the history senior seminar.
- HIST 201 HISTORICAL METHODS IN U.S. HISTORY - 3 semester hours** **F, Sp**
An introduction of the craft of researching and writing in the discipline of history.
- HIST 222 U.S. HISTORY, EARLY BEGINNINGS TO 1865 - 3 semester hours** **F, Sp**
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 semester hours** **F, Sp**
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 250 AMERICAN SPORTS HISTORY - 3 semester hours** **F, Sp, Su**
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 299 SPECIAL TOPICS IN HISTORY - 3 semester hours** **F, sp**
A temporary and/or topic specific course with content appropriate for a sophomore level audience.
- HIST 301 HISTORY OF ASIA - 3 semester hours** **F, Sp**
A survey of the cultures, empires and people of Asia.
- HIST 304 AMERICAN MILITARY HISTORY - 3 semester hours** **Sp**
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 312 HISTORY OF RUSSIA AND THE SOVIET UNION - 3 semester hours** **F, Sp**
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 317 HISTORY OF ENGLAND - 3 semester hours** **F, Sp**
A survey of the social, economic, and political development of England from 1485 to the twentieth century.
- HIST 325 SURVEY OF LATIN AMERICA - 3 semester hours** **F, Sp**
An overview of the history, culture, and politics of Latin American from the pre-Columbian era to the present day.
- HIST 327 HISTORY OF THE CARIBBEAN - 3 semester hours** **F, Sp**
A history of the political, economic, and social characteristics of the Caribbean region.
- HIST 340 AFRICAN AMERICAN HISTORY TO 1865 - 3 semester hours** **F**
This reading and writing intensive course will provide students with an analysis of important issues in African American origins to 1865.
- HIST 341 AFRICAN AMERICAN HISTORY FROM 1865 TO PRESENT - 3 semester hours** **Sp**
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 352 BLACK VOICES IN AMERICAN HISTORY - 3 semester hours** **F, Sp**
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 399 SPECIAL TOPICS IN HISTORY - 3 semester hours** **F, Sp**
A temporary and/or topic-specific course with content appropriate for an upperclassman audience.
- HIST 401 COLONIAL AMERICA TO 1763 - 3 semester hours** **F, Sp**
A study of the establishment and development of British colonies in North America emphasizing their political, social and economic patterns.
- HIST 402 STUDENT TEACHING IN HISTORY - 3 semester hours** **F, Sp**
This course is designed to provide supervision in the content area for pre-service secondary history candidates.
- HIST 405 REVOLUTIONARY AND EARLY NATIONAL PERIOD, 1763-1815 - 3 semester hours** **Sp**
An examination of the founding of the United States from the Revolution through the War of 1812.
- HIST 406 NATIVE AMERICANS IN EARLY AMERICA - 3 semester hours** **Sp**
A study of Native Americans in North American from the earliest settlements on the continent until the early nineteenth century.
- HIST 409 ANTE BELLUM AMERICA - 3 semester hours** **F, Sp**
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 semester hours** **F, Sp**
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 semester hours** **F, Sp**
A study of the effects of the Civil War and Emancipation on southern reconstruction, industrialization, and agriculture.
- HIST 417 PROGRESSIVISM TO DEPRESSION, 1900-1933 - 3 semester hours** **F, Sp**
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 THE PRESENT - 3 semester hours** **F, Sp, Su**
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 semester hours** **F, Sp, Su**
An intensive study of contemporary topics and analysis of their background and impact.

HIST 426 METHODS AND MATERIALS FOR TEACHING HISTORY AND SOCIAL STUDIES IN THE SECONDARY SCHOOL - 3 semester hours **F, Sp**

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 semester hours

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 semester hours **Sp**

A general course on the development of Virginia and its role in the history of the nation.

HIST 435 AMERICAN DIPLOMATIC HISTORY - 3 semester hours **F, Sp, Su**

A comprehensive study of American foreign relations from the colonial era to the present day.

HIST 437 ECONOMIC AND BUSINESS HISTORY OF THE UNITED STATES - 3 semester hours **F**

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 HISTORY - 3 semester hours **F, Sp**

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 AMERICAN INTELLECTUAL AND CULTURAL HISTORY - 3 semester hours **F, Sp**

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 semester hours **F, Sp**

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 semester hours **F**

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.

HIST 445 WOMEN'S HISTORY - 3 semester hours **Sp, Su**

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 WEST - 3 semester hours

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 451 BLACK HISTORY - 3 semester hours **Sp**

A study tracing the career of Afro-Americans throughout American history from the African background to present times.

HIST 453 HISTORY OF BLACK EDUCATION IN THE UNITED STATES - 3 semester hours **F, Sp**

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 PROTEST IN THE TWENTIETH CENTURY - 3 semester hours **F, Sp**

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 A HISTORY OF BLACK RELIGIOUS EXPERIENCES IN AMERICA - 3 semester hours **F, Sp**

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 semester hours **F**

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 semester hours **Sp**

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 semester hours **F, Sp**

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 WEST AFRICA IN THE ERA OF THE ATLANTIC SLAVE TRADE - 3 semester hours **F, Sp**

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 471 COMPARATIVE WORLD RELIGIONS - 3 semester hours **F, Sp**

A comparison of the world's major religions and their influence on World History.

HIST 481 EUROPE, 1814-1914 - 3 semester hours **F**

An examination of the rise of nationalism and industrialism in Europe during the nineteenth century and the causes of World War I.

HIST 483 EUROPE SINCE 1914 - 3 semester hours **Sp**

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 487 BRITISH EMPIRE/COMMONWEALTH - 3 semester hours **F, Sp**

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 semester hours **F, Sp**

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 491 THE FRENCH REVOLUTION - 3 semester hours **F, Sp**

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 - semester hours **F, Sp, Su**

A history of immigration to the Western Hemisphere, including a discussion of where the immigrants came from, why they came, and how they influenced America after their arrival.

HIST 495 INDEPENDENT STUDY IN HISTORY - 3 semester hours **F, Sp, Su**

An open format history course featuring directed supervision of the student in their chosen topic by a designated faculty member.

PHILOSOPHY**PHIL 180 CRITICAL THINKING - 3 semester hours** **F, Sp, Su**

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 semester hours **F, Sp**

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 220 INTRODUCTION TO LOGIC - 3 semester hours **F, Sp**

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 semester hours **F, Sp**

An introductory study of the nature, analysis, and justification of moral judgments.

PHIL 290 BUSINESS ETHICS - 3 semester hours **F, Sp**

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 semester hours **Sp**

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 semester hours **F**

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 READINGS IN PHILOSOPHY - 3 semester hours **F, Sp**

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 340 PHILOSOPHY OF MIND - 3 semester hours

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 semester hours **Sp**

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 semester hours **F, Sp**

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 semester hours **F, Sp**

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 semester hours **F, Sp**

An opportunity for students to pursue original research in an area of the instructor's special interest and study.

PHIL 450 APPLIED ETHICS - 3 semester hours **F, Sp**

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 AND METAPHYSICS - 3 semester hours **F, Sp**

The course examines the nature of knowledge and reality. It covers epistemological issues such as skepticism, analysis of knowledge, relevance of gender and race to understanding and the ethics of belief. It also deals with metaphysical questions about what there is in reality and how the world works by discussion issues like appearance and reality, substance and identify, causation and laws, and space and time.

DEPARTMENT OF HISTORY AND PHILOSOPHY

History Major

Bachelor of Arts Degree (120 hours)

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEHI 114	World History to 1500	3	-	3
ENGL 110	Composition I	3	-	3
MATH	GE Menu	3	-	3
LANG		3	-	3
FRST 101	Freshman Studies	2	-	2
GEHI 115	World History Since 1500	-	3	3
ENGL 111	Composition II	-	3	3
MATH	GE Menu	-	3	3
LANG		-	3	3
SCIENCE/LAB	GE Menu	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
HIST 222	U.S. History to 1865*	3	-	3
GEPI 140	Philosophy	3	-	3
SOC. SCI	(GE Menu; not Consumer Econ)	3	-	3
ENGL 201	Intro to Lit	3	-	3
HIST 111 or HIST 112	Intro to History or Intro to Black History	3	-	3
HIST 223	US History After 1865*	-	3	3
PHIL 180	Critical Thinking	-	3	3
SCIENCE/LAB	GE Menu	-	4	4
HEALTH & WELLNESS	GE Menu	-	2	2
TECHNOLOGY	GE Menu	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
GEOG	Elective	3	-	3
HIST 201	Historical Methods	3	-	3
HIST 405	Revolution	3	-	3
GEEN 310	Advanced Comm. Skills	3	-	3
HIST	Elective	3	-	3
HIST 413	Civil War & Reconstruction	-	3	3
HUMANITIES	GE Menu	-	3	3
HIST	Elective	-	6	6
UNRESTRICTIVE	Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
HIST 421	New Deal to Now	3	-	3
HIST 444	Senior Seminar	3	-	3
HIST	Elective	6	-	6
UNRESTRICTIVE	Elective	3	-	3
HIST	Elective	-	9	9
UNRESTRICTIVE	Elective (300 level or higher)	-	<u>6</u>	<u>6</u>
		15	15	30

*When HIST 222 and 223 are not offered, GEHI 122 and 123 may substitute.

DEPARTMENT OF HISTORY AND PHILOSOPHY
History and Social Sciences with a Minor in Secondary Education 6-12
Bachelor of Arts Degree (120 hours)

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
GEHI 114	World History to 1500	3	-	3
ENGL 110	Composition I	3	-	3
GEMA 112	Basic Mathematics	3	-	3
GEES 181	Earth Science and Lab	4	-	4
FRST 101	Freshman Studies	2	-	2
IDST 100	Analytical Reading, Writing and Reasoning I	(2)**	-	(2)**
GEHI 115	World History II	-	3	3
GEMA 113	Basic Mathematics	-	3	3
LANG	Elective	-	3	3
ENGL 111	Composition II	-	3	3
AGRI 150	Environmental Science and Lab	-	4	4
IDST 101	Analytical Reading, Writing and Reasoning II	-	(2)**	(2)**
		15	16	31
SOPHOMORE YEAR				
HIST 222	U.S. History to 1865*	3	-	3
GEPI 140	Philosophy	3	-	3
EDUC 201	Introduction to Teaching I	2	-	2
ENGL 202	African American Lit	3	-	3
HEALTH/WELLNESS	(GE Menu)	2	-	2
GEEN 310	Adv. Communication Skills	3	-	3
HIST 223	US History After 1865*	-	3	3
ECON 100	Basic Economics	-	3	3
EDUC 202	Introduction to Teaching II	-	2	2
GEPO 150	US Government	-	3	3
IDST 200	Digital Media in Education	-	3	3
		16	14	30
JUNIOR YEAR				
GEOG	Elective	3	-	3
HIST 201	Historical Methods	3	-	3
HIST 405	Revolution	3	-	3
POLI 102	State and Local Government	3	-	3
EDUC 315	Data Driven Instructional Design	3	-	3
HIST 413	Civil War & Reconstruction	-	3	3
EDUC 427	Reading in Subject Area	-	3	3
HIST 431	Virginia History	-	3	3
PSYC 212	Human Growth & Development	-	3	3
SPED 403	Classroom Management	-	3	3
		15	15	30
SENIOR YEAR				
HIST 421	New Deal to Now	3	-	3
HIST 444	Senior Seminar	3	-	3
HIST 426	Methods for Teaching History/Social Studies	3	-	3
EDUC 424	Critical Issues in Education	2	-	2
HIST/SOC. SCI.	Elective	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
HIST 402	Student Teaching in History	-	3	3
EDUC 402	Student Teaching	-	9	9
		14	15	29

DEPARTMENT OF LANGUAGES AND LITERATURE

Chairperson:	Deborah Goodwyn, Box 9072, Room 300T Colson Hall, Phone: 524-5489
Professors:	Rita Dandridge, Carl Garrott, Osayimwense Osa, Freddy Thomas
Associate Professors:	Diann L. Baecker, Katherine Chute, Donna Crawford, Rodger L. Doss, David P. Dussere, Deborah Goodwyn, Giles G. Hall, Kay Heath, John R. Holmes, Mohamed S. Kabia, Sheikh Kamarah, Gary MacDonald, Gladys C. Nunnally, Hildegard Rissel, Maxine Sample, Sylviane Townsel
Assistant Professors:	Carmen Alverio, Aisha Bailey, Lillie E. Bailey, Bennis Blue, Jacqueline Burleson, M. Lynn Byrd, Duane Byrge, Carlton Edwards, Willie Hobbs, Curtis Holsopple, Cherlyn Johnson, Michael McClure, Consuelo Navarro, Pamela Reed, Carol Wilcox

Description of the Department

The Department offers a wide range of writing, language-study, and literature courses in the fields of English, English Education, French, Spanish, and German; and courses in Mass Communications Media, Drama, and Speech. The Department offers two undergraduate programs leading to the Bachelor of Arts degree: one in English and one in Mass Communications. For the English major, there is also a minor in Secondary Education that may lead to a teaching endorsement. The Mass Communications program offers three options: Print Media, Radio and Television, and Public Relations. In addition, the Department offers minors in Africana Studies, English, Writing, Spanish, French, German, and Mass Communications.

Mission of Department

The Department of Languages and Literature's programs and functions support the University's mission by extending Department resources to all who strive for academic excellence, whatever their national, racial, ethnic or religious affiliation. The Department, in conjunction with the University, is ultimately dedicated to the promotion of knowledgeable, perceptive, and humane citizens secure in their self-awareness, equipped for personal fulfillment, sensitive to the needs of others, and committed to assuming productive roles in a challenging and ever changing global society.

Department programs and courses provide particular support for Mission principles concerned with advanced scholarship in the discipline of English, the African-American heritage, globally oriented studies, and students who are diversely prepared in communication skills.

Objectives of Department

- To develop students' expertise in language skills, especially writing and speaking effectively
- To develop students' knowledge about language, the literature of various periods and peoples, and the processes of critical thinking and writing.
- To prepare students for teaching, further study and research, and other careers involving analytical, critical, and communicative proficiencies.
- To provide students a broad intellectual background and specialized skills in Mass Communications and related media.

Special Facilities and Equipment

The Department of Languages and Literature offers several specific facilities: a state-of-the-art digital production studio, a multimedia computer writing center, an electronic classroom, a television editing laboratory, a radio laboratory, a foreign language laboratory, and a multimedia journalism computer classroom.

Africana Studies Minor

The Africana Studies Minor requires 18 semester hours.

The Africana Studies minor is a multidisciplinary program that combines the study, research, interpretation, and the dissemination of knowledge concerning the African presence in Africa, the Americas, Europe, and other parts of the world from the birth of human civilization to the present. Students are introduced to critical and theoretical perspectives for the multicultural approach to the historical, political, and socioeconomic realities of peoples of African descent. Students will examine the African American cultural experience and the similarities and differences among the cultures of peoples of African origin, while considering the values of these cultures and the continuity and change among geographical areas over time.

COURSE	TITLE	SEM HRS.
IDUP 270	Introduction to Africana Studies	3
One course from The following:		3
ENGL 311	African-American Literature	
ENGL 320	Harlem Renaissance	
ENGL 410	Readings in African American Literature	
One course from The following:		3
ENGL 315	African Literature	3
ENGL 411	Readings in African Literature	
ENGL 412	Caribbean Literature	
One course from The following:		3
IDUP 371	Study Abroad in Africa (3 to six hours)	
IDUP 470	Special Topics in African Studies	
One course from EACH category below:		
Unrestricted Elective	Humanities Course in Blacks in Africa or African Diaspora	3
Unrestricted Elective	Social Science Course Blacks in Africa or African Diaspora	3

English Minor

The English Minor requires 18 semester hours as indicated below:

COURSE	TITLE	SEM HRS.
Three courses from the following:		
ENGL 210	English Literature I	9
ENGL 211	English Literature II	
ENGL 212	American Literature I	
ENGL 213	American Literature II	
One course from the Foundation Figures Group:		3
ENGL 401	Chaucer	
ENGL 402	Milton	
ENGL 403	Shakespeare I	
ENGL 404	Shakespeare II	

French Minor

Students in any school at Virginia State University may declare the French Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

COURSE	TITLE	SEM HRS
FREN 212	Intermediate French I	3
FREN 213	Intermediate French II	3
One course from the following:		
FREN 310	Composition	3
FREN 313	Conversation	3

FREN 314	Advanced Conversation	3
----------	-----------------------	---

**Two courses from
The following:**

FREN 410	French Literature of the 17 th Century	3
FREN 411	French Literature of the 18 th Century	3
FREN 412	French Literature of the 19 th Century	3
FREN 416	French Civilization	3

Unrestricted Elective	Any three-hour course from the French curriculum exclusive of FREN 110 and FREN 111	3
----------------------------------	---	----------

German Minor

Students in any school at Virginia State University may declare the German Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

COURSE	TITLE	SEM HRS
GERM 212	Intermediate German	3
GERM 213	Intermediate German II	3
GERM 310	German Composition	3
GERM 313	German Conversation	3
One course from the following:		3
GERM 300	Survey of German Literature I	
GERM 301	Survey of German Literature II	
One course from the following		3
GERM 312	Practice in German Phonetics	
GERM 415	German Civilization	

Spanish Minor

Students in any school at Virginia State University may declare the Spanish Minor and satisfy the requirements by completing a minimum of 18 semester hours as indicated below.

COURSE	TITLE	SEM HRS
SPAN 212	Intermediate Spanish I	3
SPAN 213	Intermediate Spanish II	3
SPAN 310	Spanish Composition	3
SPAN 313	Spanish Conversion	3
Two SPAN courses at the 200 level or above, one of which must be at the 300/400 level		6

Mass Communications Minor

The Mass Communications Minor (18 semester hours) consists of five of the required courses in the major core. Students select a sixth course from the other Mass Communications offerings.

COURSE	TITLE	SEM HRS
MCOM 201	Introduction to Mass Communications	3
MCOM 205	Journalism I	3
MCOM 301	Journalism II	3

MCOM 306	Broadcast Journalism	3
MCOM 400	Media Law Ethics	3
MCOM Elective		3

Writing Minor

Students in any school at Virginia State University may declare the English Minor in Writing and satisfy the requirements by completing a minimum of 18 semester hours as indicated below. The foundation of the minor will be a required course in Rhetorical Traditions and a required course in Expository Writing. The remaining hours will be satisfied through the selection of 300-and 400-level courses in the minor. All courses are 3 semester hours unless indicated otherwise. The Practicum allows students the opportunity to put their knowledge to the test in real-world applications and to gain valuable practical skill. Before beginning course work in the minor, students must have completed ENGL 110 (Composition I) and ENGL111 (Composition II), and successfully passed these courses with at least a "C."

Group I	Required	Semester Hours
ENGL 341	Expository Writing	3
ENGL 421/521	Rhetorical Traditions	3

Group II

Students will select twelve (12) semester hours from the following list. Students may choose to take a preponderance of creative writing or professional writing courses or any combination.

Creative and Professional Writing Courses

ENGL 343	Writing Poetry
ENGL 344	Writing Short Fiction
ENGL 345	Writing Creative Non-fiction
ENGL 440/540	Advanced Creative Writing
ASYM 301	Business Communications
ASYM 401	Business Reporting
ENGL 342	Technical Report Writing
MCOM 205	Journalism I (Note: MCOM 201 is a prerequisite)
MCOM 301	Journalism II (Note: MCOM 201 and 205 are prerequisite)

Practicum Courses

ENGL 346	Practicum in Writing (1 credit hour: may be repeated three times; new course)
MCOM 311	Newspaper Production I (1 credit hour)
MCOM 312	Newspaper Production II (1 credit hour)
MCOM 313	Newspaper Production III (1 credit hour)

** (Note: Students may take no more than 3 credit hours of Practicum courses)

Course Descriptions

AFRICANA STUDIES

IDUP 270 INTRODUCTION TO AFRICANA STUDIES - 3 semester hours

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, Afrocentricity, 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 semester hours

An individually designed and planned learning experience at an African university.

IDUP 470 SPECIAL TOPICS IN AFRICANA STUDIES - 3 semester hours

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 113 ACTING - 3 semester hours**

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 experiences.

DRAM 215 STAGECRAFT I - 3 semester hours

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 semester hours

Practice in optional phases of presenting dramatic productions.

DRAM 301 DRAMATIC PRODUCTION - 1 semester hour, repeatable 6 times

Students work on the creation, technical production, and management of performances given by the Little Theatre and the VSU Performers.

DRAM 316 STAGECRAFT II - 3 semester hours

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 semester hours

Lecture-laboratory approach to the principles and techniques of directing and producing.

ENGLISH EDUCATION**ENED 371 THE TEACHING OF ENGLISH IN SECONDARY SCHOOLS - 3 semester hours**

Examination of traditional and current theories and practices in the teaching of English, with opportunities for supervised lab and firsthand experiences in practice teaching.

ENED 402 STUDENT TEACHING IN ENGLISH -3 semester hours**F, Sp**

This course is designed to provide supervision on the content area for pre-service secondary English candidates.

Prerequisite: Department approval

Corequisites: EDUC 401 Student Teaching Seminar, EDUC 402 Student Teaching

ENED 431 TEACHING COMPOSITION - 3 semester hours**F**

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 AND LITERATURE - 3 semester hours**Sp**

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.

ENED 433 VERBAL PROFICIENCY EXAMINATION - 0 semester hours

A written and oral examination to assess students' verbal competencies at the beginning of their senior year.

ENGLISH**ENGL 110 COMPOSITION I - 3 semester hours**

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 semester hours

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

Note: *Students must pass ENGL 110 and ENGL 111 with a "C-" or better to satisfy the General Education Writing Requirement.*

ENGL 201 INTRODUCTION TO LITERATURE -3 semester hours

F, Sp

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 INTRODUCTION TO AFRICAN AMERICAN LITERATURE - 3 semester hours

F, Sp

A course in reading, thinking critically about, and discussing literature from a variety of genres, through the study of significant texts by African American authors. Writing intensive.

Prerequisites: ENGL 110 and ENGL 111

Note: *For English and Mass Communication majors, ENGL 201 is a prerequisite for ENGL courses numbered 210 and above.*

ENGL 210 ENGLISH LITERATURE I - 3 semester hours

F

Study of English literature and its background from Anglo-Saxon times through the age of Samuel Johnson.

ENGL 211 ENGLISH LITERATURE II - 3 semester hours

Sp

Study of English literature and its background from the Romantic age to the twentieth century.

ENGL 212 AMERICAN LITERATURE I - 3 semester hours

F, Sp

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 semester hours

F, Sp

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 semester hours

F, Sp

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 semester hours

Sp

Survey in English of world literature from the seventeenth century to the present, with attention to main ideas and genres.

ENGL 301 ENGLISH LITERATURE OF THE MIDDLE AGES - 3 semester hours

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 ENGLISH LITERATURE OF THE RENAISSANCE - 3 semester hours

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 ENGLISH LITERATURE OF THE RESTORATION AND EIGHTEENTH CENTURY - 3 semesters hours

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 ENGLISH LITERATURE OF THE NINETEENTH CENTURY - 3 semester hours

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 ENGLISH LITERATURE OF THE TWENTIETH CENTURY - 3 semester hours

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 AMERICAN LITERATURE BEFORE 1800 - 3 semester hours

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 OF THE NINETEENTH CENTURY - 3 semester hours

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 OF THE TWENTIETH CENTURY - 3 semester hours

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 311 AFRICAN-AMERICAN LITERATURE - 3 semester hours

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 WOMEN'S LITERATURE -3 semester hours**Sp**

Study of selected literary works by or about women, within the context of women's literary traditions as they have developed in various cultures and historical periods.

ENGL 313 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 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 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.

ENGL 315 AFRICAN LITERATURE - 3 semester hours

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 influence written African literature. Will include representative works from such writers as Achebe, Soyinka, WaThiongo, Head, Emecheta, Ba, Osundare, U'Tamsi, and Aidoo.

ENGL 320 HARLEM RENAISSANCE - 3 semester hours

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 LESBIAN AND GAY LITERATURE - 3 semester hours

Study of representative literary works from the perspective of sexuality and sexual identity. May include consideration of literature by lesbian, gay, and bisexual writers; social and historical contexts of lesbians, gay, and bisexual literature; and theories of sexuality in the study of literature.

ENGL 322 POST-COLONIAL LITERATURE - 3 semester hours

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 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.

ENGL 324 ANGLO-IRISH LITERATURE - 3 semester hours

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 semester hours

Study of selections from the Old and New Testaments as literary texts. May include consideration of the influence of Biblical texts on other literary works and traditions.

ENGL 326/PHIL 326 MYTHOLOGY - 3 semester hours

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/PHIL 327 PHILOSOPHY IN LITERATURE - 3 semester hours

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 semester hours

Study of major developments of drama up to the 20th century. Close reading and discussion of representative plays from major playwrights and literary periods in terms of their historical and social contexts.

ENGL 332 MODERN DRAMA - 3 semester hours

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 semester hours

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 341 EXPOSITORY WRITING - 3 semester hours

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 semester hours

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 semester hours

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.

ENGL 344 WRITING SHORT FICTION - 3 semester hours

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.

ENGL 345 WRITING CREATIVE NON-FICTION - 3 semester hours

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.

ENGL 346 PRACTICUM IN WRITING - 1-3 semester hours

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 351 INTRODUCTION TO LANGUAGE STUDY - 3 semester hours

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.

F**ENGL 352 ENGLISH STRUCTURE - 3 semester hours**

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.

Sp**ENGL 401 CHAUCER - 3 semester hours**

Study of the Canterbury Tales, Troilus and Criseyde, and/or selected minor poems.

ENGL 402 MILTON - 3 semester hours

Study of the chief poems and prose works of Milton. Some emphasis on Milton's religious and political ideas.

ENGL 403 SHAKESPEARE I - 3 semester hours

Survey of Shakespeare's early work, with reading of selected plays and their study against the background of Elizabethan social, critical, and theatrical ideas. Emphasis on comedies and histories.

ENGL 404 SHAKESPEARE II - 3 semester hours

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 semester hours

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 semester hours

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 REALISM AND NATURALISM - 3 semester hours

Study of the ideas, literary methods, and influence of writers who furthered the development of the dominant mode of modern fiction.

ENGL 408 LITERATURE OF THE AMERICAN SOUTH - 3 semester hours

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 READINGS IN ENGLISH STUDIES - 3 semester hours

Variable content. Intensive study of a major issue, movement, form, theme, or figure in literature, film studies and/or language. May be repeated once for credit with different topic, with consent of department.

ENGL 410 READINGS IN AFRICAN AMERICAN LITERATURE - 3 semester hours

Variable content. Intensive study of a major issue, movement, form, 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 IN AFRICAN LITERATURE AND CULTURES - 3 semester hours

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 semester hours

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 420 SURVEY OF LITERARY THEORY AND CRITICISM - 3 semester hours

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 semester hours

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 LANGUAGE - 3 semester hours

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 447 ADVANCED CREATIVE WRITING - 3 semester hours

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

ARABIC**ARAB 110 ELEMENTARY ARABIC I - 3 semester hours**

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 semester hours

Supplementary course to Arabic 110; continued pronunciation, explanations, and drill in basic structures, readings, dictations and oral practice.

Prerequisite: ARAB 110 or its equivalent

ARAB 212 INTERMEDIATE ARABIC I - 3 semester hours

Review of grammar, reading of moderately difficult prose, practice in oral Arabic, and work in written composition.

Prerequisite: ARAB III or its equivalent

ARAB 213 INTERMEDIATE ARABIC II - 3 semester hours

Review of grammar, continued practiced in pronunciation and conversation, and reading of moderately difficult prose.

Prerequisite: ARAB III or its equivalent

FRENCH**FREN 110 ELEMENTARY FRENCH I - 3 semester hours****F, Sp**

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 semester hours**F, Sp**

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 semester hours**F, Sp**

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 semester hours**F, Sp**

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 semester hours

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 semester hours

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 semester hours

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 semester hours

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 COMPOSITION - 3 semester hours

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 313 FRENCH CONVERSATION - 3 semester hours

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 semester hours

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 IN THE SEVENTEENTH CENTURY - 3 semester hours

Study of French classicism as reflected in Malherbe, Corneille, Racine, La Rochefoucauld, Moliere, La Fontaine, La Bruyere, Mme de Sevigne, and others.

Prerequisite: FREN 310 French Composition

FREN 411 FRENCH LITERATURE IN THE EIGHTEENTH CENTURY - 3 semester hours

Emphasis on nonfictional literature of the period.

Prerequisite: FREN 301 Survey of French Literature

FREN 412 FRENCH LITERATURE IN THE NINETEENTH CENTURY - 3 semester hours

Romanticism as reflected in Chateaubriand, Mme de Stael, Lamartine, Hugo, Vigny, Musset, Gautier, Dumas pere, G. Sand and others.

Prerequisite: FREN 301 Survey of French Literature

FREN 416 FRENCH CIVILIZATION - 3 semester hours

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 semester hours

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 110 ELEMENTARY GERMAN I - 3 semester hours**

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 semester hours

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 semester hours

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 semester hours

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 semester hours

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 semester hours

Historical study of German literature from the beginning through Goethe.

Prerequisite: GERM 213 Intermediate German II

GERM 301 SURVEY OF GERMAN LITERATURE II - 3 semester hours

Historical study of German literature from Goethe to the present.

Prerequisite: GERM 213 Intermediate German II

GERM 310 GERMAN COMPOSITION - 3 semester hours

Careful review and study of the fundamentals of grammar, including practice in written composition.

Prerequisite: GERM 213 Intermediate German II or its equivalent

GERM 312 PRACTICE GERMAN PHONETICS - 3 semester hours

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 semester hours

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 semester hours

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 AND COMPOSITION FOR TEACHERS OF GERMAN - 3 semester hours

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 semester hours

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.

SPANISH**SPAN 110 ELEMENTARY SPANISH I - 3 semester hours****F, Sp**

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 semester hours**F, Sp**

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 I - 3 semester hours**F, Sp**

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 semester hours**F, Sp**

Careful study of representative modern prose; continued practice in pronunciation and conversation.

Prerequisite: SPAN 212 Intermediate Spanish or its equivalent

SPAN 214 COMMERCIAL SPANISH - 3 semester hours

Designed for business majors and other students preparing for government positions as clerks, stenographers, typists, and in other branches of civil service.

Prerequisite: SPAN 212 Intermediate Spanish I; SPAN 213 Intermediate Spanish II

SPAN 300 SURVEY OF SPANISH LITERATURE I - 3 semester hours

Survey of Spanish literature from the beginning to the Siglo de Oro.

Prerequisite: SPAN 213 Intermediate Spanish II

SPAN 301 SURVEY OF SPANISH LITERATURE II - 3 semester hours

Survey of Spanish literature from about 1700 to the present.

Prerequisite: SPAN 213 Intermediate Spanish II or its equivalent

SPAN 310 SPANISH COMPOSITION - 3 semester hours

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 Intermediate Spanish II

SPAN 312 PRACTICAL SPANISH PHONETICS - 3 semester hours

Systematic study of pronunciation including sound production, stress group, and intonation of the spoken phrase with exercises in dictation and memorization.

Prerequisite: SPAN 213 Intermediate Spanish II

SPAN 313 SPANISH CONVERSATION - 3 semester hours

Daily practice and drill in oral Spanish based principally on topics of current interest.

Prerequisite: SPAN 213 Intermediate Spanish II

SPAN 314 ADVANCED SPANISH CONVERSATION - 3 semester hours

Continued practice in spoken Spanish through class discussion and oral presentation of topics of current interest; designed for Spanish majors and others admitted by departmental permission.

Prerequisite: SPAN 313 Spanish Conversation

SPAN 315 SURVEY OF LATIN AMERICAN LITERATURE I - 3 semester hours

General survey of the literature of Latin American beginning with the letters of Cortez and continuing to Ricardo of Peru with emphasis on historical and social background; conducted in Spanish.

Prerequisite: SPAN 313 Spanish Conversation

SPAN 316 SURVEY OF LATIN AMERICAN LITERATURE II - 3 semester hours

Continuation of SPAN 315 extending from Ricardo Palma to the present; conducted in Spanish.

Prerequisite: SPAN 213 Intermediate Spanish II

SPAN 410 DRAMA OF THE GOLDEN AGE - 3 semester hours

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 Intermediate Spanish II

SPAN 412 THE NOVEL IN SPANISH LITERATURE - 3 semester hours

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 Intermediate Spanish II

SPAN 413 THE GENERATION OF 1898 - 3 semester hours

A study of the works of Valle-Inclan, Azorin, Unamuno, Maextu, and others.

Prerequisite: SPAN 213 INTERMEDIATE Spanish II

SPAN 414 SPANISH CIVILIZATION - 3 semester hours

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 (Spanish Composition or Spanish Conversation)

SPAN 415 HISPANIC AMERICAN CIVILIZATION II - 3 semester hours

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 Spanish Composition or SPAN 313 Spanish Conversation

SPAN 416 SPECIAL TOPICS IN SPANISH - 3 semester hours

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 semester hours

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 bibliographical material.

Prerequisite: Eighteen semester hours of Spanish

SPEECH**SPEE 210 GENERAL AMERICAN PHONETICS - 3 semester hours**

Discussion of the International Phonetic Alphabet as applied to American Speech. Analysis of dialects of American English, with attention to Standard American accent.

SPEE 214 INTRODUCTION TO PUBLIC SPEAKING - 3 semester hours**F, Sp**

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 semester hours

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: MCOM 201 Introduction to Mass Communications or ENGL 110 Composition I;
ENGL 111 Composition II

SPEE 313 ORAL INTERPRETATION - 3 semester hours

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.

MASS COMMUNICATIONS**MCOM 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.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II

MCOM 204 Interpersonal Communication - 3 semester hours

The study and application of effective basic verbal and nonverbal communication concepts to interactive communication situation and problems.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II;
MCOM 201 Introduction to Mass Communications

MCOM 205 JOURNALISM I - 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 Composition I; ENGL 111 Composition II;
MCOM 201 Introduction to Mass Communications

MCOM 212 PHOTOJOURNALISM - 3 semester hours

Emphasizes the basic elements of photography for the mass media, including newspapers, advertising, and television. Student learns how to compose, shoot, develop, and lay out 35 mm. photographs for newspapers and magazines and how to operate portable television cameras used by commercial stations in electronic news gathering. Emphasis on news photography and the relation of the spoken or written word to the visual image.

Prerequisites: ENGL 110 Composition I; ENGL 111 Composition II;
MCOM 201 Introduction to Mass Communications;

MCOM 239 MOTION PICTURE APPRECIATION - 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 present day. Weekly screening and discussions of important motion pictures not only as art but as they reflect and affect our times.

MCOM 301 JOURNALISM II - 3 semester hours

Practice in news gathering; development of sources, evaluation, and writing as required in the print media. Major attention given to contemporary issues and events, problems, and ethical considerations.

Prerequisite: MCOM 205 Journalism I

MCOM 302 Public Relations I - 3 semester hours

An overview of the principles and policies, 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: MCOM 201 Introduction to Mass Communications

MCOM 303 PUBLIC RELATIONS II - 3 semester hours

Practice in media relations; the development of professional writing skills with emphasis on external and internal communications: press releases, public service announcements, publication design, employee communications, speech writing, audio visual presentations, and news conferences.

Prerequisite: MCOM 302 Public Relations I

MCOM 304 COPY EDITING - 3 semester hours

Emphasis on journalistic desk work; editing stories, headline writing, typography, layout functions and relationships.

Prerequisite: MCOM 301 Journalism II

MCOM 306 BROADCAST JOURNALISM - 3 semester hours

An introduction to 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.

Prerequisites: MCOM 205 Journalism I

MCOM 309 RADIO PRODUCTION - 3 semester hours

The study and practice of basic concepts, skills, and techniques involved in the production of radio programs, with emphasis on persuasive communication techniques used in radio production.

Prerequisite: MCOM 201 Introduction to Mass Communications

MCOM 310: Advanced Radio Production - 3 semester hours

A continuation of MCOM 309; further study and practical experience in advanced radio production techniques, including programming. Student projects will focus on various types of productions done at both commercial and noncommercial stations.

Prerequisite: MCOM 309 Radio Production

MCOM 311 - NEWSPAPER PRODUCTION I - 1 semester hour

Hands-on journalism experience by completing basic news stories and features for the *Virginia Statesman*.

Prerequisite: ENGL 110 Composition I; ENGL 111 Composition II

MCOM 312 NEWSPAPER II - 1 semester hour

Hands-on journalism experience by completing complex news stories for the *Virginia Statesman*.

Prerequisite: MCOM 311 or Consent of Instructor

MCOM 313 NEWSPAPER PRODUCTION III - 1 semester hour

Hands-on journalism experience by completing editorials, columns, and other opinion pieces for the *Virginia Statesman*; editing the work of others, serving as one of the student editors; performing layout functions.

Prerequisite: MCOM 312 or Consent of Instructor

MCOM 319 PUBLIC RELATIONS LABORATORY - 3 semester hours

Workshops provide knowledge to enable students to research, design, implement and complete public relations projects for community-based organizations. The class is structured and run in a manner similar to a professional public relations agency with students assuming appropriate agency roles. The use of current information tools like websites and the Internet is emphasized.

Prerequisite: MCOM 303 Public Relations II

MCOM 330 WRITING FOR RADIO AND TELEVISION - 3 semester hours

Practice of techniques and formats used in broadcasting; focus on news writing, documentary writing, commercial writing, and writing with specific time restraints.

Prerequisites: MCOM 306 Broadcast Journalism

MCOM 335 COMMUNICATION THEORY - 3 semester hours

Explains historical and contemporary theories of human communication, with emphasis on mass communication theories.

Prerequisites: MCOM 201 Introduction to Mass Communications and Junior standing

MCOM 336 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.

MCOM 337 HISTORY OF PRINT MEDIA AND TECHNOLOGICAL DEVELOPMENT - 3 semester hours

A historical review of the development of early print media into newspaper journalism and an analysis of the impact technology as had on the practice of journalism.

Prerequisite: MCOM 201 Introduction to Mass Communication

MCOM 338 HISTORY OF RADIO, TELEVISION, AND FILM - 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.

Prerequisite: MCOM 201 Introduction to Mass Communications

MCOM 340 TELEVISION PRODUCTION - 3 semester hours

Practical aspects of television production: program planning; operation of cameras, lights, and audio components; control room discipline and simple direction. Knowledge of basic terms, work areas, and crew functions emphasized.

Prerequisites: MCOM 212 Photojournalism; MCOM 309 Radio Production

MCOM 341 ADVANCED TELEVISION PRODUCTION - 3 semester hours

Continuation of MCOM 340; study and practical experience in television production, including television programming. Planning and videotaping of students' projects.

Prerequisite: MCOM 340 Television Production

MCOM 399 SPECIAL TOPICS IN MASS MEDIA - 3 semester hours

Working under direction of a professor, a student explores a specific area or media field relating to the professional responsibilities of the mass communications student looking toward the career marketplace.

Prerequisites: MCOM 201 Introduction to Mass Communications and Junior standing

MCOM 400 MEDIA LAW AND ETHICS - 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: MCOM 201 Introduction to Mass Communications and Senior standing

MCOM 401 MULTI-MEDIA TECHNOLOGIES - 3 semester hours

Practical application of new technology, including computer and digital technology, interactive media, telecommunications, and virtual reality; also, internet, mini-discs, and Web designs and publishing.

Prerequisites: MCOM 201 Introduction to Mass Communications and Junior or Senior standing

MCOM 408 BROADCAST MANAGEMENT - 3 semester hours

Prepares students for future management positions in the broadcast media, through the study of concepts and principles of media management, an examination of how media companies function today, and how students can prepare themselves as future managers.

Prerequisites: MCOM 201 Introduction to Mass Communications and Senior standing

MCOM 409 INTERNSHIP IN NEWSPAPER JOURNALISM - 3 semester hours

Work experience for one semester in a newspaper organization, with emphasis on practical application of classroom concepts. Minimum of 120 hours of assigned work, under the direction of the Internship Supervisor on site. Regular meetings with the faculty Internship Coordinator; weekly written reports. Dates and times of meetings with the faculty Internship Coordinator must be arranged by students.

Prerequisites: MCOM 301 Journalism II; MCOM 304 Copy Editing; and permission of Internship Coordinator

MCOM 429 INTERNSHIP IN RADIO - 3 semester hours

Work experience for one semester in a radio station, with emphasis on the practical application of classroom concepts. Minimum of 120 hours of assigned work, under the direction of the Internship Supervisor on site. Regular meetings with the faculty Internship Coordinator and weekly written reports; dates and times of meetings with the faculty Internship Coordinator must be arranged by students.

Prerequisites: MCOM 309 Radio Production and permission of Internship Coordinator

MCOM 439 INTERNSHIP IN PUBLIC RELATIONS - 3 semester hours

Work experience for one semester with a public relations organization, with emphasis on the practical application of classroom concepts. Minimum of 120 hours of assigned work, under the direction of the Internship Supervisor on site. Regular meetings with the faculty Internship Coordinator; weekly written reports; dates and times of meetings with the faculty Internship Coordinator must be arranged by students.

Prerequisites: MCOM 303 Public Relations II and Permission of Internship Coordinator

MCOM 449 INTERNSHIP IN TELEVISION - 3 semester hours

Work experience for one semester in a television station, with emphasis on the practical application of classroom concepts. Minimum of 120 hours of assigned supervised work, under the direction of the Internship supervisor on site. Regular meetings with the faculty Internship Coordinator; weekly written reports; dates and times of meetings with the faculty Internship Coordinator must be arranged by students.

Prerequisites: MCOM 340 Television Production and permission of Internship Coordinator

MCOM 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 different areas in 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.

DEPARTMENT OF LANGUAGES AND LITERATURE

English Major
Bachelor of Arts Degree

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
History	GE Menu	3	3	6
Math	GE Menu	3	3	6
Language 212, 213		3	3	6
Science	GE Menu	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Surveys ¹		-	6	6
Philosophy Elective		3	-	3
Technology	GE Menu	3	-	3
Health and Wellness	GE Menu	-	2	2
Social Science	GE Menu	3	-	3
Unrestricted Electives		3	3	6
Science	GE Menu	-	<u>4</u>	<u>4</u>
		15	15	30
JUNIOR YEAR				
Literature Surveys ¹		6	-	6
ENGL 300/400 Period coverage courses ²			6	6
ENGL 341	Expository Writing	3	-	3
Language	Linguistics ³	-	3	3
Music or Art	Elective	3	-	3
Unrestricted	Electives	<u>3</u>	<u>6</u>	<u>9</u>
		15	15	30
SENIOR YEAR				
ENGL 403 or 404	Shakespeare I or II	-	3	3
ENGL 300/400 Courses		3	3	6
African American Literature ⁴		3	-	3
African Diaspora Literature ⁵		-	3	3
Speech or Drama Elective		3	-	3
Unrestricted Electives		<u>6</u>	<u>6</u>	<u>12</u>
		15	15	30

¹1 class from English Lit (ENGL 210, ENGL 211), 1 from American Lit (ENGL 212, ENGL 213), 1 from World Lit (ENGL 214, ENGL 215) and 1 other survey class (12 hours total)

²2 classes from areas not covered by surveys, See Period Coverage Menus list.

³1 class from ENGL 351, ENGL 352, ENGL 422

⁴1 class from ENGL 311, ENGL 320, ENGL 410

⁵1 class from ENGL 315, ENGL 411, ENGL 412

DEPARTMENT OF LANGUAGES AND LITERATURE
English Major - Africana Studies Minor
Bachelor of Arts Degree

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
History	GE Menu	3	3	6
Math	GE Menu	3	3	6
Language 212, 213		3	3	6
Science	GE Menu	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Surveys ¹		-	6	6
Philosophy Elective		3	-	3
Technology	GE Menu	3	-	3
Health And Wellness	GE Menu	-	2	2
Social Science	GE Menu	3	-	3
IDUP 270	Introduction to Africana Studies	3	-	3
Unrestricted Electives		-	3	3
Science	GE Menu	-	<u>4</u>	<u>4</u>
		15	15	30
JUNIOR YEAR				
Literature Surveys ¹		6	-	6
ENGL 300/400 Period coverage courses ²			6	6
ENGL 341	Expository Writing	3	-	3
Language/ Linguistics ³		-	3	3
Music or Art Elective		3	-	3
ENGL 311	African American Literature	-	3	3
IDUP 371 or IDUP 470	Study Abroad in Africa or Special Topics in African Studies	3	-	3
Social Science	Blacks in Africa or African Diaspora	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ENGL 403 or ENGL 404	Shakespeare I or II	-	3	3
ENGL 300/400	Courses	3	3	6
African American Literature ⁴		3	-	3
African Diaspora Literature ⁵		-	3	3
Humanities	Blacks in Africa or African Disaspora	3	-	3
Speech or Drama		3	-	3
Electives				
Unrestricted Electives		<u>3</u>	<u>6</u>	<u>9</u>
		15	15	30

¹ 1 class from English Lit (ENGL 210, ENGL 211), 1 from American Lit (ENGL 212, ENGL 213), 1 from World Lit (ENGL 214, ENGL 215) and 1 other survey class (12 hours total)

² 2 classes from areas not covered by surveys, See Period Coverage Menus list.

³ 1 class from ENGL 351, ENGL 352, ENGL 422

⁴ 1 class from ENGL 311, ENGL 320, ENGL 410

⁵ 1 class from ENGL 315, ENGL 411, ENGL 412

DEPARTMENT OF LANGUAGES AND LITERATURE
English Major – Mass Communications Minor
Bachelor of Arts Degree

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
History	GE Menu	3	3	6
Math	GE Menu	3	3	6
Language 212, 213		3	3	6
Science	GE Menu	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Surveys ¹		-	6	6
Philosophy Elective		3	-	3
Technology	GE Menu	3	-	3
Health And Wellness	GE Menu	-	2	2
Social Science	GE Menu	3	-	3
MCOM 201	Intro to Mass Communication	3	-	3
MCOM 205	Journalism I	-	3	3
Science	GE Menu	-	<u>4</u>	<u>4</u>
		15	15	30
JUNIOR YEAR				
Literature Surveys ¹		3	-	3
ENGL 300/400 Period coverage courses ²			6	6
ENGL 341	Expository Writing	3	-	3
Language/Linguistics ³		-	3	3
Music or Art Elective		3	-	3
MCOM 302	Public Relations I	3	-	3
MCOM 306	Broadcast Journalism	3	-	3
Unrestricted Electives	Elective	-	<u>3</u>	<u>3</u>
		15	12	27
SENIOR YEAR				
ENGL 403 or 404	Shakespeare I or II	-	3	3
ENGL 300/400 Courses		3	3	6
African American Literature ⁴		3	-	3
African Diaspora Literature ⁵		-	3	3
SPEECH or DRAMA	Elective	3	-	3
MCOM 400	Media Law and Ethics	-	3	3
MCOM Elective		3	-	3
Unrestricted Elective		<u>3</u>	<u>3</u>	<u>6</u>
		15	15	30

¹ 1 class from English Lit (ENGL 210, ENGL 211), 1 from American Lit (ENGL 212, ENGL 213), 1 from World Lit (ENGL 214, ENGL 215) and 1 other survey class (12 hours total)

² 2 classes from areas not covered by surveys, See Period Coverage Menus list.

³ 1 class from ENGL 351, ENGL 352, ENGL 422

⁴ 1 class from ENGL 311, ENGL 320, ENGL 410

⁵ 1 class from ENGL 315, ENGL 411, ENGL 412

DEPARTMENT OF LANGUAGES AND LITERATURE
English with a Minor in Secondary Education 6-12 (123 Hours)

			SEMESTER HOURS		
			1st	2nd	Total
			Sem	Sem	Hours
FRESHMAN YEAR					
IDST 100, 101*	Analytical Reading, Writing and Reasoning I & II		2	2	4
FRST 101	Freshman Studies		2	-	2
ENGL 110, 111	Composition I & II		3	3	6
Math	(GE menu)		3	-	3
Science	(GE menu)		-	4	4
Language 212, 213			3	3	6
History	(GE menu)		3	3	6
HPER 170	Health and Wellness		<u>2</u>	-	<u>2</u>
			16	16	32
SOPHOMORE YEAR					
EDUC 201, 202	Introduction to Teaching I and II		2	2	4
IDST 200	Digital Media in Teacher Education		3	-	3
Science	(GE menu)		-	4	4
PSYC 212	Human Growth and Development		3	-	3
ENGL 201 or 202	Intro to Lit I or Intro to African American Lit		3	-	3
Literature Survey ¹			3	-	3
Literature Survey ¹			-	3	3
Music or Art Elective			-	3	3
Speech/Drama Elective			<u>3</u>	-	<u>3</u>
			14	15	29
JUNIOR YEAR					
EDUC 315	Data Driven Instructional Design		3	-	3
SPED 403	Classroom Management in Educational Settings (FE)		-	3	3
Literature Survey ¹			3	-	3
Literature Survey ¹			3	-	3
ENGL 341	Expository Writing		3	-	3
Language/Linguistics ²			3	3	6
ENGL 300/400 Course			3	-	3
Philosophy Elective			-	3	3
ENED 432	Reading and Literature		-	3	3
African American Literature ³			<u>3</u>	<u>3</u>	<u>6</u>
			18	15	33
SENIOR YEAR					
ENGL 403 or 404	Shakespeare I or II		3	-	3
EDUC 424	Critical Issues in Education		2	-	2
ENED 371	Teaching in English in Secondary Schools		3	-	3
ENED 431	Teaching Composition		3	-	3
African Diaspora Literature ⁴			3	-	3
EDUC 401	Student Teaching Seminar		-	3	3
ENGL 402	Student Teaching English		-	3	3
EDUC 402	Student Teaching		-	<u>9</u>	<u>9</u>
			17	15	32

¹1 class from English Literature (ENGL 210, ENGL 211), 1 from American Literature (ENGL 212, ENGL 213), 1 from World Literature (ENGL 214, ENGL 215) and 1 other survey class (12 hours total)

²1 class from ENGL 311, ENGL 320, ENGL 410

³1 class from ENGL 351, ENGL 352, ENGL 422

⁴1 class from ENGL 315, ENGL 411, ENGL 412

*IDST 100/101 are not counted in semester hours or toward

DEPARTMENT OF LANGUAGES AND LITERATURE
Mass Communications Major – Public Relations
Bachelor of Arts Degree

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
HISTORY	GE Menu	3	3	6
MATH	GE Menu	3	3	6
Health And Wellness	GE Menu	-	2	2
Technology	GE Menu	3	-	3
Science	GE Menu	-	<u>4</u>	<u>4</u>
		14	15	29
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Survey ¹		-	3	3
Language 212, 213		3	3	6
Philosophy Elective		3	-	3
MCOM 201	Intro to Mass Communication	3	-	3
MCOM 205	Journalism I	-	3	3
MCOM 302	Public Relations I	-	3	3
SPEE 215	Voice and Diction	3	-	3
Technology	GE Menu	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
Literature Surveys ¹		3	-	3
ENGL	Elective	-	3	3
ENGL 341	Expository Writing	3	-	3
Social Science	GE Menu	3	-	3
MCOM 212	Photojournalism	3	-	3
MCOM 301	Journalism II	-	3	3
MCOM 303	Public Relations II	3	-	3
MCOM 306	Broadcast Journalism	-	3	3
MCOM 330	Writing for Radio and Television	-	3	3
Unrestricted Elective	(other than MCOM)	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
African American Literature ²		3	-	3
Music or Art Elective		-	3	3
Global Studies	GE Menu	3	-	3
MCOM 319	Public Relations Lab	3	-	3
MCOM 400	Media Law and Ethics	-	3	3
MCOM Elective		3	-	3
MCOM 439	Internship in Public Relations	-	3	3
MCOM 499	Senior Seminar in MCOM	-	3	3
Unrestricted Elective	(other than MCOM)	<u>3</u>	<u>3</u>	<u>6</u>
		15	15	30

¹ENGL 210, ENGL 211, ENGL 212, ENGL 213, ENGL 214, ENGL 215

²ENGL 311, ENGL 320, ENGL 410

DEPARTMENT OF LANGUAGES AND LITERATURE
Mass Communications Major – Print Media Option
Bachelor of Arts Degree

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
History	GE Menu	3	3	6
Math	GE Menu	3	3	6
Health and Wellness	GE Menu	-	2	2
Science	GE Menu	<u>4</u>	<u>4</u>	<u>8</u>
		15	15	30
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Survey ¹		-	3	3
Language 212, 213		3	3	6
Philosophy Elective		3	-	3
MCOM 201	Intro to Mass Communication	3	-	3
MCOM 205	Journalism I	-	3	3
MCOM 302	Public Relations I	-	3	3
SPEE 215	Voice and Diction	3	-	3
Technology	GE Menu	<u>-</u>	<u>4</u>	<u>4</u>
		15	16	31
JUNIOR YEAR				
Literature Surveys ¹		3	-	3
ENGL Elective		-	3	3
ENGL 341	Expository Writing	3	-	3
Social Science	GE Menu	3	-	3
MCOM 212	Photojournalism	3	-	3
MCOM 301	Journalism II	-	3	3
MCOM 304	Copy Editing	3	-	3
MCOM 306	Broadcast Journalism	-	3	3
MCOM 311, 312	Newspaper Production I & II	1	1	2
MCOM 337	History of Print Media & Tech Dev	-	3	3
Unrestricted Elective	(other than MCOM)	<u>-</u>	<u>3</u>	<u>3</u>
		16	16	32
SENIOR YEAR				
African American Literature ²		3	-	3
Music or Art Elective		-	3	3
Global Studies	GE Menu	3	-	3
MCOM 313	Newspaper Production III	1	-	1
MCOM 400	Media Law and Ethics	-	3	3
MCOM Elective		3	-	3
MCOM 409	Internship in Newspaper Journalism	-	3	3
MCOM 499	Senior Seminar in MCOM	-	3	3
Unrestricted Electives	(other than MCOM)	<u>3</u>	<u>3</u>	<u>6</u>
		13	15	28

¹ENGL 210, ENGL 211, ENGL 212, ENGL 213, ENGL 214, ENGL 215

²ENGL 311, ENGL 320, ENGL 410

DEPARTMENT OF LANGUAGES AND LITERATURE
Mass Communications Major – Radio and Television Option
Bachelor of Arts Degree

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
History	GE Menu	3	3	6
Math	GE Menu	3	3	6
Health and Wellness	GE Menu	-	2	2
Science	GE Menu	<u>4</u>	<u>4</u>	<u>8</u>
		15	15	30
SOPHOMORE YEAR				
ENGL 201	Introduction to Literature	3	-	3
Literature Survey ¹		-	3	3
Language 212, 213		3	3	6
Philosophy	Elective	3	-	3
MCOM 201	Intro to Mass Communication	3	-	3
MCOM 205	Journalism I	-	3	3
MCOM 302	Public Relations I	-	3	3
SPEE 215	Voice and Diction	3	-	3
Science	GE Menu	<u>-</u>	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
Literature Surveys ¹		3	-	3
ENGL Elective		-	3	3
ENGL 341	Expository Writing	3	-	3
Social Science	GE Menu	3	-	3
MCOM 306	Broadcast Journalism	3	-	3
MCOM 309	Radio Production	-	3	3
MCOM 330	Writing for Radio and Television	3	-	3
MCOM 338	History of Radio, Television and Film	-	3	3
MCOM 340	Television Production	-	3	3
Unrestricted Elective	(other than MCOM)	<u>-</u>	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
African American Literature ²		3	-	3
Music or Art Elective		-	3	3
Global Studies	GE Menu	3	-	3
MCOM 310 or MCOM 341	Adv. Radio Prod or TV Prod	-	3	3
MCOM 400	Media Law and Ethics	3	-	3
MCOM Elective		3	-	3
MCOM 429 or MCOM 449	Internship in Radio or Internship in TV	-	3	3
MCOM 499	Senior Seminar in MCOM	-	3	3
Unrestricted Elective	(other than MCOM)	<u>3</u>	<u>3</u>	<u>6</u>
		15	15	30

¹ENGL 210, ENGL 211, ENGL 212, ENGL 213, ENGL 214, ENGL 215

²ENGL 311, ENGL 320, ENGL 410

DEPARTMENT OF MILITARY SCIENCE**Description of Department**

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 of Department

To commission the future officer leadership of the U.S. Army and motivate young people to be better Americans.

Objectives of Department

- 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.

Programs (Minor) in Department

A Minor in Military Science is offered with a minimum of 15 hours of study.

Course Descriptions**MILITARY SCIENCE****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 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 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 semester hours

A course stressing the development of military skills with emphasis placed upon physical fitness, map reading and communications. Includes downproofing exercises, field training exercises, and drill and ceremonies.

Prerequisite: MILS 301 Advanced Leadership Development I

MILS 401 DEVELOPMENTAL LEADERSHIP - 3 semester hours

A study of officer-enlisted relationship, staff 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 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 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 – 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.

**SUMMARY
DEPARTMENT OF MILITARY SCIENCE**

		SEMESTER HOURS			
		1st Sem	2 nd Sem	Summer Sem.	Total Hours
FRESHMAN YEAR					
MILS 101, 102	Basic Leadership	2	2	0	4
MILS 403, 404	Leadership Lab	0	0	0	0
SOPHOMORE YEAR					
MILS 201, 202	Basic Leadership*	2	2	0	4
MILS 403, 404	Leadership Lab	0	0	0	0
MILS 300	Basic Leadership Training*	0	0	0	0
JUNIOR YEAR					
MILS 301, 302	Adv Leadership Dev	3	3	0	6
MILS 403, 404	Leadership Lab	0	0	0	0
MILS 403, 404	Advanced Leadership Training	0	0	6	6

*Basic Leadership Training can be substituted for the 100 and 200 level certain situations.

SENIOR YEAR

MILS 401, 402	Transition to Officership	3	3	0	6
MILS 403, 404	Leadership Lab	0	0	0	0
Total Semester Hours		26			

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 GEHI 164-15 and GEPE 165-11 or selecting ROTC class time (0600-0650). See catalog for course schedule

**DEPARTMENT OF MUSIC, ART AND DESIGN
MUSIC UNIT**

Chairperson: Thomas LaRose, P.O. Box 9026, 216 Harris Hall, Phone: 524-5188
 Professor: Mark W. Phillips, Richard Schwartz, David Shaffer-Gottschalk
 Associate Professors: Ethel N. Haughton, Karen Savage, Thomas LaRose
 Assistant Professors: Johnella L. Edmonds, Thomas Larose, George L. Tuckwiller, III
 Instructors: James Holden, Lisa Edward-Burrs, Lawrence Hawthorne

MUSIC UNIT DESCRIPTION

The Music Unit is accredited by the National Association of Schools of music and offers courses leading to the Bachelor of music degrees in music education and music performance. In addition, we offer the Bachelor of Arts in Music and a Minor in Music. All education curricula prepare music majors for the teaching profession and prepare them for certification to teach K-12. The Performance curricula prepare students for a career in performance in their respective performance areas. All curricula prepare students for advanced studies at the graduate level. The unit also offers a variety of courses for non-majors.

MISSION

The mission of the Music unit is to maintain both a level of academic excellence established by the university and a level of artistic achievement competitive with national standards. The Unit will promote diverse musical experiences that cross cultural boundaries, the use of technology, interaction with the community served by the university, and contact with the larger musical community. Through these experiences, the student will gain an awareness of his/her role in the university, local, national, and global community, and use that awareness to develop personal goals for future efforts and achievements.

GOALS OF THE PROGRAM

To provide students with solo performance opportunities in order to develop their performance skills to a high level and to provide the necessary ensemble performance opportunities so that they can perform effectively as chamber players as well as soloists.

To offer curricula at various levels appropriate to the needs of the students 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 be more well-rounded individuals.

To provide the University and community with professional services and expertise and increase their awareness and knowledge of the musical arts.

To provide a strong background for majors interested in graduate work in the performance areas of music, music education or other related fields.

Music Admission Requirements

Piano:

- I. Major scales, parallel motion, hands together
Minor scales (at least one form), parallel motion, hands together
Arpeggios - Major and minor triads for 4 octaves
- II. A Bach Invention or work of comparable difficulty.
- III. A contrasting work from the Classic, Romantic, or 20th Century repertoire.

Voice:

1. A voice of attractive quality: agile and resonant with a range of two octaves.
2. The ability to distinguish tonality and sing songs on pitch.
3. A repertoire that includes songs by such well-known, classical composers as Handel, Schubert Purcell, etc.
4. A background that includes participation in solo and ensemble festivals sanctioned by your state music association and/or singing in the church.

Instrumental:

Woodwind, Brass and String

1. All major scales. Each scale is to be played through the most accepted and practical range of your instrument. 2. Chromatic scale. This scale is to be played throughout the practical range of your instrument. It should be slurred ascending and tongued descending or vice-versa.
3. One piece selected from the following:
 - a. Standard etude on your chosen instrument. (Rose for the clarinet, etc.)
 - b. Composition chosen from the Band and Orchestra Directors Manual of your home state or a piece with comparable music content.
 - c. A piece of band or orchestral literature that best demonstrates your technique, musicianship and interpretation.

Percussion:

1. Play the following rudiments:

Long Roll	Seven Stroke Roll	Double Drag
Flam	Flam Accent # 1	Double Paradiddle
Ruff Flam Paradiddle	Single Ratamacue	
Five Stroke Roll	Flamacue	Triple Ratamacue
Single Drag	Lesson 25	Nine Stroke Roll

Must be played open and closed.

2. Mallet players are expected to play all scales which include two octaves.
3. Perform one piece from the following list:
 - a. Standard etude on your chosen instrument.
 - b. Composition chosen from the Band and Orchestra Directors Manual of your home state or a piece with comparable music content.
 - c. A piece of band or orchestral literature that best demonstrates your technique, musicianship and interpretation.

Areas of Specialization:**Music with a Minor in Secondary Education - Bachelor of Music Degrees in:**

1. Vocal/Choral
2. Instrumental (Brass, Percussion, String, Percussion)

A placement examination in music theory, piano and all performance mediums (vocal or instrumental), will be given to all entering students in order to determine their level of ability. In the event that a student lacks sufficient background in one of the above areas, the student may be admitted on a probationary basis; however, it is expected that the student will make sufficient progress within a year's time, which will allow him/her to become a regular student and be admitted to the regular program, in good standing.

Twelve semester hours of applied music are required of all Music Education Majors. Beginning with the second semester of matriculation each student is required to perform at least once each semester on Student Seminar Recitals. A proficiency examination is required of all students in music theory, music history, piano and their applied area at the end of their sophomore year. All students are required to give a full senior recital. A jury examination is required six weeks prior to the recital.

Music Performance Programs

The Bachelor of Music Degree in performance leads to a career in performance. Instruction is available in the following applied areas: Voice, Piano, Organ, String, Woodwind, Brass and Percussion.

An audition is required in the selected medium prior to admission to the program.

A placement examination in music theory, piano and all performance mediums (vocal or instrumental), will be given to all entering students in order to determine their level of ability. In the event that a student lacks sufficient background in one of the above areas, the student may be admitted on a probationary basis; however, it is expected that the student will make sufficient progress within a year's time, which will allow him/her to become a regular student and be admitted to the regular program, in good standing.

Twenty-one semester hours of applied music are required of all Performance Majors in their major applied area and three additional hours for the senior recital. Beginning with the second semester of matriculation each student is required to perform at least twice each semester on Student Seminar Recitals. A proficiency examination is required of all students in music theory, music history, piano and their applied area at the end of their sophomore year.

Proficiency requirements for graduation include, along with the core curriculum, the development of advanced performance skills which meet professional musical standards (e.g. the ability to execute music from memory, an outstanding sense of musicianship, and a substantial knowledge of the repertoire of his/her instrument). A proficiency examination is required of all students in music theory, music history, and their applied area at the end of their sophomore year. A basic proficiency in piano must be demonstrated by all performance majors other than piano majors.

All performance majors are required to give a full recital at the end of their junior and senior years as partial fulfillment for the performance degree. A jury examination is required six weeks prior to each recital.

Bachelor of Music Program**The Bachelor of Arts in Music**

The Bachelor of Arts Degree in Music would allow students to elect a solid liberal arts baccalaureate degree with music as the chosen major. This would be recommended for students whose background in music prior to entering VSU has not prepared them for the rigors of a Bachelor of Music in Performance and who have no desire to teach public school music. Instruction is available in the following applied areas: Voice, Piano, Organ, String, Woodwind, Brass and Percussion.

An audition is required in the selected performing medium prior to admission to the program.

A placement examination in music theory, piano and all performance mediums (vocal or instrumental), will be given to all entering students in order to determine their level of ability. In the event that a student lacks sufficient background in one of the above areas, the student may be admitted on a probationary basis; however, it is expected that the student will make sufficient progress within a year's time, which will allow him/her to become a regular student and be admitted to the regular program, in good standing.

Course Descriptions

MUSIC

MUSIC (APPLIED)

APPLIED PIANO

- MUSI 101, 102 APPLIED MAJOR PIANO - 2 semester hours** **F, Sp**
 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, 104 APPLIED MAJOR PIANO - 3 semester hours** **F, Sp**
 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 201 & 202 APPLIED PIANO MAJOR - 2 semester hours** **F, Sp**
 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 & 204 APPLIED PIANO MAJOR - 3 semester hours** **F, Sp**
 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 7^{ths} 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 Junior Recital.
- MUSI 301 & 302 APPLIED PIANO MAJOR - 2 semester hours** **F, Sp**
 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 7^{ths} 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 & 304 APPLIED PIANO MAJOR - 3 semester hours** **F, Sp**
 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 7^{ths} 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 401 & 402 APPLIED PIANO MAJOR - 2 semester hours **F, Sp**

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 7^{ths} 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 & 404 APPLIED PIANO MAJOR - 3 semester hours **F, Sp**

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 7^{ths} 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 424 SENIOR RECITAL - 3 semester hours **F, Sp**

Senior recital Jury heard by piano faculty 6 weeks before public performance date for approval.
 (Performance majors only).

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**

Preparation and presentation of senior recital. Senior recital Jury will be heard by keyboard faculty six weeks before public performance date for approval. (Education majors only)

APPLIED BRASS**MUSI 121 & 122 APPLIED BRASS MAJOR - 2 semester hours** **F, Sp**

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.

MUSI 123 & 124 APPLIED BRASS MAJOR - 3 semester hours **F, Sp**

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.

MUSI 221 & 222 APPLIED BRASS MAJOR - 2 semester hours **F, Sp**

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.

MUSI 223 & 224 - 3 semester hours **F, Sp**

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.

MUSI 321 & 322 APPLIED BRASS MAJOR - 2 semester hours **F, Sp**

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.

MUSI 323 & 324 APPLIED BRASS MAJOR - 3 semester hours **F, Sp**

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.

MUSI 421 & 422 APPLIED BRASS MAJOR - 2 semester hours **F, Sp**

Advanced technical study and repertoire development. Representative literature from principal historical periods.

MUSI 423 APPLIED BRASS MAJOR - 3 semester hours **F**

Advanced technical study and repertoire development. Representative literature from principal historical periods. Preparation for senior recital.

MUSI 424 SENIOR RECITAL - 3 semester hours **F, Sp**

Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Performance majors only)

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Education majors only)

APPLIED PERCUSSION

MUSI 121 & 122 APPLIED PERCUSSION MAJOR - 2 semester hours **F, Sp**
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.

MUSI 123 & 124 APPLIED PERCUSSION MAJOR - 3 semester hours **F, Sp**
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.

MUSI 221 & 222 APPLIED PERCUSSION MAJOR - 2 semester hours **F, Sp**
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.

MUSI 223 & 224 APPLIED PERCUSSION MAJOR - 3 semester hours **F, Sp**
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.

MUSI 321 & 322 APPLIED PERCUSSION MAJOR - 2 semester hours **F, Sp**
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.

MUSI 323 & 324 APPLIED PERCUSSION MAJOR - 3 semester hours **F, Sp**
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.

MUSI 421 & 422 APPLIED PERCUSSION MAJOR - 2 semester hours **F, Sp**
Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation.

MUSI 423 APPLIED PERCUSSION MAJOR - 3 semester hours **F, Sp**
Continued development of technique and musicianship with application to expand repertoire, stylistic interpretation. Preparation for senior recital.

MUSI 424 SENIOR RECITAL - 3 semester hours **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard six weeks prior to public performance date for approval. (Performance majors only)

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard six weeks prior to public performance date for approval. (Education majors only)

APPLIED STRINGS

MUSI 121 & 122 APPLIED STRINGS MAJOR - 2 semester hours **F, Sp**
Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature.

MUSI 123 & 124 APPLIED STRINGS MAJOR - 3 semester hours **F, Sp**
Private instruction on developing fundamental technique of string instrument playing: Scales, arpeggios, sight-reading, technical studies, solo and ensemble literature.

MUSI 221 & 222 APPLIED PERCUSSION MAJOR - 2 semester hours **F, Sp**
Application of technique to performance; tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature.

MUSI 223 & 224 APPLIED STRINGS MAJOR - 3 semester hours **F, Sp**
Application of technique to performance, tone production, bow management, finger placement covering entire tonal range in all positions, technical studies, solo and ensemble literature.

MUSI 321 & 322 APPLIED STRINGS MAJOR - 2 semester hours **F, Sp**
Continuation of technical studies, expansion of repertoire and development of performance skills. Preparation for senior recital.

MUSI 323 & 324 APPLIED STRINGS MAJOR - 3 semester hours **F, Sp**
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.

MUSI 421 & 422 APPLIED STRINGS MAJOR - 2 semester hours **F, Sp**
Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills.

MUSI 423 APPLIED STRINGS MAJOR - 3 semester hours **F, Sp**
Advanced Technical Study, continued development of repertoire, stylistic interpretation and performance skills.

MUSI 424 SENIOR RECITAL - 3 semester hours **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Performance majors only)

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Education majors only)

APPLIED WOODWINDS

MUSI 121 & 122 APPLIED WOODWINDS MAJOR - 2 semester hours **F, Sp**
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 & 124 APPLIED WOODWINDS MAJOR - 3 semester hours **F, Sp**
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 221 & 222 APPLIED WOODWINDS MAJOR - 2 semester hours **F, Sp**
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 & 224 APPLIED WOODWINDS MAJOR - 3 semester hours **F, Sp**
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 321 & 322 APPLIED WOODWINDS MAJOR - 2 semester hours **F, Sp**
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 & 324 APPLIED WOODWINDS MAJOR - 3 semester hours **F, Sp**
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 421 & 422 APPLIED WOODWINDS MAJOR - 2 semester hours **F, Sp**
Intensive study of woodwind literature, advanced technique, stylistic interpretation and application of musical concepts to performance skills.

MUSI 423 APPLIED WOODWINDS MAJOR - 3 semester hours **F, Sp**
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 semester hours **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Performance majors only)

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by instrumental faculty six weeks before public performance date for approval. (Education majors only)

APPLIED VOICE

MUSI 111 & 112 APPLIED VOICE MAJOR -2 semester hours **F, Sp**
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 & 114 APPLIED VOICE MAJOR - 3 semester hours **F, Sp**
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 211 & 212 APPLIED VOICE MAJOR - 2 semester hours **F, Sp**
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 & 214 APPLIED VOICE MAJOR - 3 semester hours **F, Sp**
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 311 & 312 APPLIED VOICE MAJOR - 2 semester hours **F, Sp**
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 & 314 APPLIED VOICE MAJOR - 3 semester hours **F, Sp**
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 411 & 412 APPLIED VOICE MAJOR - 2 semester hours **F, Sp**
Continuation of basic voice study. Arias from both opera and oratorio.

MUSI 413 APPLIED VOICE MAJOR - 3 semester hours **F, Sp**
Continuation of basic voice study. Arias from both opera and oratorio. Preparation for senior recital.

MUSI 424 SENIOR RECITAL - 3 semester hours **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by voice faculty six weeks before public performance date for approval. (Performance majors only)

MUSI 499 SENIOR RECITAL - 1 semester hour **F, Sp**
Preparation and presentation of senior recital. Senior recital Jury will be heard by voice faculty six weeks before public performance date for approval. (Education major only)

APPLIED MINOR

Music majors who wish to study a secondary applied area or non-music majors who wish to study an applied area may enroll in APPLIED MINOR courses with the permission of the instructor.

MUSI 141, 142 APPLIED MINOR - 1 semester hour **F, Sp**
These courses are for applied minor instruction in the instrumental or vocal area.
Prerequisite: Permission from the applied instructor

MUSI 241, 242 - 1 semester hour **F, Sp**
These courses continue applied minor instruction in the instrumental or vocal area.

PERFORMANCE ENSEMBLES

The Department of Music offers varied performance organizations to all University students for one hour credit each semester.

Placement in each organization is dependent upon the results of auditions given and criteria established by the direction of the respective performance ensembles.

Participation in at least one performance ensemble is required for music majors each semester of matriculation at the University. Non-Music majors may select performance ensembles in accordance with audition results.

Instrumental Ensembles

MUSI 161,162,261,262,361,362,461,462-	BAND (MARCHING (F), CONCERT(S)
MUSI 163,164,263,264,363,364,463,464-	ORCHESTRA(F,S)
MUSI 165,166,265,266,365,366,465,466-	STAGE BAND(F,S)
MUSI 167,168,267,268,367,368,467,468	CHAMBER ENSEMBLE(F,S)

Vocal Ensembles

MUSI 171,172,271,272,371,372,471,472	CONCERT CHOIR(F,S)
MUSI 173,174,273,274	MADRIGAL SINGERS(F,S)
MUSI 175,176,275,276,375,376,475,476	GOSPEL CHORALE(F,S)
MUSI 177,178,277,278,377,378,477,478	CHAMBER ENSEMBLE(F,S)

MUSIC CLASSES

MUSI 105 CLASS PIANO - 1 semester hour [for Music Majors only] F, Sp

Provides music majors (non-keyboard majors) with necessary keyboard skills to function adequately as music professionals. MUSI 105 covers: keyboard basics, major and minor five-note scales, major and minor triads, bass note harmonization and transposition of five-finger melodies, pieces learned from score, and sightreading.

MUSI 106 CLASS PIANO - 1 semester hour F, Sp

Provides music majors (non-keyboard majors) with necessary keyboard skills to function adequately as music professionals. MUSI 106 covers: major and minor scales, hands separately; primary chord progressions; chordal harmonization and transposition of five-finger melodies; pieces learned from score; and sightreading.

MUSI 107 MUSIC LABORATORY – 1 semester hour

A class providing opportunities for students to observe, plan and fill different roles as teachers in a school setting prior to student teaching.

MUSI 115, 116 VOICE CLASS - 1 semester hour F, Sp

These courses designed for the non-voice major, i.e., keyboard, band and orchestral instrumental majors. Problems in voice production, breathing, placement, diction, etc., will be discussed. Repertoire for both the college and the projected public school student will be expected.

MUSI 154 MUSIC FUNDAMENTALS - 3 semester hours F, Sp

A study of the basic elements of music needed by Elementary and Special Education teachers. Specifically taught will be key signatures, circle of fifths, all major and minor scales, clefs, keys, modes, enharmonics, intervals, triads and an introduction to four-part harmony.

MUSI 181 BASIC THEORY - 3 semester hours [for Music Majors only] F, Sp

Specifically taught will be triad inversions, dominant seventh chords, diminished seventh chords, non-harmonic tones, cadences, diatonic modulations, and four-part writing.

MUSI 182 CHROMATIC HARMONY [for Music Major only] - 3 semester hours F, Sp

Specifically taught will be four-part writing, secondary seventh chords and their inversions, augmented 6th, neapolitan and borrowed chords. Also taught are dominant ninths, elevenths, thirteenth, altered dominants, chromatic mediants, and chromatic modulations.

MUSI 183 SIGHT SINGING AND EAR TRAINING - 1 semester hour [for Music Majors only] F, Sp

Development of basic skills in music reading and aural perception. Laboratory experience required.

- MUSI 184 SIGHT SINGING AND EAR TRAINING [for Music Major only] - 1 semester hour** **F, Sp**
Continued development in music reading and aural skills. Laboratory experience required.
- MUSI 191 STRING CLASS - 1 semester hour** **F**
Special study of violin, viola, cello, double bass with an emphasis on developing the skills necessary for teaching the instruments on the elementary and intermediate levels.
- MUSI 192 PERCUSSION CLASS - 1 semester hour** **Sp**
Course designed to develop, through practical experiences, the skills necessary to teach instruments of the percussion family on the elementary and intermediate levels.
- MUSI 199 MUSIC APPRECIATION - 3 semester hours** **F, Sp**
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 205 CLASS PIANO - 1 semester hour** **F**
Provides music majors (non-keyboard majors) with necessary keyboard skills to function adequately as music professionals. MUSI 205 covers: major and minor scales, hands together; primary and secondary chord progressions; harmonization and transposition (not limited to five note patterns) pieces learned from score, and sightreading. The course culminates with the Class Piano Proficiency Examination, passage of which is required prior to advancing to MUSI 206.
- MUSI 206 CLASS PIANO - 1 semester hour** **Sp**
The course expands on the skills required for the Class Piano Proficiency Examination, especially in the area of harmonization, transposition, and reading. Also included are independent repertoire preparation and public performance experience.
- MUSI 207 MUSIC LABORATORY – 1 semester hour**
A class providing opportunities for students to observe, plan and fill different roles as teachers in a school setting prior to student teaching. Taught in conjunction with MUSI 393, Elementary Methods.
- MUSI 215, 216 VOICE CLASS - 1 semester hour** **F, Sp**
A continuation of MUSI 116.
- MUSI 253 INSTRUMENTAL SURVEY - 1 semester hour** **F**
A course designed to acquaint Choral Music Education 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 - 1 semester hour** **F**
A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. (Education majors only).
- MUSI 259 VOCAL DICTION - 1 semester hour** **Sp**
A study of the international Phonetic Alphabet (IPA) and its application to singing in French and German. (Education majors only).
- MUSI 281 FORM AND ANALYSIS - 3 semester hours** **F**
The basic skills involved in structural analysis of tonal music, with emphasis placed on the analysis of phrase structure and the ability to locate and identify the important structural principles and divisions within binary, ternary, sonata, rondo, variation, and imitative forms.
- MUSI 282 TWENTIETH CENTURY THEORY - 3 semester hours** **Sp**
Designed to expose students to the basic concepts and analytical tools necessary for an understanding of twentieth-century art music, including units introducing motives and set theory, non-diatonic scales, triadic extensions, modality and pitch class centers, serialism, and new approaches to rhythm, meter, orchestration, tone color and texture.
- MUSI 283 SIGHT SINGING AND EAR TRAINING - 1 semester hour** **F**
Continued development in music reading and aural skills. Laboratory experience required.
- MUSI 285 MUSIC HISTORY - 3 semester hours** **F**
A survey of the development of Western Music from Antiquity through the Baroque Period.

MUSI 286 MUSIC HISTORY - 3 semester hours

Sp

A survey of the development of Western Music from the Classical Period to the 20th Century.

Prerequisite: MUSI 181

MUSI 287 ELEMENTARY CONDUCTING - 2 semester hours

Sp

The basic principles of conducting vocal/instrumental groups. Laboratory experience with vocal and instrumental groups is required.

MUSI 288 VOCAL DICTION - 2 semester hours

F

A study of the International Phonetic Alphabet (IPA) and its application to singing in English and Italian. (Performance majors only.)

MUSI 289 VOCAL DICTION - 2 semester hours

Sp

A study of the international Phonetic Alphabet (IPA) and its application to singing in French and German. (Performance majors only.)

MUSI 295 WOODWIND CLASS - 1 semester hour

F

Designed to develop, through practical experience, the skills necessary to play instruments of the woodwind family on the elementary and intermediate levels.

MUSI 296 BRASSWIND CLASS - 1 semester hour

Sp

Designed to develop, through practical experience, the skills necessary to play the instruments of the brass family on the elementary and intermediate levels.

MUSI 307 PRACTICUM - 1 semester hour

A class providing opportunities for students to observe, plan and fill different roles as teachers in a school setting prior to student teaching.

Prerequisites: Taught in conjunction with MUSI 491 Instructional Methods or MUSI 493 Middle/High School Methods.

MUSI 354 MARCHING BAND TECHNIQUES - 2 semester hours

Sp

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 373, 374 OPERA WORKSHOP - 1 semester hour

F, Sp

Designed to provide experiences in the performance of opera and opera scenes.

MUSI 381 COUNTERPOINT - 3 semester hours

F, S

A course in counterpoint organized around the invention and fugue. A thorough analysis of the WELL TEMPERED CLAVIER, by J. S. Bach, is included.

MUSI 385 ART SONG - 2 semester hours

F

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 MUSIC COMPOSITION - 2 semester hours

S

This course is designed to develop the compositional skills of the student through practical experience, class discussion, research, composition projects, and private assistance. At the end of the course, the student will be able to write a composition for a medium selected by the instructor and complete all of the individual composition projects required for the course.

Prerequisites: MUSI 181, 182, 183, 184, 281, and 282

MUSI 388 ADVANCED INSTRUMENTAL CONDUCTING - 2 semester hours

F

Conducting techniques with particular attention to interpretation, techniques of instrumental conducting, tempo, articulation, nuance, seating of instrumental groups, and the testing and auditioning of instrumentalists.

MUSI 389 ADVANCED CHORAL CONDUCTING - 2 semester hours

F

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.

MUSI 393 MUSIC FOR THE ELEMENTARY SPECIALIST - 2 semester hours **Sp**

A functional laboratory for learning how to prepare and present meaningful musical experiences in elementary classroom settings. The present content of the course is based upon what elementary music teachers/specialists are expected to accomplish in both student teaching and subsequent professional teaching in the schools.

MUSI 396 TWENTIETH CENTURY MUSIC - 2 semester hours **Sp**

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.

Prerequisite: MUSI 285

MUSI 397 MUSIC IN THE ROMANTIC PERIOD - 2 semester hours **F**

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 285

MUSI 398 MUSIC IN THE CLASSICAL PERIOD - 2 semester hours **Sp**

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 285

MUSI 399 MUSIC IN THE BAROQUE PERIOD - 2 semester hours **F**

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 285

MUSI 473, 474 OPERA WORKSHOP - 1 semester hour **F, Sp**

Designed to provide experiences in the performance of opera and opera scenes.

MUSI 481 DRAMATIC MUSIC - 2 semester hours **Sp**

A study of opera and oratorio in historical perspective.

MUSI 482 INSTRUMENTAL PEDAGOGY - 2 semester hours **Sp**

Designed to explore current and historical pedagogical approaches to the teaching of band and orchestral instruments.

MUSI 483 VOCAL PEDAGOGY - 2 semester hours **F**

Designed to explore the current and historical pedagogical approaches to the teaching of vocal music.

MUSI 484 PIANO PEDAGOGY - 2 semester hours **Sp**

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 semester hours **F**

Arranging for small ensembles, full orchestra, and band.

MUSI 486 PIANO LITERATURE - 2 semester hours **F**

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 ACCOMPANIMENT - 2 semester hours **F**

An introduction to the art of the collaborative pianist through reading, listening, and playing.

MUSI 489 SENIOR THESIS - 1 semester hour **S, F**

The concentration of this non-performance senior research project may be in Composition, Music Theory/Analysis, or Music History/Musicology. The thesis topic selection approval and its evaluation will be by a committee of three music faculty. The student and the committee will determine the scope and manner of presentation for the research project.

MUSI 491 MUSIC FOR THE INSTRUMENTAL SPECIALIST - 3 semester hours **F**

Techniques of organizing and developing instrumental groups; pedagogical practices, procedures, methods and materials for developing bands, orchestras, ensembles, and solo performances.

MUSI 493 MUSIC FOR THE SECONDARY SCHOOL SPECIALIST - 3 semester hours **F**
 Philosophy, basic concepts and principles of music teaching and learning in middle and high school. Emphasis on content, techniques and materials for effective program building and implementation.

MUSI 495 VOCAL LITERATURE - 2 semester hours **Sp**
 The introduction of representative solo and ensemble literature for voice.

MUSI 496 INSTRUMENTAL LITERATURE - 2 semester hours **F**
 A course designed for the instrumental music major which introduces representative literature for the instruments of the orchestra and band.

GEMU 380 MUSIC AND ART - 3 semester hours **F, Sp**
 This course concerned with man, the aesthetic creator, It is intended to provide a broad exposure to the Fine Arts, provoke curiosity and develop interest in the Arts and in the realm of the Aesthetic. A guide for the student in search of personal freedom through a constructive use of his leisure time by association with the Art, Music, Literature, Drama and Architecture.

GEMU 480 BLACKS IN AMERICAN MUSIC - 3 semester hours **F, Sp**
 A humanities course concerned with the full range of Black contributions to music from African heritage to the present day. Course content will be presented through lectures, recordings, and class discussions.

DEPARTMENT OF MUSIC, ART AND DESIGN
MUSIC MAJOR
Instrumental Performance Concentration
Bachelor of Music Degree

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I/Composition II	3	3	6
GEMA 112, 113	Basic Math	3	3	6
FRST 101	Freshman Studies	2	-	2
MUSI 105, 106	Class Piano	1	1	2
MUSI 123, 124	Applied Major	3	3	6
MUSI 181, 182	Basic Theory/Chromatic Harmony	3	3	6
MUSI 183, 184	Sight/Sing/Ear/Training	1	1	2
MUSI _____	Ensemble	1	1	2
GE _____	Technology	-	3	3
MUSI _____	Seminar	=	=	=
		17	18	35
SOPHOMORE YEAR				
GE _____	Science & Lab	4	4	8
MUSI 205, 206	Class Piano	1	1	2
MUSI 223, 224	Applied Major	3	3	6
MUSI 281, 282	Form & Analysis/20 th Century Theory	3	3	6
MUSI 283	Sight/Sing/Ear Train	1	-	1
MUSI 285, 286	Music History	3	3	6
MUSI _____	Ensemble	1	1	2
HPER _____	Wellness	-	2	2
MUSI _____	Seminar	=	=	=
		16	17	33

JUNIOR YEAR

GEHI 114	World Civilization	3	-	3
MUSI 323, 324	Applied Major	3	3	6
MUSI _____	Music History Elective(s)	2	2	4
MUSI 381	Counterpoint	3	-	3
MUSI 287	Elementary Conducting	-	2	2
MUSI _____	Music Elective(s)	1	4	5
GE _____	Social Science	3	-	3
MUSI _____	Ensemble	1	1	2
GE _____	Global Studies	-	3	3
MUSI _____	Seminar	=	=	=
		16	15	31

SENIOR YEAR

GE _____	Literature	3	-	3
GE _____	Social Science	-	3	3
GE _____	Humanities	3	-	3
MUSI 424	Senior Recital	-	3	3
MUSI 423	Applied Major	3	-	3
MUSI 482	Instrumental Pedagogy	-	2	2
MUSI 496	Instrumental Literature	2	-	2
	Elective(s)	-	3	3
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	=	=	=
		12	12	24

DEPARTMENT OF MUSIC, ART AND DESIGN**MUSIC MAJOR****Keyboard Performance Concentration (Piano or Organ)****Bachelor of Music Degree**

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I/Composition II	3	3	6
GEMA 112, 113	Basic Math	3	3	6
FRST 101	Freshman Studies	2	-	2
GE _____	Technology	-	3	3
MUSI 103, 104	Applied Major Piano	3	3	6
MUSI 115, 116	Voice Class	1	1	2
MUSI 181, 182	Basic Theory/Chromatic Harmony	3	3	6
MUSI 183, 184	Sight/Sing/Ear/Training	1	1	2
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	=	=	=
		17	18	35
SOPHOMORE YEAR				
GE _____	Science & Lab	4	4	8
HPER _____	Wellness	-	2	2
MUSI 203, 204	Applied Major	3	3	6
MUSI 258, 259	Vocal Diction	1	1	2
MUSI 281, 282	Form & Analysis/20 th Century Theory	3	3	6
MUSI 283	Sight/Sing/Ear/Train	1	-	1
MUSI 285, 286	Music History/Music History	3	3	6
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	=	=	=
		16	17	33
JUNIOR YEAR				
GEHI 114	World Civilization	3	-	3
GE _____	Social Science	-	3	3
MUSI 303, 304	Applied Major Piano	3	3	6

GE _____	Literature	-	3	3
MUSI 381	Counterpoint	3	-	3
MUSI 487	Art of Accompaniment	2	-	2
MUSI 484	Piano Pedagogy	-	2	2
MUSI _____	Music History Elective	2	-	2
MUSI 287	Elem. Conducting	-	2	2
MUSI _____	Music Elective	-	2	2
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	=	=	=
		14	16	30

SENIOR YEAR

GE	Humanities	3	-	3
MUSI	Music Elective(s)	-	6	6
GE	Global Studies	3	-	3
MUSI 424	Senior Recital	-	3	3
MUSI 403	Applied Major Piano	3	-	3
MUSI	Music History Elective	-	2	2
MUSI 486	Piano Literature	2	-	2
MUSI	Ensemble	1	1	2
MUSI	Seminar	=	=	=
		12	12	24

DEPARTMENT OF MUSIC, ART AND DESIGN**MUSIC MAJOR****Vocal Performance Concentration****Bachelor of Music Degree**

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I/Composition II	3	3	6
GEMA 112, 113	Basic Math	3	3	6
MUSI 105, 106	Class Piano	1	1	2
MUSI 113, 114	Applied Major Voice	3	3	6
MUSI 171, 172	Concert Choir	1	1	2
MUSI 181, 182	Basic Theory/Chromatic Harmony	3	3	6
MUSI 183, 184	Sight/Sing/Ear/Training	1	1	2
FRST 101	Freshman Studies	2	-	2
GE	Technology	-	3	3
MUSI	Seminar	=	=	=
		17	18	35
SOPHOMORE YEAR				
	Fr./Ger. Lang. Elective	3	3	6
MUSI 205, 206	Class Piano	1	1	2
MUSI 213, 214	Applied Major Voice	3	3	6
MUSI 271, 272	Concert Choir	1	1	2
MUSI 281, 282	Form & Analysis/20 th Century Theory	3	3	6
MUSI 283	Sight/Sing/Ear Train	1	-	1
MUSI 285, 286	Music History I/Music History II	3	3	6
MUSI 258, 259	Vocal Diction	1	1	2
MUSI	Seminar	=	=	=
		16	15	31
JUNIOR YEAR				
GEHI 114	World Civilization	3	-	3
GE	Science & Lab	-	4	4
MUSI 313, 314	Applied Major Voice	3	3	6
MUSI 371, 372	Concert Choir	1	1	2
MUSI 373, 374	Opera Workshop	1	1	2
MUSI 287	Elem. Conducting	-	2	2
MUSI 381	Counterpoint	3	-	3
MUSI 385	Art Song	2	-	2
MUSI	Music Elective(s)	-	5	5

GE	Global Studies	3	-	3
MUSI	Seminar	=	=	=
		16	16	32
SENIOR YEAR				
GE	Science & Lab	4	-	4
GE	Social Science	-	3	3
MUSI 413	Applied Major Voice	3	-	3
MUSI 424	Senior Recital	-	3	3
MUSI 471, 472	Concert Choir	1	1	2
MUSI 473, 474	Opera Workshop	1	1	2
MUSI 483	Vocal Pedagogy	2	-	2
MUSI 481	Dramatic Music	-	2	2
GE	Literature	3	-	3
HPER	Wellness	-	2	2
MUSI	Seminar	=	=	=
		14	12	26

DEPARTMENT OF MUSIC, ART AND DESIGN
Instrumental Music with a Minor in Secondary Education K-12

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100, 101	Analytical Reading, Writing and Reasoning I, II	2**	2**	4
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Composition I, II	3	3	6
MATH 112, 113	Basic Math I, II	3	3	6
MUSI 105	Class Piano	2	-	2
MUSI 121	Applied Major Instrumental	1	-	1
MUSI 161	Marching Band	1	-	1
MUSI 181	Basic Theory	3	-	3
MUSI 183	Sight/Sing/Ear Tr.	1	-	1
MUSI 191	Strings	-	1	1
MUSI	Seminar	-	0	0
MUSI 106	Class Piano	-	2	2
MUSI 122	Applied Major Instrumental	-	1	1
MUSI 172	Concert Band	-	1	1
MUSI 182	Basic Theory	-	3	3
MUSI 184	Sight/Sing/Ear Tr.	-	1	1
MUSI	Seminar	=	0	0
		16	15	31
SOPHOMORE YEAR				
EDUC 201, 202	Introduction to Teaching I, II	2	2	4
IDST 200	Digital Media in Teacher Education	3	-	3
PSYC 212	Human Growth & Develop	3	-	3
MUSI 205	Class Piano	1	-	1
MUSI 221	Applied Major Instrumental	1	-	1
MUSI 261	Marching Band	1	-	1
MUSI 281	Form and Analysis	-	3	3
MUSI 212	Applied Major Voice	-	2	2
MUSI 285	Music History	3	-	3
MUSI	Seminar	-	0	0
MUSI 206	Class Piano	-	1	1
MUSI 259	Vocal Diction	-	1	1
MUSI 262	Concert Band	-	1	1
MUSI 282	20 th Century Theory	-	3	3
MUSI 286	Music History II	-	3	3
MUSI	Seminar	=	0	0
		14	16	30

JUNIOR YEAR				
EDUC 315	Data Driven Instructional Design	3	-	3
SPED 403	Classroom Management in Educational Settings (FE)	-	3	3
EDUC 427	Reading in The Subject Area	3	-	3
GE	Science and Lab	4	4	8
MUSI 321	Applied Major Instrumental	2	-	2
MUSI 361	Marching Band	1	-	1
MUSI 362	Concert Band	-	1	1
GE	Health and Wellness	2	-	2
GEHI 114	Global Studies	-	3	3
MUSI	Seminar	0	-	0
MUSI 287	Elem. Conducting	-	2	2
MUSI 295	Woodwinds	-	1	1
MUSI 322	Applied Major Instrumental	-	2	2
MUSI 393	Music for Elementary Specialist	-	2	2
MUSI 296	Brass & Winds	1	-	1
SENIOR YEAR				
EDUC 424	Critical Issues in Education	2	-	2
MUSI 388	Advanced Conducting	2	-	2
MUSI 485	Orchestration	2	-	2
MUSI 491	Instrumental Methods	3	-	3
MUSI 499	Senior Recital	1	-	1
MUSI 461	Marching Band	1	-	1
GE	Literature	3	-	3
MUSI	Seminar	0	-	0
MUSI 478	Student Teaching in Music	-	3	3
MUSI 401	Student Teaching Seminar	-	3	3
EDUC 402	Student Teaching	-	9	9
		14	15	29

**IDST 100/101 are not counted in semester hours or toward graduation requirement

DEPARTMENT OF MUSIC, ART AND DESIGN
Vocal/Choral Music with a Minor in Secondary Education K-12

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
IDST 100, 101	Analytical Reading, Writing and Reasoning I, II	2**	2**	4
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Composition I, II	3	3	6
MATH 112, 113	Basic Math I, II	3	3	6
MUSI 105	Class Piano	2	-	2
MUSI 111	Applied Major Voice	1	-	1
MUSI 171	Concert Choir	1	-	1
MUSI 181	Basic Theory	3	-	3
MUSI 183	Sight/Sing/Ear Tr.	1	-	1
MUSI	Seminar	-	0	0
MUSI 106	Class Piano	-	2	2
MUSI 112	Applied Major Voice	-	1	1
MUSI 172	Concert Band	-	1	1
MUSI 182	Basic Theory	-	3	3
MUSI 184	Sight/Sing/Ear/Tr.	-	1	1
MUSI	Seminar	-	0	0
IDST 200	Digital Media in Teacher Education	-	3	3
		16	17	33

SOPHOMORE YEAR

EDUC 201, 202	Introduction to Teaching I, II	2	2	4
MUSC 211	Applied Major Voice	2	-	2
PSYC 212	Human Growth & Develop	3	-	3
MUSI 205	Class Piano	1	-	1
MUSI 253	Instr. Survey	1	-	1
MUSI 258	Vocal Diction	1	-	1
MUSI 271	Concert Choir	1	-	1
MUSI 281	Form and Analysis	-	3	3
MUSI 212	Applied Major Voice	-	2	2
MUSI 285	Music History	3	-	3
MUSI	Seminar	-	0	0
MUSI 206	Class Piano	-	1	1
MUSI 259	Vocal Diction	-	1	1
MUSI 272	Concert Choir	-	1	1
MUSI 282	20 th Century Theory	-	3	3
MUSI 286	Music History II	-	3	3
MUSI	Seminar	=	<u>0</u>	<u>0</u>
		14	16	30

JUNIOR YEAR			
EDUC 315	Data Driven Instructional Design	3	- 3
SPED 403	Classroom Management in Educational Settings (FE)	-	3 3
GE _____	Science & Lab	4	4 8
MUSI 311	Applied Maj. Voice	2	- 2
MUSI 371	Concert Choir	1	- 1
HPER	Wellness	2	- 2
GEHI 114	Global Studies	3	- 3
MUSI	Seminar	0	- 0
MUSI 287	Elem. Conducting	-	2 2
MUSI 372	Concert Choir	-	1 1
MUSI 312	Applied Maj. Voice	-	2 2
MUSI 393	Music for Elementary Specialist	-	2 2
MUSI ____	Seminar	-	<u>0 0</u>
		15	14 29
SENIOR YEAR			
EDUC 424	Critical Issues in Education	2	- 2
MUSI 389	Advanced Conducting	2	- 2
MUSI 471	Concert Choir	1	- 1
MUSI 493	Music for the Secondary Specialist	3	- 3
MUSI 499	Senior Recital	1	- 1
MUSI ____	Seminar	0	- 0
GE _____	Literature	3	- 3
EDUC 427	Reading in The Subject Area	3	- 3
MUSI 478	Student Teaching in Music	-	3 3
EDUC 401	Student Teaching Seminar	-	3 3
EDUC 402	Student Teaching	-	<u>9 9</u>
		15	15 30

****IDST 100/101 are not counted in semester hours or toward graduation requirement**

DEPARTMENT OF MUSIC, ART AND DESIGN
Bachelor of Arts in Music

		SEMESTER HOURS		
		1 ST	2 ND	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ENGL 110, 111	Composition I	3	3	6
GEMA 112, 113	Basic Math	3	3	6
FRST 101	Freshman Studies	2	-	2
MUSI 105, 106	Class Piano	1	1	2
MUSI _____	Applied Major	2	2	4
MUSI 181	Basic Theory	3	-	3
MUSI 182	Chromatic Harmony	-	3	3
MUSI 183, 184	Sightsinging Ear Training	1	1	2
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	<u>0</u>	<u>0</u>	<u>0</u>
		16	14	30
SOPHOMORE YEAR				
GE _____	Natural Science & Lab	4	4	8
GEHI 114	World Civilization	3	-	3
MUSI 205	Class Piano	1	-	1
MUSI 281	Form & Analysis	3	-	3
MUSI _____	Applied Major	2	2	4
MUSI _____	Ensemble	1	1	2
	Foreign Language Elective	3	3	6
MUSI _____	Seminar	0	0	0

MUSI 282	20 th Century Theory	-	3	3
MUSI 199	Music Appreciation	-	<u>3</u>	<u>3</u>
		17	16	33
JUNIOR YEAR				
GE _____	Literature	3	-	3
MUSI 285, 286	Music History	3	3	6
GE _____	Wellness	2	-	2
GE _____	Social Science	3	-	3
MUSI _____	Applied Major	2	2	4
MUSI _____	Ensemble	1	1	2
MUSI _____	Seminar	0	0	0
GE _____	Global Studies	-	3	3
GE _____	Humanities Elective	-	3	3
MUSI 287	Elementary Conducting	-	<u>2</u>	<u>2</u>
		14	14	28
SENIOR YEAR				
GEPI 140	Philosophy	3	-	3
ELECTIVE	Free Elective	3*	3*	6
MUSI _____	Applied Major	2	-	2
MUSI _____	Ensemble	1	-	1
MUSI _____	Music History Elective	2	-	2
	Non-Music Elective	3*	3*	6
MUSI _____	Seminar	0	0	0
MUSI _____	Music Elective	-	2	2
GEMU 480	Blacks in American Music	-	3	3*
MUSI _____	Senior Recital or Senior Thesis	-	<u>1</u>	<u>1</u>
		14	12	26

**Note: Any Music course in the BM Program can be used for Music electives or free electives in the BA Program*

DEPARTMENT OF MUSIC, ART AND DESIGN
Minor in Music

	Credit Hours
For Keyboard Performers	
MUSI 115 Voice Class	1
MUSI 116 Voice Class	1
MUSI 181 Basic Theory	3
MUSI 182 Chromatic Harmony	3
MUSI 183 Sightsinging Ear Training	1
MUSI 184 Sightsinging Ear Training	1
MUSI 199 Music Appreciation	3
MUSI 141 Applied Minor	1
MUSI 141 Applied Minor	1
MUSI 241 Applied Minor	1
MUSI 242 Applied Minor	1
MUSI ____ Ensemble	<u>1</u>
Total	18
For Voice, Band, Orchestral Performers	
MUSI 105 Class Piano*	1
MUSI 106 Class Piano*	1
MUSI 181 Basic Theory	3
MUSI 182 Chromatic Harmony	3
MUSI 183 Sightsinging Ear Training	1
MUSI 184 Sightsinging Ear Training	1
MUSI 199 Music Appreciation	3
MUSI 141 Applied Minor	1
MUSI 142 Applied Minor	1
MUSI 241 Applied Minor	1
MUSI 242 Applied Minor	1
MUSI Ensemble	<u>1</u>
	18

**Some consideration is made above for either 1) keyboard performers or 2) voice, band/orchestral performers. Student registered in the Applied Minor Program as a keyboard performer will be required to enroll in MUSI 115 and MUSI 116, and those performing voice or band/orchestral instrument will be required to enroll in MUSI 105 and MUSI 106.*

***The choice here can be made from a variety of instrumental or vocal ensembles offered in the department.*

The requested program would have eighteen credits, keeping in line with all of the other minor programs in the Humanities on campus, e.g., French, German, Philosophy, and Spanish all have 18 credits in their Minor Programs.

An audition will be required of all students prior to acceptance in this course of study. A recital is not required at the end of the above program of study. A performance jury is required at the end of every semester of Applied Minor beginning with MUSI 142.

**DEPARTMENT OF MUSIC, ART AND DESIGN
ART AND DESIGN PROGRAM**

Chairperson: *Thomas Larose*, P.O. Box 9026, 216 Harris Hall, Telephone: 804.524.5188
Associate Professor: *Thomas Larose, Brenda Mveng-Whitted*
Assistant Professor: *Evelyn Davis, Shirley Dort, Lawrence Hawthorne*

Description of the Program

The Art and Design program, accredited by the National Association of Schools of Art and Design, offers courses leading to a Bachelor of Fine 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 two-dimensional and three-dimensional design, color theory, drawing, and computer fundamentals, are designed to prepare students to begin their advanced concentration coursework in the sophomore year.

Students in the program can decide from four primary career paths: Studio Arts, Animation, Graphic Design, or Web Design. The Studio Arts curriculum prepares students for traditional artistic careers in the disciplines of drawing, painting, printmaking, sculpture, and ceramics. As they follow their specific media through four 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 through the use of new media tools, techniques, and concepts, and become the artistic leaders of the 21st century.

The Animation program teaches students the principles and skills of animating in both traditional drawing and computerized formats. The curriculum is designed to prepare students to enter into graduate programs of study in animation, and/or entry-level apprentice positions within the industry.

In the Graphic Design curriculum, students follow a structured curriculum that gives them all of the knowledge and skills necessary to compete in today’s commercial arts marketplace. The program prepares students for careers as commercial artists in such areas as illustration, print and package design.

The Web Design program places emphasis on the aesthetic aspects of creating web sites, along with the practical components of digital information transfer. The curriculum prepares students to enter the workforce as skilled designers of web sites for a wide variety of customers, from personal pages to international businesses.

Acceptance into the Art CORE Program is contingent on:

- 1) acceptance into the University according to its criteria for incoming freshmen or transfer students;
- 2) a minimum of 2.0 GPA with good standing in the University for current VSU students;
- 3) display of artistic knowledge and ability through either a) the successful completion of two (2) art classes at a high school, junior college, or continuing education level, or b) submission of two (2) letters of recommendation by artists and/or art educators.

Advancement to the specific concentrations (Studio, Animation, Graphic Design, Web Design) in the Sophomore year is dependent on a review of the student’s portfolio of art work, along with the successful completion of all pre-requisite courses, in proper sequence, with a minimum of a ‘C’ grade.

Mission of the Program

The mission of the Art and Design Program 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.

Goals of the Program

- 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 (theme) 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 as related to their major fields of practice to professionals and lay persons alike.

Majors & Minors

Bachelor of Fine Art in Visual Communication Art and Design with Concentration in:

- Studio Art
- Animation
- Graphic Design
- Web Design

Studio Art Minor.

To be eligible, a student must first complete, in sequential order,

ARTS 101 (Drawing I)
 ARTS 102 (Drawing II) **or** ARTS 202 (Life Drawing)
 ARTS 103 (2D Design)
 ARTS 104 (Color Theory) **or** ARTS 207 (3D Design)

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.

Art History Minor.

To be eligible, a student must first complete ARTS 301 and ARTS 302 (World Art Survey I and II) 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.

Course Descriptions

ART AND DESIGN

FOUNDATION (CORE) COURSES

ARTS 101 DRAWING I - 3 semester hours

F

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

Sp

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

F

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

Sp

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, ARTS 103

ARTS 108 COMPUTERS FOR ARTISTS - 3 semester hours **Sp**

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 **F**

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 101, 102 and 103

ARTS 207 THREE DIMENSIONAL DESIGN - 3 semester hours **Sp**

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 101, ARTS 102

ARTS 209 COGNITIVE DEVELOPMENT FOR THE ARTIST - 3 semester hours **F**

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 101, 102, 103, and 104

STUDIO ART COURSES**ARTS 203 PRINTMAKING I - 3 semester hours** **F**

Fundamentals of graphic expressions employed in woodcuts, etchings, lithography and other vehicles for graphic reproductions. Course includes weekly critiques and discussions.

Prerequisites: ARTS 101, 102

ARTS 204 PRINTMAKING II - 3 semester hours **Sp**

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 **Sp**

Introduction to the fundamentals of transparent and opaque watercolor painting techniques.

Prerequisites: ARTS 102/VCAD 204

ARTS 208 PERSPECTIVE DRAWING - 3 semester hours **F**

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 101, 102, and 103

ARTS 212 LIFE DRAWING II - 3 semester hours **Sp**

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 216 2D METHODS AND MATERIALS - 3 semester hours **Sp**

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 101, 102, 103, and 104

ARTS 217 3D METHODS AND MATERIALS - 3 semester hours **Sp**

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 101, 102, 103, and 104

ARTS 303 SCULPTURE: WOOD - 3 semester hours **F, 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 MAKING - 3 semester hours**Sp, Even**

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 303

ARTS 305 PAINTING: STILL LIFE - 3 semester hours**F, Odd**

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 101, 102, 103, 104 or permission from the instructor.

ARTS 306 PAINTING: LANDSCAPE - 3 semester hours**Sp, Even**

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 305.

ARTS 309 CERAMICS: HAND BUILDING - 3 semester hours**F, Odd**

Introduction to 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**Sp, Even**

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 309

ARTS 406 SENIOR THESIS PROJECT - 3 semester hours**Sp**

Examination of the business aspects of the art world, including securing and arranging exhibitions. Culminates in a one-person show at a site in the community.

Prerequisites: ARTS 303 or ARTS 306

ARTS 409 CERAMICS: MOLD MAKING - 3 semester hours**F, Even**

Introduction to 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**Sp, Odd**

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 409

ARTS 413 SCULPTURE: METAL - 3 semester hours**F, 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 semester hours**Sp, Odd**

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 413

ARTS 415 PAINTING: FIGURE - 3 semester hours**F, Even**

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 101, 102, 103, 104 or permission from the instructor.

ARTS 416 PAINTING: MIXED MEDIA - 3 semester hours**Sp, 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 415

ANIMATION COURSES

- ARTS 215 INTRODUCTION TO ANIMATION - 3 semester hours** **F**
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 hours** **Sp**
Introduction to the various software, hardware, and equipment used in the creation of animation.
Prerequisite: ARTS 108, 202, and 209
- ARTS 315 SOUND FOR ANIMATION - 3 semester hours** **F**
Examination of the basic theory and methodology of sound design. Project emphasis is on the creation of sound for use in animation.
Prerequisite: ARTS 215, 225
- ARTS 325 ANIMATION BASIC I - 3 semester hours** **F**
Examination of the principles that govern animation. Student will explore these principles through various exercises and projects.
Prerequisite: ARTS 215, 225
- ARTS 335 ANIMATION BASIC II - 3 semester hours** **Sp**
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 425 ANIMATION BASIC III - 3 semester hours** **F**
Examination of experimental animation. Exploration of any available methodology/technology for animation exercises and projects.
Prerequisite: ARTS 330
- ARTS 330 ANIMATION I - 3 semester hours** **Sp**
Examination of animation components for the identification of individual strengths in animation methodology through the completion of animation exercises and projects.
Prerequisite: ARTS 315, 325
- ARTS 430 ANIMATION II - 3 semester hours** **F**
Writing and production of individual animation(s) in preparation for senior studio.
Prerequisite: ARTS 335
- ARTS 435 ANIMATION TEAM - 3 semester hours** **Sp**
Examination of animation production management. Students will take turns in different roles from pre-production to post-production of animation projects.
Prerequisite: ARTS 425, 430
- ARTS 440 SENIOR ANIMATION STUDIO - 6 semester hours** **Sp**
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, 430

ART HISTORY COURSES

- ARTS 301 F 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** **Sp**
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 20th CENTURY ART - 3 semester hours** **Sp**
Examination of the historical styles and artists beginning with the 20th Century, 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 **Sp**
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 405 SURVEY OF AFRICAN ART - 3 semester hours **F**
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.

VCAD 200 GRAPHIC DESIGN HISTORY - 3 semester hours **F**
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 **F**
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, 108

VCAD 202 TYPOGRAPHY II - 3 semester hours **Sp**
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, 203

VCAD 203 COMPUTER GRAPHICS I - 3 semester hours **F**
An introductory and foundation course on computer graphics. Basic operation of computer graphic systems and software procedures. For Graphic Design majors only.
Prerequisite: ARTS 102, 108

VCAD 205 COMPUTER GRAPHICS II - 3 semester hours **Sp**
An advanced course in computer graphics emphasizing the creation of designs and the use of interface techniques. Advanced techniques for creating digital images using industry standard technology. Emphasis on creating designs for experimental and communication purposes. For Graphic Design majors only
Prerequisites: VCAD 201, 203

VCAD 206 DIGITAL PHOTOGRAPHY - 3 semester hours **F**
A digital approach to photography as a communication tool. Discussion of photography fundamentals Introduction to photo-correction software and techniques.
Prerequisites: ARTS 102, 108

VCAD 300 ILLUSTRATION I - 3 semester hours **F, Even**
Emphasis on the fundamentals of rendering images while exploring various media and techniques. For Graphic Design majors only.
Prerequisites: VCAD 202, 205

VCAD 301 SILKSCREEN PROCEDURES - 3 semester hours **Sp**
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 PRODUCTION I - 3 semester hours **F, Odd**
Introduction to the printing process. Examination of materials and techniques. Exercises in file preparation and professional work flow via professional design studio projects. Discussion of the process of establishing client and vendor relationships. For Graphic Design majors only.
Prerequisites: VCAD 202, 205

VCAD 310 ILLUSTRATION II - 3 semester hours **Sp, Odd**

Creating illustrations for editorial and business communications using traditional and digital media. For Graphic Design majors only.

Prerequisites: VCAD 300, 302

VCAD 312 PRINT PRODUCTION II - 3 semester hours **Sp, Even**

Designing print media using experimental formats, as well as special multi-media materials and techniques. For Graphic Design majors only.

Prerequisites: VCAD 300, 302

VCAD 315 PUBLICATION DESIGN - 3 semester hours **Sp, Even**

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 Graphic Design majors only.

Prerequisites: VCAD 300, 302

VCAD 415 PACKAGE DESIGN - 3 semester hours **F, Even**

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 Graphic Design majors only.

Prerequisites: VCAD 315

VCAD 416 ADVERTISING DESIGN - 3 semester hours **Sp, Odd**

An introduction to advertising fundamentals. Development and implementation of strategic design concepts across multi-vehicle marketing materials. For Graphic Design majors only.

Prerequisites: VCAD 415

VCAD 430 PORTFOLIO - 3 semester hours **Sp**

Exploring the various methodologies for creating a professional portfolio and resume. For Art & Design majors only.

Prerequisites: One of the following: VCAD 305, ARTS 304, ARTS 306, or ARTS 310

VCAD 450 INTERNSHIP - 3 semester hours **F**

Pragmatic work experience under the supervision of qualified professional practitioners. For Art & Design majors only.

Prerequisites: VCAD 305 OR VCAD 315

VCAD 451 SENIOR THESIS PROJECT - 3 semester hours **Sp**

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: VCAD 401

WEB DESIGN COURSES**VCAD 210 WEB GRAPHICS I - 3 semester hours** **F**

Introduction to the role of the computer in visual communication design, with training in the types of software and peripherals that produce painting-type (raster) and structured-type (vector) graphics for use on Internet web sites.

Prerequisite: ARTS 108

VCAD 211 WEB GRAPHICS II - 3 semester hours **Sp**

Advanced instruction in the types of software and peripherals that produce painting-type (raster) and structured-type (vector) graphics for use on Internet web sites.

Prerequisite: VCAD 210

VCAD 304 HTML - 3 semester hours **F**

Introduction to language and structure of HTML documents, markup techniques, and validation. Topics include text formatting, lists, tables, META tags, and CSS.

Prerequisite: VCAD 211

VCAD 305 WEB DESIGN I - 3 semester hours **Sp**

Introduction to the planning and development of useful, aesthetically appealing web sites 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**Sp**

Introduction to the effective use of animations in web site design and the graphics software used to make them.

Prerequisite: VCAD 211

VCAD 401 WEB DESIGN II - 3 semester hours**F**

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 411 WEB DESIGN III - 3 semester hours**Sp**

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

GENERAL EDUCATION COURSES (NON-MAJORS)**ARTS 199 ART APPRECIATION - 3 credit hours****F, Sp**

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**F, Sp**

Introduction to the functional and decorative handicrafts through a variety of media.

ART AND DESIGN PROGRAM
BFA in Visual Communication Arts & Design – Studio Concentration

		Semester Hours		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ARTS 101, 102	Drawing I, II	3	3	6
ARTS 103	2D Design	3	-	3
ARTS 199	Art Appreciation	3	-	3
ENGL 110	Composition I	3	-	3
GEMA 112, 113	Basic Math I, II	3	3	6
FRST 101	Freshman Studies	2	-	2
ARTS 104	Color Theory	-	3	3
ARTS 108	Computers for Artists	-	3	3
ENGL 111	Composition II	-	3	3
HYPERS 170	Wellness/Health	-	2	2
		17	17	34
SOPHOMORE YEAR				
ARTS 202	Life Drawing I	3	-	3
ARTS 208	Perspective Drawings	3	-	3
ARTS 209	Cognitive Development for Artist	3	-	3
ARTS 217	3D Methods and Materials	3	-	3
GEBI 116	Biology and Lab	4	-	4
ARTS 212	Life Drawings II	-	3	3
ARTS 207	3D Design	-	3	3
ARTS 216	2D Methods and Materials	-	3	3
ENGL _____	Literature Elective	-	3	3
_____	Science and Lab	-	4	4
		16	16	32
JUNIOR YEAR				
ARTS 301, 302	World Art Survey I, II	3	3	6
ARTS _____	Paint/Sculpt/Ceramics	3	-	3
ARTS _____	Restricted Elective	3	-	3
GEHI 114	World History I	3	-	3
_____	Elective	3	-	3
ARTS _____	Paint/Sculpt/Ceramics	-	3	3
ARTS _____	Restricted Elective	-	3	3
GEHI 115	World History II	-	3	3
_____	Elective	-	3	3
		15	15	30
SENIOR YEAR				
ARTS _____	Art History Elective	3	-	3
ARTS _____	Paint/Sculpt/Ceramics	3	-	3
ARTS _____	Restricted Elective	3	-	3
_____	Social Sciences Elective	3	-	3
_____	Elective	3	-	3
ARTS _____	Art History Elective	-	3	3
ARTS _____	Paint/Sculpt/Ceramics	-	3	3
ARTS 406	Senior Thesis	-	3	3
VCAD 430	Portfolio	-	3	3
		15	12	27

ART AND DESIGN PROGRAM
BFA in Visual Communication Arts and Design – Animation Concentration

		Semester Hours		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ARTS 101, 102	Drawing I	3	3	6
ARTS 103	2D Design	3	-	3
ARTS 199	Art Appreciation	3	-	3
ENGL 110, 111	Composition I, II	3	3	6
GEMA 112, 113	Basic Math I, II	3	3	6
FRST 101	Freshman Studies	2	-	2
ARTS 104	Color Theory	-	3	3
ARTS 108	Computers for Artist	-	3	3
HPER 170	Wellness/Health	-	<u>2</u>	<u>2</u>
				34
SOPHOMORE YEAR				
ARTS 202	Life Drawing I	3	-	3
ARTS 208	Perspective Drawing	3	-	3
ARTS 209	Cognitive Development for the Artist	3	-	3
ARTS 215	Intro. to Animation	3	-	3
GEBI 116	Biology and Lab	4	-	4
ARTS 212	Life Drawing II	-	3	3
ARTS 207	3D Design	-	3	3
ARTS 225	Electronic Animation	-	3	3
ENGL _____	Literature Elective	-	3	3
_____	Science and Lab	-	<u>4</u>	<u>4</u>
		16	16	32
JUNIOR YEAR				
ARTS 301, 302	World Art Survey I, II	3	3	6
ARTS 325	Animation Basic I	3	-	3
ARTS 315	Sound for Animation	3	-	3
GEHI 114, 115	World History I, II	3	3	6
_____	Elective	3	-	3
ARTS 335	Animation Basic II	-	3	3
ARTS 330	Animation I	-	3	3
_____	Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ARTS _____	Art History Elective	3	-	3
ARTS 425	Animation Basic III	3	-	3
ARTS 430	Animation II	3	-	3
_____	Social Science Elective	3	-	3
_____	Elective	3	-	3
ARTS _____	Art History Elective	-	3	3
ARTS 435	Animation Team	-	3	3
ARTS 440	Senior Animation Studio	-	<u>6</u>	<u>6</u>
		15	12	27

ART AND DESIGN PROGRAM
BFA in Visual Communication Arts & Design – Graphic Design Concentration

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ARTS 101, 102	Drawing I, II	3	3	6
ARTS 103	2D Design	3	-	3
ARTS 199	Art Appreciation	3	-	3
ENGL 110, 111	Composition I, II	3	3	6
GEMA 112, 113	Basic Math I, II	3	3	6
FRST 101	Freshman Studies	2	-	2
ARTS 104	Color Theory	-	3	3
ARTS 108	Computers for Artists	-	3	3
HPER 170	Wellness/Health	-	<u>2</u>	<u>2</u>
		17	17	34
SOPHOMORE YEAR				
ARTS 202	Life Drawing I	3	-	3
ARTS 209	Cognitive Development for the Artist	3	-	3
VCAD 201	Typography I	3	-	3
VCAD 203	Computer Graphics I	3	-	3
VCAD 206	Digital Photography	3	-	3
ARTS 207	3D Design	-	3	3
VCAD 202	Typography II	-	3	3
VCAD 205	Computer Graphics II	-	3	3
VCAD 200	Graphic Design History	-	3	3
GEBI 116	Biology and Lab	-	<u>4</u>	<u>4</u>
		15	16	31
JUNIOR YEAR				
ARTS 301, 302	World Art Survey I, II	3	-	3
VCAD 300	Illustration I	3	-	3
VCAD 302	Print Production I	3	-	3
GEHI 114, 115	World History I, II	3	3	6
	Science and Lab	4	-	4
VCAD 310	Illustration II	-	3	3
VCAD 312	Print Production II	-	3	3
VCAD 315	Publication Design	-	<u>3</u>	<u>3</u>
		16	12	28
SENIOR YEAR				
VCAD 305	Web Design I	3	-	3
VCAD 415	Package Design	3	-	3
VCAD 450	Internship	3	-	3
ENGL _____	Literature Elective	3	-	3
	Social Science Elective	3	-	3
ARTS 403	African American Art	-	3	3
VCAD 416	Advertising Design	-	3	3
VCAD 430	Portfolio	-	3	3
VCAD 451	Senior Thesis Project	-	<u>3</u>	<u>3</u>
		15	12	27

ART AND DESIGN PROGRAM
BFA in Visual Communication Arts & Design – Web Design Concentration

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
ARTS 101, 102	Drawing I, II	3	3	6
ARTS 103	2D Design	3	-	3
ARTS 199	Art Appreciation	3	-	3
ENGL 110, 111	Composition I, II	3	3	6
GEMA 112, 113	Basic Math I, II	3	3	6
FRST 101	Freshman Studies	2	-	2
ARTS 104	Color Theory	-	3	3
ARTS 108	Computers for Artists	-	3	3
HPER 170	Wellness/Health	-	<u>2</u>	<u>2</u>
		17	17	34
SOPHOMORE YEAR				
ARTS 202	Life Drawing I	3	-	3
ARTS 208	Perspective Drawing	3	-	3
ARTS 209	Cognitive Development for the Artist	3	-	3
VCAD 210	Web Graphics I	3	-	3
GEBI 116	Biology and Lab	4	-	4
ARTS 212	Life Drawing II	-	3	3
ARTS 207	3D Design	-	3	3
VCAD 211	Web Graphics II	-	3	3
ENGL _____	Literature Elective	-	3	3
_____	Science and Lab	-	<u>4</u>	<u>4</u>
		16	16	32
JUNIOR YEAR				
ARTS 301, 302	World Art Survey I, II	3	-	3
VCAD 206	Digital Photography	3	-	3
VCAD 304	HTML	3	-	3
CISY 155	Introduction to Information Systems	3	-	3
GEHI 114, 115	World History I, II	3	3	6
ARTS 302	World Art Survey II	-	3	3
VCAD 305	Web Design I	-	3	3
VCAD 314	Web Animation	-	3	3
CISY 330	Intro to JAVA Programming	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
ARTS _____	Art History Elective	3	-	3
VCAD 401	Web Design II	3	-	3
VCAD 450	Internship	3	-	3
_____	Social Sciences Elective	3	-	3
_____	Elective	3	-	3
ARTS _____	Art History Elective	-	3	3
VCAD 411	Web Design III	-	3	3
VCAD 430	Portfolio	-	3	3
VCAD 451	Senior Thesis Project	-	3	3
_____	Elective	-	<u>3</u>	<u>3</u>
		15	15	30

**THE DEPARTMENT OF POLITICAL SCIENCE AND PUBLIC
ADMINISTRATION**

Chairperson: Wallace McMichael, Box 9065, Room 100 Colson Hall, Phone: 524-5037
Associate Professor: Chaya Jain, Earl McClenney
Assistant Professors: Gary Baker, Theodore Brown, James Phillips

Description of the Department

The Department of Political Science and Public Administration prepares students for entry into the various careers in the public service. Faculty members promote and maintain educational quality to address the common core courses and specializations for pursuing graduate and professional education in political science, international relations, public policy and administration. Through strong senior thesis and internship programs, students participate in policy analysis of contemporary problems and hands-on challenges of public management.

Majoring in political science can lead to a career as a lawyer, diplomat, state legislator, pollster, campaign manager, research scholar, newspaper reporter, or editorial writer. Majoring in public administration can lead to a rewarding career as a public servant who designs, implements, manages, or evaluates public policies on topics as varied as health, social services, transportation, energy, education or waste management in local, state, national governments, or international agencies.

The technical competencies fostered in the department's curricula and extra-curricula activities include being able to think carefully and critically about important questions, writing and speaking well, acquiring knowledge for grounding problems in a political, social, economic, or legal context, and demonstrating the ability to collect information to analyze problems or to make a difference in the quality of people's lives. Through internships in which students are paired with professionals who prosecute cases, defend clients in court, shape environmental regulations, manage money, people and things, draft bills, or lobby for the rights of children, students become aware that working in politics or public administration is anything but boring. Through participation in the departmental clubs, honor society, and professional organizations, students work in groups and participate in community, civic life, and public affairs.

Mission of the Department

The mission of the political science major is to offer education that emphasizes scholarship, the pursuit of knowledge through research and instruction, and the development of a critical understanding of government, both nationally and internationally. The political science faculty offer a program of study leading to the Bachelor of Arts (B.A.) degree in political science.

The mission of the public administration major is to prepare men and women for active service and employment in national, state and local agencies in the executive, legislative and judicial branches of government. The public administration faculty offer a program of study leading to the Bachelor of Science (B.S.) degree in public administration.

Public administration is the field of study and practice dealing with the art and science of managing and administering the functions of the government in the executive, legislative and judicial branches of the federal, state and local governments. The emphasis is on academic excellence in the preparation of students for entry-level positions in government employment, non-profit agencies and businesses. The department encourages all students, regardless of race, creed or color, to demand the best of themselves so that they may serve those who are less fortunate.

Students are exposed to a rigid series of structured courses in liberal arts, public budgeting and finance, intergovernmental relations, organizational theory and development, public policy, personnel administration, administrative law, land use law and environmental law. Throughout the program students are encouraged to explore and use the resources of the University and state local and federal agencies to integrate theory with practice. An intensive 192-hour executive agency internship is required.

General Objectives of the Department are as follows:

- 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 prepare students for entry-level positions in managing and administering the human resources, budgeting and financial processes, and information systems functions of the various levels of governments and of nonprofit agencies.
- to provide opportunities for students to develop and test empirical hypotheses, use statistical research methods, and communicate results using multi-media presentations in capstone courses and internships,
- to acquaint students with the skills to enable them to act ethically and effectively in the institutions and processes for public sector agencies;

Programs in the Department

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 student understanding of national and international issues, and increase the range of career and professional options. The Minor Program is especially recommended for majors in Management, Economics, History, International Studies, Sociology, Public Administration, and Education. The program consists of 18 credit hours; twelve credit hours in core courses, and six credit hours in political science electives at the 300 level or above.

The Legal Studies Program

The Legal Studies Program, a joint effort with the History Department, consists of 24 credit hours of course work that 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 program gives the student the flexibility of concentrating in legal studies while at the same time pursuing a degree in a traditional discipline.

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.

Course Descriptions

POLITICAL SCIENCE

- GEPO 150 UNITED STATES GOVERNMENT - 3 semester hours** **F, Sp**
An introductory course in the study of the American political system.
- POLH102 STATE AND LOCAL GOVERNMENT -3 semester hours** **F, Sp**
A study of the structure, operations, and functions of the state and local institutions of government.
- POLI 201 POLITICAL PHILOSOPHY - 3 semester hours**
A study of the development of political thought from the Greek period through the Middle Ages.
- POLI 202 CONTEMPORARY POLITICAL THOUGHT - 3 semester hours** **F**
A study of political thought from the end of the Middle Ages to the present.
- POLI 203 GOVERNMENT AND POLITICS IN RUSSIA -3 semester hours**
A study of the theory, organization, and administrative processes in the Russian political system.
- POLI 204 MODERN AFRICA - 3 semester hours**
A political and historical analysis of the problems of nation-states on the African continent, from 1945 to the present.

POLI 205 GOVERNMENT AND POLITICS OF DEVELOPING COUNTRIES - 3 semester hours

A study of the political and economic problems of underdeveloped countries in the Third World.

POLI 206 GOVERNMENT AND POLITICS OF CHINA - 3 semester hours

A study of the political ideologies, institutions, and decision-making processes in the People's Republic of China.

POLI 207 INTERNATIONAL RELATIONS - 3 semester hours

A study of the political, social, and economic dynamics of the present international system.

F**POLI 208 INTERNATIONAL LAW AND ORGANIZATION - 3 semester hours**

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 semester hours

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.

Sp**POLI 210 COMPARATIVE GOVERNMENT -3 semester hours**

A comparative analysis of nation-states within the contemporary international system.

Sp**POLI 301 THE SCOPE AND METHODS OF POLITICAL SCIENCE - 3 semester hours**

Inquiry into the methodology, epistemology, and techniques of the discipline of political science.

F**POLI 302 THE TECHNIQUES OF POLITICAL ANALYSIS - 3 semester hours**

A study of the research methodologies and techniques used in the study of political problems.

Sp

Prerequisite: POLI 301 The Scope and Methods of Political Science

POLI 303 POLITICAL PARTIES AND PRESSURE GROUPS - 3 semester hours

A study of political parties and interest groups and their impact on public policy.

POLI 304 AMERICAN CONSTITUTIONAL LAW - 3 semester hours

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.

F**POLI 305 SEMINAR IN BLACK POLITICS - 3 semester hours**

A study of the political impact of African-Americans in local, state, and national policy issues.

Sp**POLI 306 SEMINAR IN URBAN PROBLEMS - 3 semester hours**

A study of the political, social, and economic problems affecting metropolitan communities.

F**POLI 307 AMERICAN FOREIGN POLICY - 3 semester hours**

A study of the formation, implementation, and implications of American foreign policy.

POLI 308 POLIMETRICS I - 3 semester hours

A study of statistical approaches in political science research, with emphasis on survey research and data analysis using the SPSS statistical analysis program.

F

**Prerequisites: GEMA 112 Basic Mathematics; GEMA 113 Basic Mathematics;
STAT 210 Elementary Statistics I**

POLI 309 POLIMETRICS II - 3 semester hours

A study of statistical approaches in political science research. Advance data analysis techniques, including univariate, bivariate, and multivariate analysis, and the testing of hypotheses.

Sp

Prerequisites: POLI 308 Polimetrics I

POLI 310 POLITICAL SCIENCE INTERNSHIP - 6 semester hours

Students provided with the opportunity to experience the workings of government, through placement in internships with various legislators, and public and private agencies.

Sp, Su

Prerequisite: Minimum sophomore status, or approval of Department Chairperson

POLI 315 THE CIVIL RIGHTS MOVEMENT - 3 semester hours

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 semester hours

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 semester hours

F

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 semester hours

Sp

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 RESEARCH/STUDY - 3 semester hours

Sp

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 AND CIVIL LIBERTIES - 3 semester hours

Sp

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 semester hours

A study of the President's role in formulating public policy through interaction with domestic and foreign political actors.

POLI 412 THE POLITICAL ECONOMY OF SOUTHERN AFRICA - 3 semester hours

A study of the political and economic forces which shape the politics of nation-states in southern Africa.

POLI 413 THE POLITICS OF MULTINATIONAL CORPORATIONS IN THE THIRD WORLD - 3 semester hours

A study of the impact of multinational corporations on the politics of nation-states in the Third World.

POLI 414 MARXIST POLITICAL PHILOSOPHY - 3 semester hours

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 101 FOUNDATIONS OF INTERGOVERNMENTAL RELATIONS - 3 semester hours**

F

An introductory study of the basic structure of American federalism and the intergovernment context of the work of public managers in national, state and local governments.

PADM 103 THE ADMINISTRATION OF SUBNATIONAL GOVERNMENTS - 3 semester hours

Sp

A survey of the processes and institutions through which policy is formulated, implemented, and evaluated at the regional, state and local levels of government, special attention given to substate regionalism for planning and public service delivery, interstate compacts among government for functional purposes, and special purpose districts.

PADM 207 LEGISLATIVE PROCESSES - 3 semester hours

Sp

A detailed analysis of the structure and organization of the federal Congress. A review of the ways in which public issues become legislation and the interrelationships between federal, state and local legislative processes.

PADM 211 GOVERNMENTAL MANAGEMENT & DECISION-MAKING - 3 semester hours

F

A detailed study of the management and operations of modern public agencies with emphasis on the organization of service delivery structures, decision-making theory, history, and practice.

PADM 301 PUBLIC POLICY ANALYSIS - 3 semester hours

Sp

A summary of policy development models with emphasis on understanding the complex interrelationships of public and private systems. A detailed analysis of specific issues is a regular part of class work, including developing critical thinking skills.

- PADM 305 INTRODUCTION TO PUBLIC SECTOR BUDGETING - 3 semester hours** **Sp**
Identification, analysis and discussion of the various approaches to public sector budgeting and budget processes are covered. Emphasis on developing a theoretical and practical knowledge of budgeting techniques applied at the national, state and local levels of government.
- PADM 307 ADMINISTRATIVE LAW - 3 semester hours** **Sp**
Overview of the American public law systems and lawmaking processes at each level of government. Students undertake intensive case study in the areas of due process, administrative law, regulatory law, sovereignty and judicial review.
- PADM 309 PUBLIC INSTITUTIONS & ORGANIZATIONAL ENVIRONMENT - 3 semester hours** **F**
Students will explore and analyze basic concepts of developing institutional responses to public sector programs and problems. Emphasis on various bureaucratic models and personal behavior within organizations.
- PADM 401 ENERGY AND ENVIRONMENTAL LAW AND ADMINISTRATION - 3 semester hours** **Sp**
A study of the management of energy and environmental issues in an intergovernmental context; an analysis of the political, social and economic impact of energy and environmental policy with special emphasis given to legislative, executive, judicial, and administrative actions to establish and implement policies on natural resources and waste disposal.
- PADM 403 LAND USE LAW AND POLICY - 3 semester hours** **Sp**
A summary of the law and practice relative to State planning, zoning and regulatory practices. A review of federal law and national agency administration of federal lands, internal navigable waters, solid and liquid waste disposal, hazardous materials disposal and the impact upon state and local government; students must have taken PADM 307. **Prerequisite: Permission of the instructor required**
- PADM 404 PROJECT MANAGEMENT - 3 semester hours** **Sp**
Detailed consideration of various work scheduling and resource management techniques with emphasis on Program Evaluation and Review Techniques (PERT). A study of various functional area models for program planning, evaluation, design, development and integration. Use of computer software programs in project management is required.
- PADM 405 ADVANCED PUBLIC PERSONNEL ADMINISTRATION - 3 semester hours** **F**
A Comprehensive review of wage and salary administration techniques, position classification, merit systems, EEO programs, training and evaluation, and labor relations in the public sector. Emphasis on understanding the role of the employee and employer in accomplishing public program goals.
- PADM 406 ADVANCED PUBLIC SECTOR BUDGETING - 3 semester hours** **Sp**
A detailed examination of governmental revenue and expenditure systems. Emphasis will be placed on governmental accounting, reporting, productivity analysis, auditing, and the "how to" of budget preparation at the local, state, and national levels.
- PADM 408 INTERN PLACEMENT - 6 semester hours** **F, Su**
Students are assigned to a federal, state or local agency for practical on-the-job experience.
- PADM 410 GRANTS MANAGEMENT - 3 semester hours** **F**
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.
- PADM 411 SENIOR SEMINAR I - 3 semester hours** **F**
Senior students are required to select a current public policy or public administration issue, undertake a detailed and comprehensive analysis, and demonstrate a thorough integration of the courses taken and skills learned.
- PADM 412 SENIOR SEMINAR II - 3 semester hours** **Sp**
A continuation of PADM 411 with emphasis on writing, editing and completing the senior thesis.

**DEPARTMENT OF POLITICAL SCIENCE
AND PUBLIC ADMINISTRATION
Political Science
Bachelor of Arts Degree**

		SEMESTER HOURS		
		1st Sem	2nd Sem	Total Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Composition I, II	3	3	6
HIST 122, 123	United States History I, II	3	3	6
MATH 112, 113	Basic Math I, II	3	3	6
POLI 150	United States Government	3	-	3
POLI 102	State & Local Government	-	3	3
GE	Natural Science and Lab	-	<u>4</u>	<u>4</u>
		14	16	30
SOPHOMORE YEAR				
PHIL 140	Introduction to Philosophy	3	-	3
PSYC 124	Introduction Psychology	3	-	3
HPER 170	Wellness Course (GE Menu)	2	-	2
ENGL 202	Intro African-American Literature	3	-	3
POLI 202	Contemporary Political Thought	3	-	3
POLI 210	Comparative Government	-	3	3
STAT 210	Elementary Statistics	-	3	3
GE	Humanities Elective	3	-	3
GE	Technology Elective	-	3	3
GE	Natural Science and Lab	-	4	4
	Unrestrictive Elective	-	<u>3</u>	<u>3</u>
		17	16	33
JUNIOR YEAR				
ECON 210	Principles of Microeconomics	3	-	3
ECON 211	Principles of Macroeconomics	-	3	3
POLI 301	Scope & Methods of Political Science	3	-	3
POLI 302	Techniques of Political Analysis	-	3	3
POLI 306	Seminar in Urban Problems	3	-	3
POLI 308, 309	Polimetric I, II	3	3	6
POLI	Restrictive Elective	3	3	6
GE	Humanities Elective	-	<u>3</u>	<u>3</u>
		15	15	30
SENIOR YEAR				
POLI 403	Senior Thesis	3	-	3
POLI 404	Senior Seminar	-	3	3
POLI	Restrictive Electives	6	6	12
	Unrestrictive Electives	<u>6</u>	<u>3</u>	<u>9</u>
		15	12	27

**DEPARTMENT OF POLITICAL SCIENCE
AND PUBLIC ADMINISTRATION
Public Administration
Bachelor of Science Degree**

		SEMESTER HOURS		
		1st	2nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Composition I, II	3	3	6
HIST 122	United States History I	3	-	3
MATH 112, 113	Basic Math I, II	3	3	6
HPER 170	Health/Wellness	2	-	2
PADM 101	Foundation of Intergovernmental Relations	3	-	3
PADM 103	Administration of Subnational Governments	-	3	3
CISY 155	Introduction Computer Science	-	3	3
GEPS 124	Introduction to Psychology	-	<u>3</u>	<u>3</u>
		16	15	31
SOPHOMORE YEAR				
PHIL 140	Introduction to Philosophy	3	-	3
PADM 211	Governmental Management and Decision-Making	3	-	3
ENGL 202	Into African-American Literature	3	-	3
GE	Natural Science and Lab	4	4	8
CISY	Computer Science (200 level or higher)	3	-	3
PADM 207	Legislative Processes	-	3	3
ECON 210	Principles of Microeconomics	-	3	3
PADM 301	Policy Analysis	-	3	3
PADM 305	Introduction to Public Sector Budgeting	-	<u>3</u>	<u>3</u>
		16	16	32
JUNIOR YEAR				
ECON 211	Principles of Macroeconomics	3	-	3
STAT 210	Elementary Statistics	3	-	3
PADM 309	Public Institutions and Organizational Environment	3	-	3
GEEN 310	Advanced Communication Skills	3	-	3
GE	Foreign Language GE Menu	3	3	6
PADM 307	Administrative Law	-	3	3
ELECTIVE	Restrictive Elective (300-level or higher)	-	3	3
PADM 404	Planning Technology/Project Management	-	<u>3</u>	<u>3</u>
		15	12	27
SENIOR YEAR				
PADM 405	Advanced Public Personnel Administration	3	-	3
PADM 408	Internship Placement	6	-	6
PADM 410	Grants Management	3	-	3
PADM 411, 412	Senior Seminar I, II	3	3	6
PADM 401	Energy and Environmental Law Administration	-	3	3
PADM 403	Land Use Law and Policy	-	3	3
PADM 406	Advanced Public Sector Budgeting	-	3	3
ELECTIVE	Restrictive Elective (300-level or higher)	-	<u>3</u>	<u>3</u>
		15	15	30

**DEPARTMENT OF SOCIOLOGY, SOCIAL WORK
AND CRIMINAL JUSTICE**

Chairperson: Jay Malcan, Box 9036, Room 201E Colson Hall, Phone: 524-5511/5512
Professor: Mokerrom Hossain
Associate Professors: Ghyasuddin Ahmed, C. Nana Derby, Joyce M. Edwards, James Hodgson, Jay W. Malcan, Shahid Shahidullah, David Spinner, Cheryl Stampley, David Stein, Isis Walton
Assistant Professors: Zaccheus Ogunnika, Nicolle Parsons-Pollard
Instructor: Jennifer Harris

Description of Department

The Department of Sociology, Social Work and Criminal Justice offers undergraduate degrees in three areas, and these areas are: Sociology, Social Work and Criminal Justice. These programs prepare students for a wide range of career options in the broad dominions 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.

The Sociology curriculum offers general education on different major aspects of sociological knowledge. 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. 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.

This department also offers 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. 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.

The Social Work (BSW Program) and curriculum prepares entry-level generalist social work professionals committed to social and economic justice for individuals, families and communities by serving populations-at-risk in urban and rural settings. The BSW program prepares generalist social workers for lifelong learning, critical thinking, professional service and leadership roles, and preparation for graduate social work education through an educational process that combines a liberal arts and science foundation with professional social work education.

Currently, the social work major is being reactivated and is scheduled to begin Fall 2008. The BSW program is in the candidacy phase toward full accreditation. Candidacy is granted for up to 3 years retroactive to the beginning of the academic year in which it receives candidacy. Initial accreditation of the BSW program will occur in academic year 2011-2012.

Only students admitted during the academic year in which the program is granted candidacy will be seen as having graduated from an accredited program at such time as the program is granted initial accreditation

Mission of Department

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.

The Social Work (BSW Program) prepares entry-level generalist social work professionals committed to social and economic justice for individuals, families and communities by serving populations-at-risk in urban and rural settings. The program contributes to the development and dissemination of social work knowledge and skills, affirms professional values and ethics, and demonstrates understanding, respect and appreciation for the unique social, political, and cultural diversity of central and southern Virginia. The program provides professional service the central and southern Virginia region.

Objectives of Department

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
- To provide a required internship in Criminal Justice, and required field placements in Social Work.
- 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.

Additional Objectives of Social Work (BSW Program)

To prepare students for beginning entry-level generalist social work practice to work *effectively* with diverse individuals, families, groups and communities with respect, appreciation and knowledge of culture, class, family structure, gender, marital status, race, ethnicity, religious, sexual orientation, national origin, geographic settings (urban & rural), and disability which being *committed* to serve populations-at-risk and working toward social and economic justice.

To prepare generalist social workers to participate *actively* in community-based participatory social research initiatives for community development and revitalization, and *apply* research findings to expand social work knowledge and to evaluate generalist social work practice.

To prepare generalist social workers to maintain the dignity and worth of each person, practicing with integrity and competence in accordance with the profession's values and ethics, with systems of all sizes addressing social problems most prevalent in central and southern Virginia.

To prepare generalist social workers for lifelong learning, critical thinking, professional service and leadership roles, and preparation for graduate social work education through an educational process that combines a liberal arts and science foundation with professional social work education.

Majors in the Department

Bachelor of Arts Degree:	Sociology
Bachelor of Social Work:	Social Work
Bachelor of Science Degree:	Criminal Justice
Master of Science:	Criminal Justice (see graduate catalog for program description)

Other Department Information

Students may participate and assume leadership positions in the following departmental organizations sponsored by the department:

- Alpha Kappa Delta – International Sociology Honor Society
- Alpha Phi Sigma – National Criminal Justice Honor Society
- Lambda Alpha Epsilon – American Criminal Justice Association
- National Association of Blacks in Criminal Justice

Course Descriptions

SOCIOLOGY

SOCI 101 INTRODUCTION TO SOCIOLOGY - 3 semester hours

F, Sp

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

F, Sp

The study of evidence of human evolution, developing cultures, racial groupings and people in preliterate societies.

SOCI 201 SOCIAL PROBLEMS - 3 semester hours**F, Sp**

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 214/PSYC 214 SOCIAL PSYCHOLOGY - 3 semester hours**F, Sp**

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.

SOC 302 MARRIAGE AND FAMILY - 3 semester hours**F, Sp**

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.

SOCI 304 RACE AND ETHNIC RELATIONS - 3 semester hours**F, Sp**

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.

SOCI 308 SOCIOLOGY OF THE AFRICAN AMERICAN EXPERIENCE - 3 semester hours**F, Sp**

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: Junior/Senior Level

SOCI 311 SOCIAL MOVEMENTS AND SOCIAL CHANGE - 3 semester hours**Sp**

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.

SOCI 314 SOCIOLOGY OF RELIGION - 3 semester hours**F**

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.

SOCI 317 METHODS OF SOCIAL RESEARCH - 3 semester hours**F, Sp**

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.

SOCI 318 SOCIOLOGICAL THEORY - 3 semester hours**F, Sp**

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 352 URBAN ISSUES - 3 semester hours**F**

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.

SOCI 356 POPULATION ISSUES - 3 semester hours**Sp**

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.

SOCI 362 JUVENILE DELINQUENCY - 3 semester hours**F, Sp**

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.

SOCI 370 AFRICAN AMERICAN WOMEN IN SOCIETY - 3 semester hours**Sp**

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.

SOCI 411 COMPARATIVE SOCIAL INSTITUTIONS - 3 semester hours**Sp**

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 CLASS, STATUS AND POWER - 3 semester hours**Sp**

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 INDUSTRIAL SOCIOLOGY - 3 semester hours**F**

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 420 SENIOR SEMINAR - 3 semester hours**F, Sp**

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.

Prerequisites: SOCI 317 Methods of Social Research; SOCI 318 Sociological Theory.

Course Descriptions**SOCIAL WORK****SOWK 210 GRASS ROOTS COMMUNITY BUILDING - 3 semester hours****F**

Introduction to the historical wisdom of the social work profession and to community building approaches that incorporate collectivist and Afrocentric perspectives. This course includes an experimental service learning component and exposure to American sign language.

Prerequisites: Sophomore standing.

SOWK 250 INTRODUCTION TO GENERALIST SOCIAL WORK - 3 semester hours**Sp**

A systematic overview of the social work profession and introduction to generalist social work practice. This course includes an experimental service learning component.

Prerequisites: SOWK 210 and sophomore standing.

SOWK 315 SOCIAL WORK RESEARCH I - 3 semester hours**F**

Introduces students to research methods to build the knowledge base for social work practice.

Prerequisites: SOWK 250, majors only and junior standing.

Co-requisites: SOWK 320, SOWK 330 and SOWK 370.

SOWK 316 SOCIAL WORK RESEARCH II - 3 semester hours**Sp**

Prepares social work majors with basic application skills of social/community research methodology and the techniques of gathering, analyzing, and interpreting original data.

Prerequisites: SOWK 315, majors only and junior standing.

Co-requisites: SOWK 321, SOWK 340, SOWK 375 and SOWK 399.

SOWK 320 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I - 3 semester hours **F**

Presents major concepts from the social and behavioral sciences and their application to micro, mezzo and macro social work practice. Focus is on the first half of the life cycle.

Prerequisites: SOWK 250, majors only and junior standing.

Co-requisites: SOWK 315, SOWK 330 and SOWK 370.

SOWK 321 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II - 3 semester hours **Sp**

Presents major concepts from the social and behavioral sciences and their application to micro, mezzo and macro social work practice. Focus is on the second half of the life cycle.

Prerequisites: SOWK 320, majors only and junior standing.

Co-requisites: SOWK 316, SOWK 340, SOWK 375 and SOWK 399.

SOWK 330 RACE RELATIONS AND SOCIAL WORK - 3 semester hours **F**

Presents concepts and theories for generalist practitioners to assess the client from culture-general and culture-specific perspectives.

Prerequisites: SOWK 250, majors only and junior standing.

Co-requisites: SOWK 315, SOWK 320 and SOWK 370.

SOWK 340 SOCIAL WELFARE POLICY AND SERVICES - 3 semester hours **Sp**

Utilizes a strengths perspective to understand and analyze the processes of defining need and to influence existing social welfare policy and services.

Prerequisites: Majors only and junior standing.

Co-requisites: SOWK 316, SOWK 321, SOWK 375 and SOWK 399.

SOWK 370 GENERALIST PRACTICE (MICRO) I: INDIVIDUALS - 3 semester hours **F**

An introduction to generalist social work practice with an emphasis on working with individuals across the life cycle that presents the ecological model, the strengths-based, problem-solving process, intergenerational, and cultural considerations for working with individuals. This course includes a minimum of two (2) hours a week practicing fundamental interpersonal skills required for effective social work practice.

Prerequisites: SOWK 250, majors only and junior standing.

Co-requisites: SOWK 315, SOWK 320 and SOWK 330.

SOWK 375 GENERALIST PRACTICE (MEZZO) II: FAMILIES - 3 semester hours **Sp**

Expands social work theory foundation and practice methodology by focusing on knowledge and skills to work with families.

Prerequisites: SOWK 370, majors only and juniors standing.

Co-requisites: SOWK 316, SOWK 321, SOWK 3490 and SOWK 399.

SOWK 399 FIELD INSTRUCTION I AND SEMINAR - 3 semester hours **Sp**

Provides supervised field internship in selected social work and human service agencies and a weekly seminar to integrate theory to generalist social work practice. This course assists the student to prepare for the *Foundations Exam* and to develop and submit this *Bio-psycho-social-cultural-spiritual paper* for application to the Professional level (senior year) of the social work program.

Prerequisites: SOWK 370, majors only and junior standing.

Co-requisites: SOWK 316, SOWK 321, SOWK 340 and SOWK 375.

SOWK 415 SOCIAL WORK RESEARCH III - 3 semester hours **F**

Assists social work majors to design, implement, evaluate and report social work (practice and program) evaluations and community-based research findings.

Prerequisites: SOWK 316, majors only and senior standing.

Co-requisites: SOWK 450, SOWK 475 and SOWK 490.

SOWK 450 COMMUNITY MENTAL HEALTH I - 3 semester hours **F**

Integrates the strengths empowerment model of generalist social work practice with individual, family, group, organization, and community client systems.

Prerequisites: Majors only and senior standing.

Co-requisites: SOWK 415, SOWK 475 and SOWK 490.

SOWK 455 COMMUNITY MENTAL HEALTH II - 3 semester hours **Sp**

Integrates the strengths empowerment model of generalist social work practice with individuals and families with serious and persistent mental illness.

Prerequisites: Majors only and senior standing.

Co-requisites: SOWK 480, SOWK 498 and SOWK 499.

SOWK 475 GENERALIST PRACTICE (MACRO) III: COMMUNITIES AND GROUPS - 3 semester hours **F**
Provides knowledge and skills necessary to assess and develop a culture-specific plan of action with communities, groups and organizations.

Prerequisites: SOWK 375, admitted into professional level of the social work major and senior standing.

Co-requisites: SOWK 415, SOWK 450 and SOWK 490.

SOWK 480 FAMILY AND GROUP INTERVENTIONS - 3 semester hours **Sp**

Prepares students to implement family and group interventions from a generalist social work practice perspective.

Prerequisites: Majors only and senior standing.

Co-requisite: SOWK 455, SOWK 498 and SOWK 499.

SOWK 490 PROFESSIONAL FIELD PRACTICUM I AND SEMINAR - 6 semester hours **F**

Advanced supervised field practicum in selected social work and human service agencies, and a weekly seminar to integrate theory to generalist social work practice. The initial draft of the *Integrative Case Analysis Paper* is begun, with completion during the SOWK 499 course. This paper is part of the graduation requirements.

Prerequisites: SOWK 399, majors only and senior standing.

Co-requisite: SOWK 415, SOWK 450 and SOWK 475.

SOWK 498 SOCIAL WORK SENIOR SEMINAR - 3 semester hours **Sp**

A capstone course emphasizes professional writing skills, ethics, and legal dilemmas for professional generalist social work practice.

Prerequisites: Majors only and senior standing.

Co-requisites: SOWK 455, SOWK 480 and SOWK 499.

SOWK 499 PROFESSIONAL FIELD PRACTICUM II AND SEMINAR - 6 semester hours **Sp**

Advanced supervised field practicum in selected social work and human service agencies, and a weekly seminar to synthesize social work knowledge with generalist social work practice. The *Integrative Case Analysis Paper (HBSE, Practice, Policy & Research)* assesses a client case from the field practicum and is submitted as part of the graduation requirements.

Prerequisites: SOWK 490, majors only and senior standing.

Co-requisites: SOWK 455, SOWK 480 and SOWK 498.

Course Descriptions

CRIMINAL JUSTICE

CJUS 116 INTRODUCTION TO CRIMINAL JUSTICE - 3 semester hours **F, Sp**

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 **F, Sp**

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

Corequisite: CJUS 211

CJUS 211 SPSS FOR CRIMINAL JUSTICE/LAB - 1 semester hour **F, Sp**

Introduces basic principles of SPSS used in social science research. Must be taken in conjunction with CJUS 210 Introductory Statistics for Criminal Justice.

Corequisite: CJUS 210

CJUS 212 AMERICAN LAW ENFORCEMENT SYSTEM AND PRACTICES - 3 semester hours **F, Sp**

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 217 INTRODUCTION TO THE JUVENILE JUSTICE SYSTEM - 3 semester hours **S**

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 230 CRIMINAL INVESTIGATION - 3 semester hours **F, even numbered years**

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 250 COURT SYSTEM AND PRACTICES - 3 semester hours **F, Sp**

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 260 DRUGS, CRIME AND THE CRIMINAL JUSTICE SYSTEM - 3 semester hours **F**

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 315 TERRORISM - 3 semester hours **Sp**

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 **F, Sp**

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 SYSTEM AND PRACTICES - 3 semester hours **Sp**

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 335 CONTEMPORARY PROBLEMS IN POLICING - 3 semester hours **F, even numbered years**

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 345 CRIMINAL LAW AND EVIDENCE - 3 semester hours **Sp**

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 360 CRIMINOLOGY AND THEORIES OF CRIME - 3 semester hours **Sp**

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 semester hours **F**

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 **Sp**

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 directions in law, policy, research and practice.

CJUS 365 POLICE ORGANIZATION AND MANAGEMENT - 3 semester hours **F, odd-numbered years**

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 380 CRIMINAL PROCEDURES - 3 semester hours **F**

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 410 CRIMINAL JUSTICE DATA MANAGEMENT - 3 semester hours **F, odd-numbered years**

Emphasizes real world data sets and management including data analysis techniques.

Prerequisite: CJ Senior standing

CJUS 415 INTRODUCTION TO FORENSIC INVESTIGATION - 3 semester hours **F, Sp**

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 for: CJUS 415 Lab

CJUS 415 FORENSIC INVESTIGATION LABORATORY - 1 semester hour **F, Sp**

Corequisite for CJUS 415

CJUS 420 SENIOR SEMINAR IN CRIMINAL JUSTICE - 3 semester hours **F, Sp**

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 COMPARATIVE CRIMINAL JUSTICE SYSTEMS - 3 semester hours **F**

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 **F, Sp**

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 AND THE VIOLENT OFFENDER - 3 semester hours **Sp**

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 **F, Sp**

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 semester hours **Sp, odd-numbered years**

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 **Sp, odd numbered years**

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**F, odd-numbered years**

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 AND THE CRIMINAL JUSTICE SYSTEM - 3 semester hours**Sp**

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 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.

CJUS 494 SPECIAL TOPICS IN CRIMINAL JUSTICE – 3 semester hours**F, Sp**

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.

SCHOOL OF LIBERAL ARTS AND EDUCATION
DEPARTMENT OF SOCIOLOGY, SOCIAL WORK AND CRIMINAL JUSTICE
Sociology
Bachelor of Arts

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Freshman Writing I, II	3	3	6
MATH	GE Math Menu	3	3	6
HISTORY	GE History Menu	3	-	3
HPER 170	Health/Wellness	-	2	2
SOCI 101	Intro to Sociology	-	3	3
TECHNOLOGY	GE Technology Menu	3	-	3
SOCI 102	Intro to Anthropology	-	3	3
UNRESTRICTED	Elective	-	<u>3</u>	<u>3</u>
		14	17	31
SOPHOMORE YEAR				
LANG (Foreign)	Language 200 or above	3	3	6
GLOBAL STUDIES	GE Global Studies Menu	3	-	3
ENGL	GE Elective Menu	3	-	3
SCIENCE & LAB	GE Science Menu	4	4	8
STAT 210	Elementary Statistics	-	3	3
SOCI 201	Social Problems	-	3	3
PSYC 214	Social Psychology	-	<u>3</u>	<u>3</u>
		16	13	29
JUNIOR YEAR				
SOCI 302	Marriage & Family	-	3	3
SOCI 304	Race & Ethnic Relations	-	3	3
SOCI 308	Soc African Amer Exp	3	-	3
SOCI 317	Methods of Social Research	3	-	3
SOCI 318	Sociological Theory	3	-	3
SOCI/SOSW/CJUS	Elective	3	3	6
HUMANITIES	Elective GE Menu	-	6	6
UNRESTRICTIVE	Elective	<u>3</u>	-	<u>3</u>
		15	15	30
SENIOR YEAR				
SOCI 352	Urban Issues	-	3	3
SOCI 356	Population Issues	-	3	3
SOCI 362	Juvenile Delinquency	3	-	3
SOCI 411	Comparative Social Institutions	-	3	3
SOCI 413	Class, Status and Power	3	-	3
SOCI 414	Industrial Sociology	3	-	3
SOCI 420	Senior Seminar	-	3	3
UNRESTRICTIVE	Elective	<u>3</u>	<u>6</u>	<u>9</u>
		12	18	30

DEPARTMENT OF SOCIOLOGY, SOCIAL WORK AND CRIMINAL JUSTICE

Criminal Justice
Bachelor of Science

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110, 111	Freshman Writing I, II	3	3	6
MATH	GE Math Menu	3	3	6
CJUS 116	Intro to Criminal Justice	3	-	3
CJUS 212	American Law Enforcement	-	3	3
SCIENCE & LAB	GE Science Menu	4	4	8
TECHNOLOGY	GE Technology Menu	-	<u>3</u>	<u>3</u>
		15	16	31
SOPHOMORE YEAR				
CJUS 210	Intro to Statistics for CJ	3	-	3
CJUS 211	SPSS for Criminal Justice Lab	1	-	1
CJUS 250	Court System & Practice	-	-	3
CJUS 255	Introduction to Corrections	-	3	3
CJUS	Elective	-	3	3
ENGL	GE Literature Menu	3	-	3
HPER	GE Health/Wellness Menu	2	-	2
HUMANITIES	GE Humanities Menu	3	3	6
SOCIAL SCIENCE	GE Social Science Menu	-	3	3
UNRESTRICTED	Elective	-	<u>3</u>	<u>3</u>
		15	15	30
JUNIOR YEAR				
CJUS 317	Research Methods for CJ	3	-	3
CJUS 360	Criminology & Theories of Crime	3	-	3
CJUS 430	Pre-Internship	-	2	2
CJUS	Elective	3	3	6
GLOBAL STUDIES	GE Global Studies Menu	-	3	3
HISTORY	GE History Menu	3	-	3
UNRESTRICTIVE	Elective	<u>3</u>	<u>6</u>	<u>9</u>
		15	14	29
SENIOR YEAR				
CJUS 420	Senior Seminar	-	3	3
CJUS 432	Criminal Justice Internship	4	-	4
UNRESTRICTIVE	Elective	12	-	12
UNRESTRICTIVE	Elective	-	<u>11</u>	<u>11</u>
		16	14	30

DEPARTMENT OF SOCIOLOGY, SOCIAL WORK AND CRIMINAL JUSTICE

Social Work Major

Bachelor of Science

		SEMESTER HOURS		
		1 st	2 nd	Total
		Sem	Sem	Hours
FRESHMAN YEAR				
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
SPAN 110	Elementary Spanish I	3	-	3
GEHI	History Elective	3	-	3
CISY	Technology Elective	3	-	3
HPER	Elective	1	-	1
ENGL 111	Composition II	-	3	3
SPAN 111	Elementary Spanish II	-	3	3
GEMA 112	Basic Mathematics I	-	3	3
GEPS 124	Introduction to Psychology	-	3	3
GEPI or PHIL	Philosophy Elective	-	3	3
		15	15	30
SOPHOMORE YEAR				
SOWK 210	Grass Roots Community Bldg	3	-	3
ENGL	Literature Elective	3	-	3
SPAN 212	Intermediate Spanish I	3	-	3
GEPI 116	Biological Science w/lab	4	-	4
GEMA 113	Basic Mathematics II	3	-	3
SPAN 213	Intermediate Spanish II	-	3	3
STAT 210	Statistics	-	3	3
SOWK 250	Intro to Generalist SW	-	3	3
BIOL 315	Human Anatomy w/lab	-	4	4
HPER	Elective	1	1	1
		16	14	30
<i><u>Pre-Profession Level</u></i>				
JUNIOR YEAR				
SPEE 214	Intro to Public Speaking	3	-	3
SOWK 320	HBSE I	3	-	3
SOWK 330	Race Relations & SW	3	-	3
SOWK 370	Generalist Practice I	3	-	3
SOWK 315	SW Research I	3	-	3
SOWK 321	HBSE II	-	3	3
SOWK 340	Soc Welfare Policy & Svs	-	3	3
SOWK 375	Generalist Practice II	-	3	3
SOWK 316	SW Research II	-	3	3
SOWK 399	Field Instruction I & Sem.	-	3	3
		15	15	30
<i><u>Profession Level</u></i>				
SENIOR YEAR				
SOWK 415	SW Research III	3	-	3
SOWK 475	Generalist Practice III	3	-	3
SOWK 450	Community Ment. Health I	3	-	3
SOWK 490	Prof. Field Practicum I & Seminar	6	-	6
SOWK 455	Community Ment Health II	-	3	3
SOWK 480	Fam. & Group Interventions	-	3	3
SOWK 498	SW Senior Seminar	-	3	3
SOWK 499	Prof. Field Practicum II & Seminar	-	6	6
		15	15	30

*If SPAN 110 and/or 111 is not needed, student may select to replace it from this list: CJUS 116, ECON 100, GEPO 150, GESO 211, SOCI 101, SOCI 102 and/or AGRI 295.

**SCHOOL OF LIBERAL ARTS AND EDUCATION
PROFESSIONAL EDUCATION PROGRAMS**

Unit Head: Delores R. Greene, Box 9088; Room 101, Harris Hall; Telephone: 524.6869
Administrators: John Blackwell, Coordinator-Assessment & Instructional Technology
Shandra Claiborne, Coordinator of Admissions and Data Analyst
Sandra Evans, Assessment Specialist
Donna Jones-Miles, Coordinator-Field Experiences & Special Projects
John Travis, Program Transition Accountability Specialist
Harriet Wynn, Policy & Planning Specialist/NCATE Manager

Governance

The Professional Education Unit is housed in the School of Liberal Arts and Education. The Unit is the administrative arm that oversees the preparation of teachers and other school personnel. The programs in the Unit are approved by the Virginia Department of Education and accredited by the National Council for the Accreditation of Teacher Education (NCATE). Changes in programs are ongoing based on revised accreditation and approval regulations.

Unit Conceptual Framework

The conceptual framework reflects the Unit's shared vision for preparing quality educators for work in PreK-12 schools. The overall goal of the Unit 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. The following definitions are the foundation of the unit's candidate proficiencies at the initial and advanced levels:

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 learn.

Reflective: Reflecting upon and evaluating research and the success of past decisions in an effort to make better decisions in the future.

Unit Mission Statement

Creating a positive learning environment for all students and using evidence-based performance standards to develop reflective practitioners are central to the Professional Education Programs Unit's mission. The Unit 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.

THE CENTER FOR UNDERGRADUATE PROFESSIONAL EDUCATION PROGRAMS

Associate Dean: Delores R. Greene

Director: Claire Robinson

Faculty: John Blackwell, Assistant Professor
 Joanne Blanchard, Assistant Professor
 Patrice Aldridge, Assistant Professor
 Judaea Hodge, Assistant Professor
 Donna Jones-Miles, Assistant Professor

The Center for Undergraduate Professional Education Programs offers initial teacher preparation programs in the following areas:

Undergraduate Endorsement Programs Offered for Initial Teacher Preparation

Interdisciplinary Studies Major Elementary Education Minor	Interdisciplinary Studies Major Special Education Minor	Content Area Major Secondary Education Minor
<ul style="list-style-type: none"> • Elementary Education PreK-6 	<ul style="list-style-type: none"> • Special Education - Emotional Disturbance K-12 • Special Education - Mental Retardation K-12 • Special Education - Learning Disabilities K-12 	<ul style="list-style-type: none"> • Agriculture 6-12 • Biology 6-12 • Chemistry 6-12 • English 6-12 • Family and Consumer Sciences 6-12 • Health and Physical Education PreK-12 • History and Social Sciences 6-12 • Mathematics 6-12 • Music Education - Choral PreK-12 • Music Education - Instrumental PreK-12 • Physics 6-12

All minors in Secondary Education must complete 18 semester hours of professional education coursework, with the exception of Health and Physical Education (PreK-12).

Program Matriculation and Admissions Requirements

Pre-candidates who indicate aspirations for careers in teaching are assigned an academic advisor who is a faculty member in the Center for Professional Undergraduate Programs. Pre-candidates who desire a minor in Secondary Education must also have an advisor in the academic major content area. Before registering for courses in Professional Studies, pre-candidates and candidates meet with their advisors to discuss their academic and professional goals and objectives. Pre-candidates/candidates and their advisors jointly review the academic regulations of the University and the specific course requirements for endorsement. Based on the desired teaching specialization, a comprehensive four-year program of study is planned.

The Professional Education Unit has developed phases that serve as transition points for undergraduates to follow as they matriculate through the program: Pre-admission, Admission, Pre-student Teaching, Student Teaching, and Graduate Follow-up.

Phase I: Pre-admission

Students in this phase are called **pre-candidates**. They have expressed an interest in becoming a teacher and the Unit begins to collect data on the potential candidate. Information will be collected during this phase to develop a profile of potential candidates. Strengths and weaknesses will be identified and addressed with pre-candidates in the development of individualized personal development plans.

During their freshman year, pre-candidates must submit the following documents (effective fall 2006):

1. Application of Intent, which will include SAT/ACT Scores and an Attitude Survey
2. Plato Scores
3. College BASE Scores
4. College GPA
5. Evidence of successful completion of IDST 100 Analytical Reading, Writing and Reasoning I (*if needed*)
6. Evidence of successful completion of IDST 101 Analytical Reading, Writing and Reasoning II (*if needed*)

Phase II: Admission

Pre-candidates must apply to the Center for Professional Undergraduate Education Programs no later than the last semester of their sophomore year. Transfer students who have a minimum of sixty (60) credit hours are required to apply after the completion of one full semester. An applicant must meet the following criteria:

1. Submit a completed Application for Admission to the Teacher Education Program (available on the website)
2. Complete EDUC 201 Introduction to Teaching I and EDUC 202 Introduction to Teaching II with a minimum grade of "C" and begin a portfolio
3. Have a minimum cumulative grade point average of 2.5
4. Pass the Praxis I assessment, with scores of 178 in Reading, 178 in Mathematics and 176 in Writing or a composite score of 532 or submit Scholastic Aptitude Test (SAT) scores of 1100 with minimum scores of 530 verbal and 530 on mathematics
5. Complete an interview with a faculty member, during which the Admissions Dispositions Assessment is administered

The above information is then presented to the Admissions Committee for final determination of the acceptance status of program applicants. The Unit does not discriminate on the basis of race, color, religion, national origin, sex, marital status, age, disability, or veteran status in any admission related activity.

Phase III: Pre-Student Teaching

After admission to the Center for Professional Undergraduate Education Programs, pre-candidates become candidates. Candidates begin taking the professional education courses outlined for their endorsement program and continue to participate in field experiences (see Professional Studies Course outline). Candidates continue to develop their portfolios, submit evidence of meeting program outcomes, and document completion of field experiences.

Phase IV: Student Teaching

Candidates who have completed their academic and professional education courses and have been admitted to the Teacher Education Program must apply to Student Teaching during the first semester of their senior year. In order to be eligible for student teaching, candidates must:

1. Complete a Student Teaching Application
2. Submit documentation showing completion of the following assessments required by the Virginia Department of Education:
 - a. Praxis II all endorsement areas (Special Education minors must take Praxis II for Elementary Education to be considered highly qualified)
 - b. Passing score of 235 on the Reading and Writing sections of the Virginia Communication and Literacy Assessment or a composite score of 470 (required in December 2006)
 - c. Passing score of 235 on the Virginia Reading Assessment (Elementary and Special Education minors only) (required July 1, 2006)
 - d. Complete the Technology Skills for Instructional Personnel (TSIP's)
 - e. Complete the Child Abuse Recognition and Intervention Training
3. Submit documentation of completion of Professional Education course requirements (except EDUC 401 and EDUC 402) by November 15 for Spring Student Teaching placement and April 15 for a Fall placement, and
4. Complete an interview to present portfolios with the Coordinator of Field Experiences and members of the Professional Community.

Upon acceptance into Student Teaching candidates begin the transition from a Working Portfolio to a Professional Portfolio and are required to present that portfolio as a part of the Exit Presentation for the culmination of Student Teaching.

Phase V: Graduate Follow-up

Prior to graduating, Student Teachers are required to complete all licensure documents required by the Virginia Department of Education. The Unit will submit the forms and documentation for licensure. Student teachers are required to complete a Program Evaluation prior to graduation. The Center for Professional Undergraduate Education Programs is responsible for conducting follow-up surveys and initiatives with graduates for a period of three years. Endorsement program requirements may change based on Virginia Department of Education Regulations.

Undergraduate Initial Licensure Programs*Academic Advisement*

Upon admission to the University, pre-candidates who indicate aspirations for careers in teaching are assigned academic advisors in the Professional Education Unit. Before registering for professional education courses, pre-candidates/candidates meet with their advisors to discuss their academic and professional goals and objectives. Pre-candidates/candidates and advisors jointly review the academic regulations of the Unit and the specific course requirements for teacher licensure. Based on the pre-candidates/candidates' teaching specialization aspirations, they and their advisors plan a comprehensive four-year program of studies.

Elementary Education (PreK-6) Minor

A minor in Elementary Education (PreK-6) is designed to satisfy the State of Virginia teaching endorsement, and licensure requirements for pre-kindergarten through intermediate grades of elementary school. Candidates are required to complete an Interdisciplinary Studies major.

The following are course requirements for a minor in Elementary Education (PreK-6):

**SCHOOL OF LIBERAL ARTS AND EDUCATION
INTERDISCIPLINARY STUDIES MAJOR**

Dr. Andrew Kanu, Director

General Education Courses

Course Number	Course Title	Semester Hours
FRST 101	Freshman Studies	2
ENGL 110	Composition I	3
ENGL 111	Composition II	3
GEBI 116	Biological Science and Lab	4
GEES 181	Earth Science and Lab	4
HPER 170	Health and Wellness	2
ECON 100	Basic Economics	3
GEHI 114/115	World History I or World History II	3
GEHI 122/123	U.S. History I or U.S. History II	3
GEPI 140	Philosophy	3
IDST 200	Digital Media in Teacher Education	3
MATH 130*	Numbers and Operation	3
MATH 131*	Algebra and Functions	3
ENGL 201 or 202*	Introduction to Literature or African American Literature	3
GEEN 310*	Advanced Communication Skills	3
Total Hours		45

Interdisciplinary Studies (Academic Core Courses)

Course Number	Course Title	Semester Hours
Mathematics (9 Credits)		
MATH 130*	Numbers and Operation	3
MATH 131*	Algebra and Functions	3
MATH 230	Geometry & Measurements	3
English/Language Arts (9 Credits)		
ENGL 201 or 202*	Introduction to Literature or African American Literature	3
ENGL 214 or 215	World Literature I or World Literature II	3
GEEN 310*	Advanced Communication Skills	3

Social Studies (9 Credits)

GEOG 210	World Geography	3
HIST 431	History of Virginia	3
GEPO 150	U.S. Government	3

Science (12 Credits)

GEBI 116*	Biological Science and Lab	4
GEES 181*	Earth Science and Lab	4
GEPH 101	Physical Science and Lab	4
		39

* *These courses also meet General Education requirements.*

ELEMENTARY EDUCATION (PREK-6) MINOR

Course Number	Course Title	Semester Hours
Professional Studies Courses (21 Hours)		
EDUC 201	Introduction to Teaching I	2
EDUC 202	Introduction to Teaching II	2
EDUC 315	Data Driven Instructional Design	3
ELED 328	Curriculum and Instruction	3
ELED 429	Language Acquisition and Reading I	3
EDUC 424	Critical Issues in Education	2
ELED 430	Language Acquisition and Reading II	3
EDUC 401	Student Teaching Seminar	3
Field Experiences (FE) (12 Hours)		
EDUC 402	Student Teaching	9
SPED 403	Classroom Management in Educational Settings FE	3
Restricted Electives (20 Hours)		
IDST 100**	Analytical Reading, Writing and Reasoning I	2
IDST 101**	Analytical Reading, Writing and Reasoning II	2
PSYC 314	Test and Measurements	3
BIOL 427	Science Process Skills & Lab	4
PSYC 212	Human Growth and Development	3
STAT 210	Elementary Statistics	3
SPED 325	Survey of Exceptional Children	<u>3</u>
Total Hours		53

** IDST 100/101 are not counted in semester hours or toward graduation requirement

The Center for Undergraduate Professional Education Programs

Interdisciplinary Studies with a Minor in Elementary Education (PreK-6) (120 Hrs)

		Freshman Year		
Course Number	Course Title	1 st Sem.	2 nd Sem.	Total Hours
IDST 100	Analytical Reading, Writing and Reasoning I	(2)**	-	(2)
IDST 101	Analytical Reading, Writing and Reasoning II	-	(2)**	(2)
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
MATH 130	Numbers and Operation	3	-	3
MATH 131	Algebra and Functions	-	3	3
GEBI 116	Biological Science and Lab	4	-	4
GEES 181	Earth Science and Lab	-	4	4
GEPE	Elective	1	-	1
HPER 170	Health and Wellness	-	2	2
ECON 100	Basic Economics	-	<u>3</u>	<u>3</u>
		13	15	28

Sophomore Year

Course Number	Course Title	1 st Sem.	2 nd Sem.	Total Hours
EDUC 201	Introduction to Teaching I	2	-	2
EDUC 202	Introduction to Teaching II	-	2	2
GEHI 114 or 115	World History I or World History II	-	3	3
GEHI 122 or 123	U.S. History I or U.S. History II	3	-	3
GEOG 210	World Geography	-	3	3
ENGL 201 or 202	Introduction to Literature or African Amer Lit.	3	-	3
IDST 200	Digital Media in Teacher Education	3	-	3
GEPH 101	Physical Science and Lab	-	4	4
GEPI 140	Philosophy	3	-	3
PSYC 212	Human Growth and Development	3	-	3
STAT 210	Elementary Statistics	-	3	3
SPEE 214	Introduction to Public Speaking	-	3	3
		17	18	35

Junior Year

Course Number	Course Title	1 st Sem.	2 nd Sem.	Total Hours
ENGL 214 or 215	World Literature I or II	3	-	3
EDUC 315	Data Driven Instructional Design	3	-	3
ELED 328	Curriculum and Instruction	-	3	3
ELED 429	Language Acquisition and Reading I	-	3	3
GEEN 310	Advanced Communication Skills	-	3	3
PSYC 314	Test and Measurements	3	-	3
GEPO 150	U.S. Government	3	-	3
BIOL 427	Science Process Skills & Lab	-	4	4
MATH 230	Geometry & Measurements	3	-	3
GEMU 380	Music and Art	-	3	3
		15	16	31

Senior Year

Course Number	Course Title	1 st Sem.	2 nd Sem.	Total Hours
EDUC 424	Critical Issues in Education	2	-	2
HIST 431	History of Virginia	3	-	3
SPED 403	Classroom management in Educational Settings (FE)	3	-	3
ELED 430	Language Acquisition and Reading II	3	-	3
SPED 325	Survey of Exceptional Children	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
EDUC 402	Student Teaching	-	9	9
		14	12	26

**IDST 100/101 are not counted in semester hours or toward graduation requirement

Special Education (K-12) Minor

A minor in Special Education (K-12) is designed to satisfy the State of Virginia teaching endorsement, and licensure requirements for kindergarten through the twelfth grade. Candidates are prepared to work with students with emotional disturbance, learning disabilities and mental retardation. Candidates are required to complete an Interdisciplinary Studies major.

The following are course requirements for a minor in Special Education (K-12):

SPECIAL EDUCATION (K-12) MINOR

Course Number	Course Title	Semester Hours
Professional Studies Courses (24 Hours)		
EDUC 201	Introduction to Teaching I	2
EDUC 315	Data Driven Instructional Design	3
SPED 328	Reading and Language Development for Exceptional Learners	3
SPED 323	Survey of Exceptional Children	3
EDUC 424	Critical Issues in Education	2
SPED 425	Transitional Education for Students with Disabilities	2
SPED 402	Diagnosis of Educational Needs	3
ELED 429	Language Acquisition and Reading I	3
EDUC 401	Student Teaching Seminar	3
PSYC 212	Human Growth and Development	3
Field Experiences (FE) (21 Hours)		
SPED 423	Curriculum and Instruction for Exceptional Learners FE	3
SPED 442	Communicating and Collaborating w/ Educators and Parents FE	3
SPED 403	Classroom Management in Educational Settings FE	3
SPED 325	Characteristics of Exceptional Learners FE	3
EDUC 402	Student Teaching FE	9
Restricted Electives (4 hours)		
**IDST 100	Analytical Reading, Writing and Reasoning I	2
**IDST 101	Analytical Reading, Writing and Reasoning II	2
GEMU 380	Music and Art	3

All Professional Studies Courses will require Field Experiences

****IDST 100/101 are not counted in semester hours or toward graduation requirement.**

The Center for Undergraduate Professional Education Programs

Interdisciplinary Studies with a Minor in Special Education (K-12) (123 Hrs)

Freshman Year

Course Number	Course Title	1st Sem.	2nd Sem.	Total Hours
IDST 100	Analytical Reading, Writing and Reasoning I	(2)**	-	(2)**
IDST 101	Analytical Reading, Writing and Reasoning II	-	(2)**	(2)**
FRST 101	Freshman Studies	2	-	2
ENGL 110	Composition I	3	-	3
ENGL 111	Composition II	-	3	3
MATH 130	Numbers and Operation	3	-	3
MATH 131	Algebra and Functions	-	3	3
GEBI 116	Biological Science and Lab	4	-	4
GEES 181	Earth Science and Lab	-	4	4
HPER 170	Health and Wellness	-	2	2
ECON 100	Basic Economics	-	3	3
GEPE	Elective	1	-	1
		13	15	28

Sophomore Year

Course Number	Course Title	1st Sem.	2nd Sem.	Total Hours
EDUC 201	Introduction to Teaching I	2	-	2
SPED 323	Survey of Exceptional Children (FE)	3	-	3
GEHI 122 or 123	U.S. History I or II	3	-	3
GEOG 210	World Geography	-	3	3
GEHI 114 or 115	World History I or II	-	3	3
LANG ELECTIVE	100 or above	-	3	3
GEPH 101	Physical Science and Lab	-	4	4
IDST 200	Digital Media in Teacher Education	3	-	3
ENGL 214 or 215	World Literature I or II	-	3	3
GEPI 140	Philosophy	3	-	3
PSYC 212	Human Growth and Development	3	-	3
		17	16	33

Junior Year

Course Number	Course Title	1st Sem.	2nd Sem.	Total Hours
EDUC 315	Data Driven Instructional Design	3	-	3
ELED 429	Language Acquisition and Reading I	-	3	3
SPED 328	Reading and Language Development for Exceptional Learners	3	-	3
SPED 323	Characteristics of Exceptional Children (FE)	-	3	3
SPED 403	Classroom Management in Educational Settings (FE)	-	3	3
SPED 425	Transitional Education for Exceptional Learners	2	-	2
SPED 402	Diagnosis of Educational Needs	-	3	3
ENGL 201 or 202	Introduction to Literature or African American Lit	3	-	3
GEMU 380	Music and Art	-	3	3
GEEN 310	Advanced Communication Skills	-	3	3
MATH 230	Geometry & Measurements	3	-	3
		14	18	32

Senior Year

Course Number	Course Title	1st Sem.	2nd Sem.	Total \ Hours
EDUC 424	Critical Issues in Education	2	-	2
HIST 431	History of Virginia	3	-	3
GEPO 150	U.S. Government	3	-	3
SPED 442	Communicating and Collaborating (FE)	2	-	2
SPED 423	Curriculum and Instruction for Exceptional Learners (FE)	3	-	3
EDUC 401	Student Teaching Seminar	-	3	3
EDUC 402	Student Teaching (FE)	-	9	9
		13	12	25

****IDST 100/101 are not counted in semester hours or toward graduation requirement**

SECONDARY EDUCATION (6-12 AND PREK-12) MINOR

A minor in Secondary Education (6-12 and PreK-12) is designed to satisfy the State of Virginia teaching endorsement, and licensure requirements for 6-12 and Pre-kindergarten through the twelfth grade. Candidates are required to complete a major in the content area they wish to teach.

The following are Professional Studies and field experiences course requirements for a Minor in Secondary Education (6-12 and PreK-12):

SECONDARY EDUCATION (6-12 AND PREK-12) MINOR

Course Number	Course Title	Semester Hours
Professional Studies Course Requirements (18 Hours)		
EDUC 201	Introduction to Teaching Part I	2
EDUC 202	Introduction to Teaching Part II	2
EDUC 315	Data-Driven Instructional Design	3
EDUC 427	Reading in the Subject Area	3
EDUC 424	Critical Issues in Education	2
EDUC 401	Student Teaching Seminar	3
	Content Area Professional Studies Course	3
Field Experiences (FE) (12 Hours)		
EDUC 402	Student Teaching	9
SPED 403	Classroom Management in Educational Settings FE	3
Restricted Electives (4 Hours)		
IDST 100**	Analytical Reading, Writing and Reasoning I	2
IDST 101**	Analytical Reading, Writing and Reasoning II	2
Total Hours		31

The following curriculum sheets describe the course requirements for each secondary endorsement area.

**IDST 100/101 are not counted in semester hours or toward graduation requirement

The following are course descriptions for elementary, secondary and special education minors, as well as professional studies courses. Course descriptions for content area majors may be found in the Virginia State University Undergraduate Catalog.

Course Descriptions

IDST 100 ANALYTICAL READING AND REASONING PART I - 2 Semester Hours**F, Sp**

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 and Reasoning Part II - 2 Semester Hours**F, Sp**

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 standardized testing.

EDUC 201 INTRODUCTION TO TEACHING I - 2 Semester Hours**F, SP**

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 preK-12 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 INTRODUCTION TO TEACHING II - 2 Semester Hours**F, SP**

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.

Prerequisites: EDUC 201 Introduction to Teaching I

EDUC 315 DATA DRIVEN INSTRUCTIONAL DESIGN - 3 Semester Hours**F, Sp**

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 Introduction to Teaching I; EDUC 202 Introduction to Teaching II*

* Elementary and Secondary Education Minors Only

EDUC 401 STUDENT TEACHING SEMINAR - 3 Semester Hours**F, Sp**

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: Completion of all coursework and state assessments

Corequisites: EDUC 402 Student Teaching
Content Area Student Teaching

EDUC 402 STUDENT TEACHING FE - 9 Semester Hours**F, Sp**

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: Completion of all curriculum courses and state assessments

Corequisite: EDUC 401 Student Teaching Seminar
Content Area Student Teaching

EDUC 424 CRITICAL ISSUES IN EDUCATION - 2 Semester Hours**F, Sp**

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
EDUC 315 Data Driven Instructional Design
ELED 429 Language Acquisition and Reading I*
ELED 430 Language Acquisition and Reading II*
EDUC 427 Reading in the Subject Areas**

* Elementary and Special Education Minors Only

** Secondary Education Minors Only

EDUC 427 READING IN THE SUBJECT AREA - 3 Semester Hours**F, Sp**

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.

ELED 328 CURRICULUM AND INSTRUCTION - 3 Semester Hours**F, Sp**

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**F, Sp**

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.

ELED 430 LANGUAGE ACQUISITION AND READING II - 3 Semester Hours**F, SP**

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.

SPED 323 CHARACTERISTICS OF EXCEPTION LEARNERS FE - 3 Semester Hours**F, Sp**

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.

Prerequisites: EDUC 315 Data Driven Instructional Design

SPED 325 SURVEY OF EXCEPTION CHILDREN - 3 Semester Hours**F, Sp**

This course provides an introduction to the philosophical, historical, and legal foundations of special education Learning Disability, Mental Retardation, and Emotional Disturb (LD, MR, ED). 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 part of this course.

Prerequisite: EDUC 201 Introduction to Teaching I
*EDUC 202 Introduction to Teaching II

**SPED 328 READING AND LANGUAGE DEVELOPMENT FOR EXCEPTIONAL LEARNERS –
3 Semester Hours F, SP**

This course is designed to address the skills to impart a thorough understanding of the complex nature of language acquisition and reading, including: phonemic awareness, an understanding of sound/symbol relationships, explicit phonics instruction, syllables, concepts of print, phonics, fluency, vocabulary development, and comprehension strategies. Additional skills shall include proficiency in writing strategies, as well as, the ability to foster an appreciation of a variety of literature and independent reading. Candidates will be required to complete a field experience requirement of 15 hours.

Prerequisite: EDUC 201 Introduction to Teaching I

SPED 402 DIAGNOSIS OF EDUCATIONAL NEEDS - 3 Semester Hours**F, SP**

This course is designed to provide an understanding and application of the foundations of assessment and evaluation related to best educational practices such as legal provisions, regulations, and guidelines regarding assessment of individuals with disabilities. The impact of culture, linguistics and other variables on assessment findings and placement decisions will be addressed. Pre-candidates will select, administer, score and interpret various formal and informal individual and group instruments, and summarize findings for eligibility, placement and instructional decisions. Candidates will have experience with norm-reference, criterion reference, and curriculum-based measures, as well as, task analysis and portfolio assessments. Candidates will be required to complete a field experience requirement of 15 hours as a part of this course.

Prerequisite: EDUC 315 Data Driven Instructional Design

SPED 403 CLASSROOM MANAGEMENT IN EDUCATIONAL SETTINGS FE - 3 Semester Hours**F, SP**

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.

**SPED 423 CURRICULUM AND INSTRUCTION FOR EXCEPTIONAL LEARNERS FE -
3 Semester Hours F, SP**

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.

SPED 425 TRANSITIONAL EDUCATION FOR STUDENTS WITH DISABILITIES - 2 Semester Hours**F, SP**

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: EDUC 315 Data Driven Instructional Design

SPED 442 COMMUNICATING AND COLLABORATING WITH EDUCATORS AND PARENTS FE**3 Semester Hours F, SP**

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.

**GENERAL
INFORMATION**

Financial**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 Student Activities.

Library

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, laserdisk, audiotapes and other media. A wheel chair 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 wheel chair 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.

Student Services

In support of the academic mission of the University, Student Affairs efforts are directed toward creating an environment in which students' personal and professional goals are actualized. In that there is a generally acceptable knowledge that students' physical, psychological, intellectual, and social needs are developing simultaneously, all programs and services are aimed at assisting the student develop as a complete individual, capable of functioning responsibly within their academic environment and in the society in which he/she will ultimately live.

Career Planning and Placement

The Career Planning and Placement Center is a vital part of the educational and student development process at Virginia State University. It provides career planning and placement assistance to students and graduates. The Center serves as a vehicle in interpreting the University's programs and promoting the attributes of its graduates to business, industry and government. The major aim of the Center is to assist students in obtaining the most benefits possible from their college education through satisfying career placement upon graduation.

The objectives of the Center are achieved through a well-rounded program which provides students with a resource library containing video and printed materials, automated resume' preparation and a job referral system, on-campus interview, workshops and seminars on job search skills, and interviewing techniques.

Federal Programs

Through federal grants, the University provides special academic and counseling support services to eligible university students, high school students, and dropouts from the community. These services are available through the University's Educational Talent Search, Upward Bound, and Student Support Services Program. For more information about these programs, contact the specific program area.

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.

National Student Exchange

The National Student Exchange provides students with the opportunity to study up to one year at one of 176 colleges and universities and three (3) U.S. territories without having to pay the high cost of out-of-state tuition. Payment of tuition is made in one of two ways. Using Plan A, students pay their tuition and fees to the host institution. Using Plan B, students pay their tuition and fees to Virginia State University. Room and board fees are the responsibility of the students and are paid directly to the host institution. Virginia State University only uses Plan B.

Virginia State University students who participate in the NSE program remain as degree-seeking, registered students at Virginia State University. Any financial aid that is normally available can be applied to the exchange obligations. Because NSE is an officially approved program of the University, all courses with their respective credit hours and earned grades will be recorded on the Virginia State University transcript and be calculated into the GPA.

Academic Support Center

The Academic Support Center (ASC) provides services and programs that support the successful completion of undergraduate programs of study for all students enrolled at the University. These include comprehensive advisement services for Undeclared Majors, International Students, and Veteran Students. A component of the ASC is the New Student Orientation Program for freshmen and other students new to the University. Another component is the Stay in Step Intergenerational Program which provides tutors and mentors for individual and small group assistance in writing, mathematics, science, history, study skills, test taking skills, time management, and preparation for the PRAXIS I examinations. ASC services also include general counseling, absentee notification from class for student emergencies, and assistance with the withdrawal process for students who desire to discontinue studies at the University. The Academic Support Center offers services that include general counseling and advisement, New Student Orientation, undeclared majors advisement, National Student Exchange, veteran advisement, international student advisement, tutorial and mentoring services.

New Student Orientation Program

The New Student Orientation Program (NSOP) is designed to introduce incoming freshmen and other new students to the University to academic and other support resources and to general expectations, all designed to promote a good early start and to increase each student's potential for academic success.

University-wide collaboration for academic advisement, registration, and a comprehensive introduction to campus life are main components of the program. Students are informed about facilities, resources, and support services available at the University.

All new freshmen who have received official notification of acceptance to the University are required to participate in the New Student Orientation Program. NSOP sessions are scheduled for each academic year.

Stay in Step Intergenerational Program

The Academic Support Center's Stay In Step Intergenerational Program (SISIP) tutors and mentors provide one-on-one and small group service to any VSU student for improving their academic performance in writing, math, science, history, study skills, test

taking, and time management. The tutors and mentors also help students in the Teacher Education Program who are preparing to take the PRAXIS I examination.

ASC Computer Lab

The ASC Computer Lab is available for use by students who are being served by the SISIP tutors and mentors.

Undeclared Major Advisement Program

The Undeclared Major Advisement Program is located in the ASC and provides counseling and advisement for students who are undecided about choosing an academic major. The program assists undecided students in investigating careers and the academic majors associated with those careers. Students receive individual counseling from caring counselors, are exposed to career assessment inventories, visit different major departments on campus, and attend workshops designed to help them make informed decisions about careers and choosing a major field of study.

Special Student Advisement

The Academic Support Center provides general advisement and informational and referral services for students.

International Student Advisement

The International Student Advisement service assists all international students and exchange visitors with the submission of forms as needed according to the U. S. Department of Justice, Immigration and Naturalization Service. The office also sponsors field trips and campus activities to afford students the opportunity to become better acquainted with American culture and the VSU campus community.

Veteran Students Advisement

The Veterans Affairs Office seeks to serve veterans and dependents by keeping them abreast of their allowances, awards, rights, privileges and responsibilities in accordance with the codes of the contract made between the University, the Veterans Administration and the U. S. Department of Education.

Withdrawals and General Counseling

The staff of the Academic Support Center 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 the ASC 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 the Academic Support Center at Virginia State University, P.O. Box 9034 Petersburg, Virginia 23806, phone (804) 524-6755.

Counseling Services

Counseling Services provides services to the student body in individual counseling, group counseling and crisis intervention. Counseling Services is located in Room 412 Memorial Hall. All services are provided by appointment and are strictly confidential.

Public Safety

The Department of Police and Public Safety is charged with and dedicated to the task of protecting life and property on the campus of the University. The ultimate objective of the department is the establishment and maintenance of an environment on the campus which is safe, sane, secure and conducive to high quality human endeavor.

Residence Life

Virginia State University recognizes and emphasizes the housing of students as a vital part of the total experience of higher education. To this end, the University's residence hall program strives for the development of socially effective citizens in a democratic society. Social and educational programs within the residence halls are designed not only to enrich and enhance development, but to act as a catalyst to maximize self control, self discipline, and acceptance of responsibility for one's behavior. The residence hall staff members are selected individuals dedicated to making the residence halls the best possible places to live. Students are encouraged to go to them to get acquainted and to receive assistance, advice, and guidance.

Student Commuter Services

The Office of Commuter Services assists students with housing, transportation, and consumer needs which are coordinated by the Director of Student Activities. The Commuter Services lounge is located on the second floor of Foster Hall. To participate one must be a full-time student in good standing with the University socially, financially, and academically with a grade point average of at least 2.5. February 15 is the application deadline. For more information, call the Office of Student Activities.

Student Government Association

Through membership in the Student Government Association (SGA), all regularly enrolled students participate in the government of the University. The purpose of the SGA is to develop a spirit of cooperation in the activities of the University; develop self-expression, self-control and leadership; encourage initiative; and create an intermediary between the administration and the students in matters of general welfare. The SGA shall be the official student governing body in all matters pertaining to the common interests of the student body.

Student Health Service

The Student Health Service delivers acute medical care to all VSU students. The Health Service exists to provide, in a welcoming environment, comprehensive and confidential medical care responsive to the needs of each student and consistent with the highest standards of acceptable medical practice. The focus of Virginia State University is on the promotion of good health through counseling, education and prevention of illness.

The Student Health Service is part of a multidimensional network of community health resources and makes specialty referrals for medical cases beyond its capacity.

Student Identification Card

Currently enrolled students must possess a valid Student Identification Card. This card is good for four-years upon revalidation at registration. Students use this card for health service, attendance at athletic events, dining hall, special activities and other related events.

Substance Abuse and Sexual Assault Prevention

The Office of Substance Abuse and Sexual Assault Prevention provides the University community with educational programming and facts about the negative effects associated with substance abuse and sexual assault. Programs and information are designed to educate students about the risks and consequences linked to alcohol and other drugs and the impact of sexual assault. Information is intended to enable students to make more informed and responsible choices and decisions. The office also publicizes information about the University Alcohol and Drug policy and Sexual Misconduct policy. Awareness events and risk-reduction programs are planned throughout the year and co-sponsored with other departments and student organizations to elicit campus-wide support in helping prevent substance abuse and sexual assault on campus. Assistance and counseling are offered to students with substance abuse or sexual assault related problems.

**INSTRUCTIONAL
FACULTY**

INSTRUCTIONAL FACULTY*** Year Entered Service**

- Abraham, Arthur (1999)* Professor, History and Philosophy.
B.A., Durham University; M.A., University of Sierra Leone; Ph.D., Birmingham University.
- Adeyemi, Cheryl M. (2004)* Associate Professor, Mathematics and Computer Science.
B.S., The Ohio State University; M.A., The Ohio State University; M.S. Illinois State University; Ph.D., Illinois State University.
- Adekoya, Adeyemi A. (1992)* Professor, Computer Information Systems.
B.S., University of Lagos; M.S., Ph.D., Syracuse University.
- Adom, Kwame (1989)* Instructor, Engineering and Technology.
B.S., Kumasi University; M.S., University of Illinois.
- Agrawal, Krishan Murari (1969)* Professor, Mathematics and Computer Science.
B.S., M.S., University of Agra; M.S., Ph.D., University of Windsor.
- Ahmed, Ghyasuddin (2002)* Assistant Professor, Sociology, Social Work and Criminal Justice.
M.A. Pakistan, M.A. University of Chicago, Ph.D. Sociology, University of Georgia.
- Ahuja, Sandeep (2002)* Assistant Professor, Engineering and Technology.
B.S., Regional Engineering College, Warangal, India; M.S. and Ph.D., Drexel University.
- Akkaladevi, Somashekar (2006)* Assistant Professor, Computer Information Systems.
M.S., Ph.D., Georgia State University.
- Aldridge, Patricia R. (2006)* Assistant Professor, Undergraduate Professional Education Programs.
B.A., Norfolk State University; M.S. Virginia State University; Ed.D., Nova Southeastern University.
- Alkebulan, Paul (2003)* Assistant Professor, History and Philosophy.
B.A., University of California, Berkeley; M.A., California State University, Hayward; Ph.D., University of London.
- Akbar, Shahzad (2002)* Assistant Professor, Computer Engineering
B.S., Lafayette College, M.S. Massachusetts Institute of Technology, Ph.D. Cornell University.
- Amaram, Donatus Iheukwumere (1984)* Professor, Management and Marketing.
B.A., Howard University; M.B.A., University of Missouri; Ph.D., Ohio State University.
- Amewokunu, Yao (2008)* Assistant Professor, Management and Marketing.
B.B.A., University of Lome; M.B.A., Laval University; Ph.D., Laval University.
- Amini, Majid (2003)* Associate Professor, History and Philosophy.
B.S., and Ph.D., University of London.
- Amr, Salame (2002)* Assistant Professor, Engineering and Technology
B.S., University of Science and Technology; M.S., West Coast University; Ph.D., New Mexico State University.
- Ansari, Ali A. (1991)* Associate Professor, Engineering, and Technology.
BSEE, MSEE, Ph.D., University of Texas at Arlington.
- Ansari, Jahangir (2002)* Assistant Professor, Engineering and Technology.
B.S., Iran University of Science and Technology; M.S. and Ph.D., Seoul National University.
- Atalay, Asmare (1997)* Associate Professor, Agriculture Research Station.
B.S., State University of New York at New Paltz; M.S., Ph.D., University of Missouri.
- Baecker, Diann L. (2000)* Assistant Professor, Languages and Literature.
B.A., M.A., Ph.D., University of North Carolina at Greensboro.

- Bai, Xue (1999)* Associate Professor, Computer Information Systems.
B.S. Northeastern University, P. R. China; M.S. USTB, P.R. China; M.S., Ph.D. Clemson University.
- Bailey, Aishia (2002)* Assistant Professor, Languages and Literature.
B.A., Virginia State University; M.A., Indiana University of Pennsylvania.
- Bailey, Lillie E. (1989)* Assistant Professor, Languages and Literature.
B.A., Millsaps College; M.A., Virginia State University.
- Baker, Gary (1977)* Assistant Professor, Political Science and Public Administration.
B.A., M.S., The Ohio State University.
- Bakhshi, V. Sagar (1968)* Professor, Mathematics and Computer Science.
(Hons), B.A., M.A., Delhi University; Ph.D., Oregon State University.
- Bates-Brown, Valery Yvonne Rose (1981)* Professor, Music, Art and Design.
B.F.A., M.F.A., Virginia Commonwealth University; Ph.D., Howard University.
- Bawuah, Kwadwo (1984)* Professor, Economics.
B.A., Bethany College; M.B.A., Eastern Illinois University; Ph.D., Virginia Polytechnic Institute and State University.
- Beavers, Michelle (2005)* Assistant Professor, Administration and Supervision.
B.S., M.Ed., Ph.D., Virginia Commonwealth University.
- Bejou, David (1999)* Dean, Professor of Marketing.
B.A., College of Literature and Foreign Languages; M.B.A., Embry-Riddle Aeronautical University; Ph.D., The University of Memphis.
- Belkhodja, Omar (2006)* Assistant Professor, Management.
B.S., Iscae Tunis Tunisia; M.B.A., Laval University; Ph.D., Laval University.
- Bernard, Kenneth J. (2003)* Professor, Mathematics and Computer Science.
B.S. Niagara University, M.A., Ed.D., University of Rochester.
- Bey, Leon Wright (1978)* Associate Professor, Health, Physical Education, Recreation and Dance.
B.S., Virginia State University; M.S., Indiana University; Ed.D., Temple University.
- Bhardwaj, Harbans L. (1991)* Associate Professor, Agriculture and Human Ecology.
B.S., M.S., Punjab University; Ph.D., Kansas State University.
- Billing, Tejinder K. (2007)* Assistant Professor, Management.
B. Tech., Punjab Agriculture University; M.B.A., Punjab University; Ph.D., The University of Memphis.
- Blouet, Olywn M. (1992)* Professor, History and Philosophy.
B.A., University of Sheffield; M.A., University of Nebraska; Ph.D., University of Nebraska.
- Boese, Alan Ervin (1971)* Assistant Professor, Economics.
B.A., Ohio Wesleyan University; M.A., Southern Illinois University.
- Boyd-Starke, Kimberly P. (2005)* Assistant Professor, Psychology.
B.A., Spelman College; M.A., Georgia School of Professional Psychology; M.S., Ph.D., Virginia Commonwealth University.
- Brooks-Buck, Judith (2006)* Associate Professor, Graduate Professional Education Program.
B.A., Bennett College; M.Ed., University of Virginia; Ph.D., University of Virginia.
- Brown, Beverly (2005)* Assistant Professor, Nursing.
AASN, John Tyler Community College; BSN Virginia Commonwealth University, MSN/FNP, Old Dominion University.
Certifications: Advance Practice Registered Nurse and Certified in Critical Care.
- Brown, Benita (1999)* Associate Professor, Health, Physical Education, Recreation and Dance.
B.A., M.Ed., Ed.D., Temple University.

- Brown-Cobb, Renia (1999)* Associate Professor, Psychology.
B.S., Virginia Commonwealth University; M.Ed., Ed.S., Psy.D., James Madison University.
- Brown, Henry Otis (1975)* Associate Professor, Management and Marketing.
B.S., Virginia State University; M.S., Central Michigan University; J.D., North Carolina Central University.
- Brown, Larry Clifford (1974)* Professor, Biology.
B.A., Olivet Nazarene University; M.S., Ed.D., Ball State University.
- Brown, Retta (2005)* Assistant Professor, Graduate Professional Education Program.
B.S., University of North Carolina-Chapel Hill; M.S., North Carolina Agricultural and Technical State University; Ed.D., University of Cincinnati.
- Brown- Reaves, Taniesha (2000)* Assistant Professor, Political Science and Public Administration.
B.S., Virginia State University; M.S., Syracuse University; J.D., Syracuse University.
- Burton, Gerald Lee (1978)* Professor, Mathematics and Computer Science.
B.S., Livingston College; M.S., Ohio State University; Ph.D., Virginia Commonwealth University.
- Carson, Bernice L. (1990)* Instructor, Psychology.
B.S., Norfolk State University; M.S., Virginia State University.
- Cantanzaro, Christopher (2007)* Assistant Professor, Plant and Soil Science.
B.S., University of Missouri-Columbia; M.S., The University of Tennessee-Knoxville; Ph.D., North Carolina State University.
- Chappell, Beverly T. (2001)* Assistant Professor, Educational Leadership.
B.S., Virginia Commonwealth University; M.Ed., Virginia Commonwealth University., Ph.D. The College of William & Mary.
- Chappell, Glenn (2007)* Assistant Professor, Plant and Soil Science.
B.S., M.S., North Carolina State University; Ph.D., Virginia Polytechnic Institute and State University.
- Chen, Hui (2007)* Assistant Professor, Mathematics and Computer Science.
B.E., China University of Mining and Technology; M.S., University of Science and Technology of China; M.S., Ph.D., University of Memphis; Ph.D., Chinese Academy of Science.
- Cho, Sunyoung (2007)* Assistant Professor, Computer Information Systems.
B.A., Seoul National University; M.S., Ph.D., Georgia State University.
- Christian, Silas (2007)* Associate Professor, Graduate Professional Education Program.
B.A., M.Ed., Tuskegee University; Ph.D., University of Missouri.
- Clark, Vernessa R. (2002)* Associate Professor, Psychology.
B.S., Virginia State University, M.S., Ph.D., Howard University.
- Conway, Ishmail (2006)* Assistant Professor, Graduate Professional Education Program.
B.A., Hampton Institute; M.A., The New School for Social Research; Ph.D., University of Virginia.
- Crawford, Donna (1998)* Associate Professor, Languages and Literature.
B.A. University of Oregon; M.A., University of Washington; Ph.D., University of California at Riverside.
- Crosby, David (1992)* Assistant Professor, Cooperative Extension.
B.S., University of Georgia; M.S., West Georgia College; Ph.D., Auburn.
- Couch, Delores (2006)* Assistant Professor, Nursing.
AAS, New York University; BSN, Long Island University; MA, New York University.
- Daniel, Lorraine (1997)* Assistant Professor, Psychology.
B.S., University of Iowa; M.S., Virginia State University; Psy.D., Wright State University.
- Deane, Harold Alexander (1969)* Assistant Professor, Health, Physical Education, Recreation and Dance.
B.S., Virginia State University; M.A., Howard University.

- DeLong, Robert (2006)*Assistant Professor, Chemistry and Physics.
B.S. University at Buffalo, Ph.D., Johns Hopkins University.
- Dimkpah, Young (2003)* Assistant Professor, Economics.
B.A., Eastern Kentucky University, M.A., Central Missouri State University, Ph.D., Howard University.
- d'Orgeix, Stephen Christian (2001)* Associate Professor, Biology.
B.A., Sonoma State University; M.A., California State University, Fullerton; Ph.D. Virginia Tech.
- Dort, Shirley B. (1991)* Assistant Professor, Music, Art and Design.
B.A., Texas A & I University; M.F.A., Old Dominion University/Norfolk State University.
- Doss, Rodger L. (1994)*Associate Professor, Languages and Literature.
B.A., Bridgewater College; M.A., Virginia State University; Ph.D., Virginia Commonwealth University.
- Dussere, David Philip (1973)*Associate Professor, Languages and Literature.
B.A., Concordia College; M.A., Catholic University; M.A., Ph.D., University of Arkansas.
- Edmonds, Johnella Lucas (1971)*Assistant Professor, Music, Art and Design.
B.M.E., Howard University; M.M., Catholic University.
- Edwards, Carlton (2002)*Assistant Professor, Languages and Literature.
B.A., University of Pittsburgh; M.A., Regent University.
- Edwards, Joyce M. (1999)* Associate Professor, Sociology, Social Work, and Criminal Justice.
B.S., Southern University, M.A., Ph.D., Sociology, Howard University.
- Edwards-Burrs, Lisa (2002)* Instructor, Music, Art and Design.
B.M., M.M., Virginia Commonwealth University.
- Eseonu, Maxwell Obioma (1982)*Associate Professor, Economics.
B.A., East Stroudsburg State College; M.B.A., University of Baltimore; Ph.D., Howard University.
- Eyob, Ephrem (1984)* Professor, Engineering and Engineering Technology.
B.S., Langston University; M.Ed., M.A., Ph.D., University of Oklahoma.
- Faison, Karen (2005)* Associate Professor, Nursing
BSN, Hampton University; MSN/FNP-The University of North Carolina at Chapel Hill; Certificate in Health Administration,
Old Dominion University; Ph.D., Virginia Commonwealth University/Medical College of Virginia. Certifications: Advance
Practice Registered Nurse and Certified Nurse Educator.
- Faison, Milton Omar (2004)* Assistant Professor, Biology.
B.A., Hampton University; Ph.D., University of Virginia.
- Feldstein, Andrew (2007)*Assistant Professor, Marketing.
B.A. State University of New York at Oswego; M.A, Pennsylvania State University; Ph.D., Pace University.
- Fife, John (2007)*Assistant Professor, Psychology.
B.A., University of Massachusetts; Ph.D., Virginia Commonwealth University.
- Fiore, Douglas (2006)* Associate Professor, Graduate Professional Education Programs.
B.A., Hofstra University; M.S. Purdue University; Ph.D. Indiana State University.
- Fletcher, Raymond (1997)* Professor, Mathematics and Computer Science.
B.A. University of Maine at Orono; M.A., M.S., SUNY at New Paltz; Ph.D., Emory University.
- Fox, Barry W. (1981)* Assistant Professor, Cooperative Extension.
B.S., Old Dominion University; M.S. Virginia Commonwealth University.
- Garrott, Carl L. (1998)* Professor, Languages and Literature.
B.A., Kentucky State University; M.A., Tennessee State University; Ed.S. Western Kentucky University; Ed.D. University of
Kentucky.

- Gatrone, Ralph C. (2002)* Associate Professor, Chemistry and Physics.
B.S., Wilkes College, Ph.D., University at Buffalo.
- Ghariban, Nasser (2002)* Assistant Professor, Engineering and Technology.
B.S., Sharif University of Technology; M.S., Ph.D., University of Texas at Arlington.
- Gilliam, Conrad Murphy (1975)* Professor, Agriculture and Human Ecology.
B.S., M.S., Virginia State University; Ed.D., Virginia Polytechnic Institute and State University.
- Gipson, Gilbert W. (1999)* Assistant Professor, Health, Physical Education, Recreation and Dance.
B.A., Lee College M. Ed., Ed.D., University of Tennessee, Knoxville.
- Glaise, Joyce E. (2007)* Assistant Professor, Coordinator of Secondary Education.
B.S., North Carolina A&T State University; M.S., North Carolina A&T State University; Ed.D., University of Virginia.
- Goodwyn, Deborah (1997)* Associate Professor, Languages and Literature.
B.A., North Carolina Central University; M.A.T., Duke University; Ph.D., Indiana University of Pennsylvania.
- Greenberg, Byron E. (2006)* Assistant Professor, Psychology
B.A., Ph.D., Loma Linda University.
- Griffin, Raymond (1994)* Associate Professor, Educational Leadership.
A.B., Shaw University; M.Ed., Virginia State University; C.A.G.S., College of William and Mary; Ed.D., Washington State University.
- Guerinoi, Fabio (1997)* Assistant Professor, Mathematics and Computer Science.
B.S., University of Costa Rica; M.S., Ph.D., Rensselaer Polytechnic Institute.
- Haile, Dawit (1997)* Professor, Mathematics and Computer Science.
B.S., M.S., Addis Ababa University, Ethiopia; M.S., Virginia Commonwealth University; Ph.D., Southern Illinois University at Carbondale.
- Hall, Giles G. (1989)* Associate Professor, Languages and Literature.
B.A., Emory University; M.A., Ph.D., University of Georgia.
- Han, Seonkoo (2005)* Assistant Professor, Mathematics and Computer Science.
B.A., M.A., DongGuk University, Korea; M.A., Ph.D., University of California Santa Barbara.
- Hankins, Anthony G. (1987)* Assistant Professor, Cooperative Extension.
B.S., Bearea College; M.S., Virginia Polytechnic Institute and State University.
- Harrelson, Peggy O. (1995)* Assistant Professor, Cooperative Extension.
B.S., & M.Ed., University of North Carolina-Greensboro; Ph.D., Virginia Commonwealth University.
- Harris, Glenn (2005)* Assistant Professor, Biology
B.S., University of Oregon; Ph.D. Northwestern University.
- Harris, Toni S. (2006)* Assistant Professor, Psychology
B.A. University of Virginia; M.S., Ph.D., Virginia Commonwealth University.
- Haughton, Ethel N. (1994)* Associate Professor, Music, Art and Design.
B.M., East Carolina University; M.A., The Ohio State University; Ph.D., The Ohio State University.
- Hawthorne, Lawrence (2002)* Instructor, Music, Art and Design.
B.F.A., M.F.A., Virginia Commonwealth University.
- Heath, Kay (2000)* Assistant Professor, Languages and Literature.
B.A., University of Texas at Austin; M.A., University of Houston; Ph.D., Rice University.
- Hill, Renee A. (1994)* Associate Professor, History and Philosophy.
B.A., University of Michigan; M.A., E. Michigan University; M.A., University of Michigan; Ph.D., University of Virginia.

- Hill, Oliver W. (1981)* Professor, Psychology
B.A., Howard University; M.A., Ph.D., University of Michigan.
- Hodgson, James F. (2006)* Associate Professor, Sociology Social Work and Criminal Justice.
B.A., M.A., Ph.D., York University.
- Hogan, Wesley (2003)* Assistant Professor, History and Philosophy.
B.A., University of Pennsylvania; M.A., Ph.D., Duke University.
- Holden, James, Jr. (1984)* Instructor, Music, Art and Design.
B.M.E., M.M.E., Jackson State University.
- Holmes, John R. (1997)* Associate Professor, Languages and Literature.
B.A., M.A., University of Southwestern Louisiana; Ph.D., University of Colorado.
- Holsopple, Curtis (2005)* Assistant Professor, Languages and Literature.
B.A., Manchester College; M.A., Ball State University; M.A., Ph.D., Regent University.
- Hopkins, Reginald (1994)* Associate Professor, Psychology.
B.S., M.S., Florida A & M University; Ph.D., Howard University.
- Hossain, Mokerrom (1997)* Associate Professor, Sociology, Social Work and Criminal Justice.
B.A., M.A. Sociology, Dhaka, Bangladesh, M.A., Ph.D. Sociology, University of California, Riverside.
- Hunter, James Edward (1975)* Professor, Health, Physical Education, Recreation and Dance.
A.B., Shaw University; M.S., Ph.D., University of Illinois.
- Hwang, Jae Kwang (2003)* Assistant Professor, Economics.
B.A., Hankuk University of Foreign Studies; M.A., Ph.D., University of Alabama.
- Insera, Paula (2005)* Assistant Professor, Dietetics.
B.S., State University of New York at Stony Brook; M.S., New York University, Ph.D., University of Arizona, Tucson.
- Irvin, William (1994)* Assistant Professor, Cooperative Extension.
B.S., University of Tennessee; M.S., Ph.D., Virginia Polytechnic Institute and State University.
- Jagannadham, Gollakota (1970)* Associate Professor, Agriculture and Human Ecology.
B.S., M.Tech., Sugar University, India; M.S., Ph.D., University of North Carolina.
- Jain, Chaya (2006)* Associate Professor, Political Science and Public Administration.
B.A., M.A., Vikram University; Ph.D., Virginia Commonwealth University.
- Javaheri, Amir (2002)* Assistant Professor, Engineering and Technology
M.S. Case Western Reserve University; Ph.D. University of Cincinnati.
- Javidi, Giti (2004)* Assistant Professor, Mathematics and Computer Science.
B.S., University of Central Oklahoma; M.S.; Ph.D., University of South Florida.
- Johnson, Elijah (1969)* Assistant Professor, Health, Physical Education, Recreation and Dance.
B.S., Arkansas A.M.& N. University of Arkansas; M.Ed., University of Arkansas; M.S., Indiana University.
- Johnson, Paulette Walker (1974)* Associate Professor, Health, Physical Education, Recreation and Dance.
B.S., Morgan State College; M.Ed., Springfield College; Ed.D., Virginia Polytechnic Institute and State University.
- Johnson, Ross (2004)* Assistant Professor, Biology
B.S., Pennsylvania State University; M.S., University of Michigan, Ph.D., University of Pennsylvania.
- Jones, Isabel (2003)* Associate Professor, Family and Consumer Science.
B.S., Fort Valley State University, M.S., University of Missouri, Ph.D., Michigan State University.
- Jones, Wayne (2004)* Assistant Professor, Political Science and Public Administration.
B.A., M.P.A.; Virginia Commonwealth University; Ph.D., George Washington University.

- Joyner, Alice (1998)* Assistant Professor, Agriculture and Human Ecology.
B.S., M.S., Virginia State University; Ed.D, Nova University.
- Kabia, Mohamed Saidu (1998)* Associate Professor, Languages and Literature.
Licence de lettres modernes, Maîtrise de lettres modernes, Diplôme d'Etudes Approfondies, and Doctorat de 3eme Cycle,
Université de Nantes (France).
- Kamarah, Sheikh K. (1999)* Assistant Professor, Languages and Literature.
B.A., University of Sierra Leone; M.A., Leeds University; Ph.D., University of Wisconsin.
- Kanu, Andrew (1997)* Professor, Health, Physical Education, Recreation and Dance.
B.S., MPH, HSD, Indiana University.
- Kaselloo, Paul (2003)* Assistant Professor, Biology.
B.S., M.Sc, University of Toronto; Ph.D., University of Wyoming.
- Kim, Yoon G. (2004)* Assistant Professor, Engineering and Technology.
B.S., M.Sc., University of Toronto; Ph.D., University of Wyoming.
- Knight-Mason Regina M. (1990)* Associate Professor, Biology.
B.S., M.S., Virginia State University; Ph.D., Howard University.
- Kraemer, Mark E. (1984)* Assistant Professor, Agriculture Research Station.
B.A., University of Wisconsin at Milwaukee; M.S., Ph.D., University of Wisconsin at Madison.
- Krohn, Mel David (1983)* Professor, Educational Leadership.
B.A., Morehead State University; M.B.A., University of Southern California; Ph.D., The University of Iowa.
- Kunze, Mark (2006)* Assistant Professor, Management.
B.S., Columbus State University; M.S., Ph.D., Georgia State University.
- Lai, Shuhua (2007)* Assistant Professor, Mathematics and Computer Science.
B.S., East China Normal University; M.S., Shanghai Jiaotong University; Ph.D., University of Kentucky.
- Lane, Frances Jackson (1974)* Associate Professor, Mathematics and Computer Science.
B.S., M.S., Virginia State University. Ph.D., University of Virginia.
- Larose, Thomas E. (2001)* Assistant Professor, Music, Art and Design.
B.A., M.A., University of Florida. Ph.D., Virginia Commonwealth University.
- Lee, Teresa, S. (2002)* Assistant Professor, Educational Leadership.
B.A., Virginia Polytechnic Institute and State University, M.S., Radford University., Ed.D., University of Virginia.
- Li, Han (2007)* Assistant Professor, Computer Information Systems.
B.E., Sinkiang Petroleum Institute, China; M.S., Ph.D., Oklahoma State University.
- Lim, Jun San (2007)* Assistant Professor, Marketing.
B.B.A., M.B.A., Keimyung University, Korea; Ph.D., University of Alabama.
- MacDonald, Gary (2000)* Assistant Professor, Languages and Literature.
B.A., Rhode Island College; M.A., University of Florida, Ph.D., University of Florida.
- Malcan, Jay W. (2006)* Associate Professor, Sociology, Social Work and Criminal Justice.
B.A., University of Montana; M.A., John Jay College of Criminal Justice (CUNY); Ph.D., Florida State University.
- Mao, Weidong (2007)* Assistant Professor, Mathematics and Computer Science.
B.S., Wuhan University; M.S., Wuhan University of Technology; Ph.D., Georgia State University.
- Mbagwu, Godwin Okechukwu (1981)* Professor, Chemistry and Physics.
B.S., University of Nigeria; Ph.D., Virginia Commonwealth University.

- McClenney, Earl Hampton, Jr. (1980)* Associate Professor, Political Science and Public Administration.
B.S., North Carolina Agricultural and Technical State University; M.P.A., University of Virginia; J.D., University of Richmond.
- McFarland, Richard (2003)* Assistant Professor, Educational Leadership.
B.S., University of Arizona; M.S., University of Arizona; Ed.D, Northern Arizona University.
- McMichael, Wallace (1976)* Professor, Political Science and Public Administration.
B.A., Clark College; M.A., Ph.D., Atlanta University.
- Mebrahtu, Tadesse (1987)* Professor, Agriculture Research Station
B.S., University of Maryland Eastern Shore; M.S., Alabama A&M University; Ph.D., University of Maryland at College Park.
- Mersie, Wondi (1988)* Professor, Agriculture Research Station.
B.S., Addis Ababa University; M.S., Reading University; Ph.D., Virginia Polytechnic Institute and State University.
- Mitchem, Cheryl Evelyn CPA, CM A (1991)* Associate Professor, Accounting and Finance. B.A., Texas Christian University; M.B.A., San Diego State University; Ph.D., Virginia Commonwealth University.
- Moehl, John (1994)* Assistant Professor, Cooperative Extension.
B.S., Oregon State; M.S. & Ph.D., Auburn University.
- Mohamed, Ali I. (1988)* Associate Professor, Biology.
B.S., M.S., Ph.D., Cairo University.
- Montague, Frances (2005)* Assistant Professor, Nursing.
ASN, Norfolk State University; BSN, Hampton University; MSN/GNP, Hampton University; Certifications: Advanced Practice Registered Nurse.
- Mukherjee, Shubhabrata (2007)* Assistant Professor, Mathematics and Computer Science.
B.S., Calcutta University; M.S., Indian Institute of Technology, Kharagpur; M.S., Ph.D., University of Louisiana at Lafayette.
- Mummalaneni, Venkatapparao (1998)* Associate Professor, Management and Marketing.
B.S., Regional Engineering College; M.B.A., Indian Institute of Management; Ph.D., Pennsylvania State University.
- Mveng, Brenda (1999)* Instructor, Music, Art and Design.
BFA, Howard University; MFA, Howard University, MA, Yale University.
- Nasim, Aashir (2007)* Associate Professor, Psychology.
B.A., Augusta State University; M.S., Ph.D., Howard University.
- Nerrie, Brian (1988)* Assistant Professor, Cooperative Extension.
B.A., Marist College; M.S. & Ph.D., Auburn University.
- Newton, Scott (1986)* Associate Professor, Cooperative Extension.
B.A., Hendrix College; M.S., University of Arkansas; Ph.D., Southern Illinois University.
- Norman, James (2001)* Assistant Professor, Educational Leadership.
B.S., North Carolina A & T State University; M.Ed., Virginia State University ; Ed.D., Virginia Polytechnic Institute and State University.
- Nunnally, Gladys C. (1991)* Associate Professor, Languages and Literature.
B.A., M.Ed., Virginia State University; Ph.D., Indiana University of Pennsylvania.
- Nwoke, Ben U., CMfgE. (1997)* Professor, Engineering and Technology.
B.Sc. (Hons.), University of Nigeria; M.S., Ph.D., Iowa State University.
- Odeh, Oluwarotimi (2006)* Assistant Professor, Agriculture Business and Economics.
B.A., M.B.A., Federal University of Technology, Nigeria; Ph.D., Kansas State University.

- Ogunnika, Zacchaeus O. (2006)* Assistant Professor, Sociology Social Work and Criminal Justice.
B.S., University of Lagos; M.A., New York University; Ph.D., New School for Social Research.
- Olvido, Alexander (2005)* Assistant Professor, Biology.
B.S., University of California, Irvine; Ph.D., University of South Carolina.
- Omojokun, Emmanuel O. (1989)* Professor, Computer Information Systems.
B.S. (First Class Honors), University of Ibadan; M.S., University of Waterloo; Ph.D., University of Colorado.
- Omotoye, Richard (2002)* Assistant Professor, Economics.
B.A., M.S., Ph.D., Leningrad Finance and Economics Institute, Russia.
- Overton, Reginald (2002)* Associate Professor, Health, Physical Education, Recreation and Dance.
B.S., Middle Tenn. State University, M.S. United States Sports Academy, Ed.D., Temple University.
- Owens, Azzala Yvone (1981)* Instructor, Mathematics and Computer Science.
B.S., M.Ed., Virginia State University.
- Pao, Steven (2002)* Professor, Agriculture Research Station.
B.S., Chinese Culture University, Taipei, Taiwan; M.S., Ph.D., The Ohio State University.
- Parry, John (2006)* Assistant Professor, Agriculture Research Station.
B.A., San Diego State University; M.S., California State University at Chico; Ph.D., University of Maryland at College Park.
- Perdue, Diana S. (2003)* Associate Professor, Mathematics and Computer Science.
B.S., Belmont University; M.A.T., Jacksonville; Ph.D., University of Virginia.
- Person, Linda (1991)* Assistant Professor, Health, Physical Education, Recreation and Dance.
B.S., M.S., Virginia State University, Ph.D., Virginia Polytechnic Institute & University.
- Philipsen, Dirk (1996)* Associate Professor, History and Philosophy.
B.A., College for Political Economy; M.A., Ph.D., Duke University.
- Phillips, James D. (2002)* Assistant Professor, Political Science and Public Administration.
B.A., Hamden-Sidney.; Ph.D., University of Colorado of Denver.; J.D., University of Richmond.
- Phillips, Mark W. (1998)* Associate Professor, Music, Art and Design.
B.M., M.Ed., Virginia State University; Ph.D., University of Oklahoma.
- Prins, Robert J. (2006)* Assistant Professor, Engineering and Technology.
B.S., Michigan Technological University; M.S., University of Virginia; Ph.D., Virginia Polytechnic Institute and State University.
- Qazi, Tariq M. (2002)* Associate Professor, Mathematics and Computer Science.
B.S., Gorakhpur University, India; M.S. Indian Institute of Technology, Kanpur, India; M.S., Ph.D., Indian Institute of Technology, Kanpur, India; Ph.D., Carleton University, Ottawa, Canada.
- Qiu, Manying Mabel (1999)* Associate Professor, Computer Information Systems.
B.S., Southern Wesleyan University; M.S. Clemson University; Ph.D., Clemson University.
- Rashidi, Nasser, H. (2003)* Assistant Professor, Engineering and Technology.
B.S., M.S., Tuskegee University; Ph.D., University of Wyoming.
- Reese, Serena (1999)* Assistant Professor, Health, Physical Education, Recreation and Dance.
B.A., University of California, Los Angeles (UCLA); M. A., California State University, Long Beach, Ph.D., University of Tennessee, Knoxville.
- Ren, Shuxin (2007)* Assistant Professor, Agriculture Research Station.
B.S., Beijing Agriculture University, China; Ph.D., Texas A&M University.
- Rissel, Hildegard (1997)* Associate Professor, Languages and Literature.
B.S., M.S., Ph.D., Georgetown University.

- Robinson, Yvette G. (1972)* Assistant Professor, Cooperative Extension.
B.S., M.S., Virginia State University.
- Sample Maxine J. (2002)* Associate Professor, Languages and Literature.
B.A., The College of New Jersey; M.A., Clark Atlanta University; Ph.D., Emory University.
- Saravanabhavan Sheila (1998)* Associate Professor, Educational Leadership.
M.A., Madurai University.; M.A., Northern Arizona University.; Ed.D., Northern Arizona University.
- Sarkar, Abhijit, (2005)* Assistant Professor, Chemistry and Physics.
B.S., Ph.D., University of Illinois, Chicago.
- Sayre, Brian (2005)* Associate Professor, Biology.
B.S., University of Illinois, Urbana-Champaign; M.S., Ph.D., Virginia Tech.
- Schwartz, Richard Isadore (1976)* Associate Professor, Music, Art and Design.
B.M.E., University of Michigan; M.M., Ph.D., Washington University.
- Sen, Dilip Kumar (1969)* Professor, Biology.
I.S., D.V.M., Calcutta University, India; Ph.D., Howard University.
- Shaffer-Gottschalk, David (1992)* Associate Professor, Music, Art and Design.
B.M., Wartburg College; M.M., University of Michigan; D.M.A., University of Colorado.
- Sharma, Hari Prakash (2003)* Associate Professor, Accounting and Finance.
LL.B., B.Com., Meerut University; M. Com., Rohilkhand University; M.B.A., University of North Carolina at Charlotte; Ph.D., Agra University.
- Shelton, Claiborne, Jr. (1981)* Associate Professor, Educational Leadership.
B.S., M.Ed., Virginia State University; Ph.D., University of Iowa.
- Shen, Hua (2002)* Assistant Professor, Biology.
B.Sc, Nan-Kai University, M.Sc, Ph.D., University of British Columbia.
- Sheybani, Ehsan (2004)* Assistant Professor, Engineering and Technology
BSEE, University of Florida; MSEE, Florida State University; Ph.D., University of South Florida.
- Shahidulla, Shahid (2001)* Assistant Professor, Sociology, Social Work and Criminal Justice.
M.P.I.A., M.A., Ph.D. Sociology, University of Pittsburgh.
- Siddiqi, Shaukat Mahmood (1969)* Professor, Biology.
B.S., M.S., University of Peshawar Pakistan; M.S., Virginia State University; Ph.D, University of South Carolina.
- Singh, Rana Pratap (1972)* Professor, Mathematics and Computer Science.
B.S., M.S., Banaras Hindu University, India; M.S., Ph.D., University of Windsor, Canada.
- Sriharan, Shobha (1990)* Associate Professor, Environmental Science.
B.S., Osmania University, Hyderabad, India; M.S., Osmania University Hyderabad, India; Ph.D., Toulouse University, France
- Smith, Christine (1982)* Assistant Professor, Psychology.
B.S., M.S., Virginia State University, Ph.D., Walden University.
- Snow, Cary (2006)* Instructor, Hospitality Management.
B.S., M.S., Virginia State University.
- Srivastava, Keshav Nand (1978)* Associate Professor, Chemistry and Physics.
B.S., Saint Andrews College; M.S., University of Gorakhpur; Ph.D., Howard University.
- Stampley, Cheryl D. (2004)* Associate Professor, Sociology, Social Work and Criminal Justice.
B.A., Governors State University-Illinois; R.N., Michael Reese Hospital School of Nursing; M.S.W., University of Chicago;
Ph.D., Loyola University.

- Study, Nancy E. (2002)* Assistant Professor, Engineering and Technology.
B.S., Southwest Missouri State University; M.S., Purdue University; Ph.D. Purdue University.
- Sun, Yong (2007)* Assistant Professor, Finance.
B.E., Jiangxi University of Finance and Economics, China; M.B.A., Wright State University; Ph.D., Old Dominion University.
- Tabanjeh, Mohammad M. (2002)* Associate Professor, Mathematics and Computer Science.
B.S., M.S., Yarmouk University; M.A., Ph.D., The Graduate School and University Center of The City University of New York.
- Taylor, Colleen Marie (2003)* Assistant Professor, Chemistry and Physics.
B.S., Ph.D., Virginia Commonwealth University.
- Thomas, Freddy L. (1992)* Professor, Languages and Literature.
B.A., Morris Brown College; M.S., Indiana University; Ph.D., University of South Carolina.
- Thomas-Buchanan, Pamela A. (2002)* Assistant Professor, Animal Science.
B.S., Virginia State University, D.V.M., Tuskegee University.
- Tompkins, Stephen S. (1996)* Associate Professor, Engineering and Technology.
B.S., Virginia Polytechnic Institute and State University; M.S., University of Virginia; Ph.D., Old Dominion University.
- Toni, Bourama (2003)* Professor, Mathematics and Computer Science.
B.S., M.S., National University of Ivory Coast; Ph.D., University of Montreal.
- Thota, Vykuntapathi (1972)* Professor, Educational Leadership.
B.S., Osmania University, India; M.S., Kansas State University; Ph.D., Michigan State University.
- Trotter, Pamela B. (2003)* Associate Professor, Psychology
B.A., Lincoln University; M.A., Ph.D., Kent State University.
- Tuckwiller, George Lee, III (1976)* Assistant Professor, Music, Art and Design.
B.M., Virginia Commonwealth University; M.Ed., Virginia State University.
- Varde, Aparna (2006)* Assistant Professor, Mathematics and Computer Science.
B.E., University of Bombay, India; M.S., Ph.D., Worcester Polytechnic Institute.
- Waajid, Badiyyah (2007)* Assistant Professor, Family and Consumer Science.
B.S., Virginia Commonwealth University; M.S., Virginia State University; Ph.D., Virginia Commonwealth University.
- Walton, Isis (2001)* Assistant Professor, Sociology, Social Work and Criminal Justice.
B.A., Talladega College, Ph.D. Sociology, Wayne State University.
- Walker, Katrina L. (2004)* Associate Professor, Psychology
B.A., University of Virginia; Ph.D., University of South Carolina.
- Ward, Sherman (2005)* Assistant Professor, Biology.
B.A., University of New Orleans; Ph.D., Northwestern University.
- Watson, Jamantha (2002)* Assistant Professor, Languages and Literature.
B.A., Hampton University; M.F.A., Virginia Commonwealth University.
- Wieman, Robert (2006)* Assistant Professor, Mathematics and Computer Science.
B.A., University of California at Berkeley; Ph.D., North Carolina State University.
- Wildeus, Stephan (1992)* Professor, Agriculture Research Station.
B.S., Montana State University; Ph.D., James Cook University.
- Williams, Deanne (2001)* Associate Professor, Agriculture and Human Ecology.
B.S. University of the West Indies; M.B.A., Nova Southeastern University; Ed.S., University of Florida; Ed.D, University of Florida.

- Williamson, Keith (2006)* Associate Professor, Engineering and Technology.
B.S., Bucknell University; M.S., Northeastern University; Ph.D., Tufts University
- Wilson, Carolyn, H. (2000)* Assistant Professor, Educational Leadership.
B.S., Norfolk State University; M.S., Old Dominion University.; Ed.D., George Washington University.
- Wimbush, George Washington (1969)* Professor, Mathematics and Computer Science.
B.S., Grambling State University; M.S., Clark -Atlanta University; Ed.D., University of Houston.
- Wright, Carl Nathaniel, CPA (1976)* Professor, Accounting and Finance.
B.S., Virginia State University; M.B.A., Virginia Commonwealth University; Ph.D., Jackson State University.
- Xie, Zhifu (2007)* Assistant Professor, Mathematics and Computer Science.
B.Sc., M.Sc., Chongqing Normal University; Ph.D., Brigham Young University.
- Xu, Shuting (2005)* Assistant Professor, Computer Information Systems.
B.E., Shandong University, China; Ph.D., Shonghai Jiastong University, China; Ph.D., University of Kentucky.
- Xu, Yaquan (2005)* Assistant Professor, Computer Information Systems.
B.S., Huazhong University of Science and Technology, China; Ph.D., University of Mississippi.
- Yan, Ruiliang (2006)* Assistant Professor, Marketing.
B.A., Southwest Agriculture University, China; M.S., Sichuan University, China; Ph.D., University of Wisconsin.
- Yang, Hong (2007)* Assistant Professor, Agriculture Research Station.
B.A., Sichuan Institute or Light Chemical Industry; M.S., Oregon State University; Ph.D., The Pennsylvania State University.
- Yang, Huiqing Helen (2003)* Associate Professor, Mathematics and Computer Science.
B.S., Taiyuan University of Technology; M.S., Harbin Institute of Technology; M.S., Ph.D., The University of Southern Mississippi.
- Yang, Seung S. (2004)* Assistant Professor, Computer Information Systems.
B.E., Soongsil University; M.E. Soongsil University; Ph.D., Kent State University.
- Yoo, Dong Kyoona (2006)* Assistant Professor, Computer Information Systems.
B.A., M.S., Korea University; Ph.d., The University of Toledo.
- Young, Danette (2001)* Instructor/Technician, Biology. A.A.S., Danville Community College.
B.S., M.S., Longwood College.
- Young, Fransis E. (2003)* Instructor, Music,
Art and Design. B.F.A., M.F.A., Howard University.
- Young, Gloria (1994)* Professor, Dietetics.
B.S., Philippine Women's University; M.S., University of Iowa; Ed.D., Nova University.
- Young, Posey R. (1991)* Instructor, Engineering and Technology,
B.S., M.Ed., Virginia State University.
- Zadeh, Jeff (2002)* Associate Professor, Mathematics and Computer Science.
B.S., Karaj College of Mathematics; M.S., Western Illinois University, Ph.D., Illinois Institute of Technology.
- Zewelanj, Serpell (2008)* Assistant Professor, Psychology.
B.S., Clark University; M.S., Ph.D., Howard University.
- Zhang, Jie (2006)* Assistant professor, Computer Information Systems.
B.A., Renmin University of China, P.R. China; M.A., Ph.D., University of Mississippi.
- Zhong, Yan (2006)* Assistant Professor, Hospitality Management.
B.A., Tianjin Foreign Language Institute, Tianjin, P.R. China; M.S., Ph.D., Texas Tech University-Lubbock.

INDEX

Academic Regulations and Procedures	20
Academic Honesty	22
Academic Honors	21
Academic Sanctions	22
Accounting and Finance, Department of	107-114
Admissions	20
Advanced Placement	22
Advanced Scholars Program	23
Advisement	21
Administrative Systems Management	224-226
Agriculture and Human Ecology, Department of	60-104
Art and Design	312-319
Attendance	24
Baccalaureate Degree	21
Biology, Department of	133-145
Board of Visitors and Administration	2
Cancellation of Enrollment	23
Career Planning and Placement	358
Change of Major	23
Chemistry and Physics, Department of	146-163
Classification of Students	23
Commencement	24
Computer Information Systems, Department of	115-120
Concentration	24
Counseling Services	360
Course Load	24
Course Numbering System	24
Course Waivers and Substitutions	24
Credit by Examination	24
Degrees	25
Economics, Department of	219-223
Engineering and Technology, Department of	164-188
Enrollment/Withdrawal	25
Examinations	25
Financial	357
Financial Aid	25
Foreign Language Requirement	25
General Education Requirements	26
Grade Reports	26
Grade Review Procedure	26
Grade-Point Average	26
Grades	25
Graduating Honors	21
Graduation Procedures	26
Health, Physical Education, Recreation and Dance, Department of	227-248
History and Philosophy, Department of	249-257
Honors	26
Honors Program	26
Honors with Distinction List	21
Honors List	21
Hospitality Management	92
Human Ecology	85-91
Immunizations	26

In-State Tuition Eligibility.....	357
Instructional Faculty	362-375
International Students	20
International Student Advisement.....	359
Insurance	358
Laboratory Enrollment.....	26
Languages and Literature, Department of.....	258-284
Last 27 Credits.....	26
Late Registration	27
Library.....	357
Major	27
Management and Marketing, Department of.....	121-132
Management Degree Program	122
Marketing Degree Program.....	123
Mathematics and Computer Science, Department of	189-205
Military Science, Department of.....	285-287
Minor	27
Music, Art and Design, Department of	288-311
National Student Exchange	358
New Student Orientation Program	359
Non-Traditional Studies.....	21
Nursing, Department of	206-209
Off-Campus Courses	27
Placement in Freshman Mathematics	27
Political Science and Public Administration, Department of	320-327
Presidential Scholarship.....	28
Probation.....	27
Professional Education Program.....	341-355
Proficiency Examinations	27
Provost's Scholarship.....	28
Public Safety	360
Psychology, Department of.....	210-215
Readmission.....	21
Registration	26
Residence Life	360
Senior Citizens	21
Sociology, Social Work, and Criminal Justice, Department of.....	328-340
Special Academic Programs	52
Special Student Advisement	359
Suspension	22
Stay in Step Intergenerational Program	359
Student Commuter Services.....	360
Student Government Association	360
Student Health Service.....	360
Student Identification Card	360
Substance Abuse and Sexual Assault Prevention	361
The University Accreditation and Affiliations	6-7
The University History	4
The University Principles	5
The University Mission	5
Top Ranking Graduates	22
Transcripts	28
Transfer Credits	28
Transfer Students.....	17
Tuition and Fees	28
Undeclared Major Advisement Program	359
Undergraduate Scholarships	28

University Scholarship..... 29
Veteran Students Advisement..... 359
Withdrawal from the University 28
Withdrawals and General Counseling..... 359



**GRADUATE CATALOG
2008-2010**

Virginia State University (VSU) 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.

The Graduate Studies Office

The Graduate School Office (Office of the Dean, School of Graduate Studies, Research and Outreach) is located at 20716 Fourth Avenue and is open daily for students from 8:00 a.m. to 5:00 p.m., Monday through Friday. Students who desire conferences should schedule an appointment.

General Policy Statement

The provisions of this Catalog do not constitute a contract, expressed or implied, between any applicant, student, or faculty member and Virginia State University. Virginia State University reserves the right to withdraw courses at any time, to change fees, calendars, curricula, graduation procedures, and any other requirements affecting students. Changes will become effective whenever the proper authorities so determine and will apply both to prospective students and to those already enrolled.

While every effort is made to assure accuracy, Virginia State University does not assume responsibility for any misrepresentation which might arise through error in the preparation of this or any other of its catalogs, or through failure to give notice of changes in its requirements, policies, tuition and fees, course offerings, and other matters affecting students.

TABLE OF CONTENTS

ADMINISTRATION OF GRADUATE PROGRAMS	1
GENERAL INFORMATION	2
History and Philosophy of Graduate Study at Virginia State University	2
Accreditation and Affiliations.....	2
Careers and Graduate.....	3
STUDENT SERVICES	4
FINANCIAL INFORMATION	8
Tuition and Fees.....	8
Financial Assistance.....	8
ADMISSIONS AND OTHER ACADEMIC REGULATIONS FOR A MASTER’S DEGREE	10
Admission Requirements	10
Other Academic Requirements	12
GRADUATE PROGRAMS AND COURSE DESCRIPTIONS	21
Biology	24
Career and Technical Studies.....	24
Project Management Concentration	28
Criminal Justice	30
Economics.....	35
English	38
Graduate Professional Education Programs	42
Elementary Education (PreK-6).....	44
Special Education (K-12).....	46
Counselor Education.....	50
Counselor Education (PreK-12).....	52
Educational Administration and Supervision.....	56
Educational Administration and Supervision (non-endorsed).....	58
Media and Technology (non-endorsed)	60
Doctor of Education – Educational Administration and Supervision.....	62
History	64
Interdisciplinary Studies	71
Mathematics.....	72
Physics	80
Plant Science.....	81
Psychology.....	84
Sport Management.....	88
Post-Master’s Certificate Programs	93
Certificate of Advanced Graduate Studies	93
Certificate of Graduate Studies in Project Management	95
Certificate Program in Nutrition and Dietetics.....	95
Graduate Faculty.....	97
Index	102

ADMINISTRATION OF GRADUATE PROGRAMS

The Dean of the School of Graduate Studies, Research and Outreach and Graduate Coordinators exercise 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.

Much of the work of the Graduate Coordinators is accomplished through four subcommittees: (1) Policies and Petitions, (2) Graduate Curriculum, (3) Graduate Professional Education, and (4) Graduate Record Examination. 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 curriculum changes and curriculum proposals. The Graduate Professional Education Committee serves as the principal unit for articulation and evaluation of all aspects of advanced-level professional education programs. The Graduate Record Examination Review Committee reviews policy, makes recommendations for exceptions, and designs procedures for the Graduate Record Examination.

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. No distinction is made among regular day courses, evening or Saturday offerings, or summer session courses. The standards and academic requirements are the same.

GENERAL INFORMATION

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 thereafter, 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 2001 to the School of Graduate Studies, Research and Outreach. It is one of five schools headed by a Dean. The School of Graduate Studies, Research and Outreach 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 essential study in supporting areas and disciplines. As a corollary, programs in the professions include study in the basic academic disciplines from which they are derivative or on which they rest and, in addition, include essential 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 and facilities for advanced study and research in their fields of specialization, and one of its aims is to assist students in achieving an advanced level of understanding and competence necessary for successful professional careers.

Accreditation and Affiliations

Virginia State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools **(1866 Southern Lane, Decatur, Georgia 30033-4097; telephone number 404-679-4501)** to award bachelor's and master's degrees, a certificate of advanced graduate study, and a doctorate degree.

The graduate professional and professional education programs are fully accredited by the National Council for Accreditation of Teacher Education and the Virginia State Board of Education. The University is a member of the American Association of Colleges for Teacher Education as well as the American Council on Education. In addition to numerous other professional organizations related to the various academic programs, the University has membership in the following:

- American Association of University Women
- American College Health Association
- Association of American Colleges
- Association of Continuing Higher Education

Association of Virginia Colleges
Conference of Southern Graduate Schools
Council of Cooperative College Projects
Council of Graduate Schools of the United States
National Association of Schools of Music
National Association of State Universities and Land Grant Colleges
National Commission of Accrediting
National University Continuing Education Association
Oak Ridge Associated Universities
Southern Universities Research Association

Careers and Graduate Study

In general, all graduate programs provide preparation or continued preparation for a number of careers ordinarily associated with the various fields of study which they represent. For example, students interested in one of the sciences or mathematics should study in one of those fields; historians should concentrate in history or combine it with political science offerings if cooperatively advised by major professors. Similarly, students interested in careers in education should enter some aspect of the teaching curricula either as majors in the academic area only or as majors who combine studies in the discipline with other studies in human development, research, measurement or learning theory.

More information about majors and careers may be found in the descriptions of the individual programs given in later sections of the catalog.

Student Services and Facilities

The University offers a variety of extra-curricular programs of a cultural, educational, social, and recreational nature. These programs supplement and enhance the academic program. In addition, numerous supporting services are provided to meet specific student needs. Graduate students are invited to participate in the total University program and to take advantage of available student services.

The Vice President for Academic and Student Affairs bears direct responsibility for the coordination of these programs and services, which are administered through the following offices: Alumni, Athletics, Counseling Services, Financial Aid, Placement Services, Resident Student Activities, Health Services, and Veterans Affairs.

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

Alumni Office

All graduates are members of the Alumni Association. The Association offers a continuing opportunity for the Alumni to serve the University and to maintain a strong sense of identity with their Alma Mater. Interested friends of the University may be granted associate membership. A nominal membership fee secures all membership privileges. The Association publishes the quarterly *Alumni Newsletter*, which is distributed to all active alumni on its roster.

Athletics and Recreation

All University students are encouraged to participate regularly in athletic activities of their choice. The physical education facilities, the track, swimming pool, and tennis courts are available for students' use.

Financial Aid

Qualified students demonstrating need for financial assistance may apply for loans, scholarships, grants, and part-time employment through this office. Brief descriptions of the various aid programs may be found in the "Expenses and Financial Aid" section of this catalog.

Additional information and application forms may be obtained from the Financial Aid Office, Carter G. Woodson Avenue. All requests for application forms and additional information regarding graduate fellowships should be directed to the School of Graduate Studies, Research and Outreach.

International Education

The Dr. George H. Bennett Office for International Education assists graduate students in identifying opportunities for research, teaching, and study abroad. Scholarships are available to currently enrolled students who have been accepted into an education abroad program for which they will receive credit toward their degree program.

Library Facilities

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 250,200 monographs, approximately 1,255 periodicals and newspapers, 746,333 microform pieces, 27,144 audio-visual pieces including government publications 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 200 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. The book and serial collections, along with a wealth of online databases are accessible through the Library's webpage and through TROY, the Online Public Access Catalog (OPAC) with special services for the visually impaired. The Library provides local and remote access to Interlibrary loan, online reserves and self help information literacy activities. Visit the website at <http://library.vsu.edu>

The Media Center houses videos, CDs, DVDs, audiotapes and other media. It also has a full array of multimedia services and provides wheel chair accessible multimedia services. The Center provides large screen text enhancements, talking books and other media for students with disabilities. The renovated library contains a 24-hour computer lab, cyber café and 24-hour study area to accommodate the University's diverse student population.

The Library has a seating capacity for 600 students and shelving capacity for approximately 300,000 books. Facilities include 21 private study rooms with hardware and wireless capability and 4 group conference rooms with smart boards for leading edge presentations. There are numerous individual carrels. The Library has a 40 seat electronic classroom to train students in information literacy.

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 is a selective depository for United States and Virginia government publications. The collection of more than 200,079 federal and state documents offer a wealth of information.

Johnston Memorial Library is handicapped accessible.

Placement Services

The Career Planning and Placement Service aids students and alumni in locating positions after graduation. It also assists students in locating on-campus employment opportunities.

For better service to graduates, students should register with the Placement Office during the last year of enrollment for the degree. The office attempts to maintain files of current vacancies. Alumni are encouraged to inform the office of their desire for position changes.

Housing

Accommodations for a limited number of graduate students are available in University residence units. Mostly double accommodations are available, but a few single units are available. Requests for University residence accommodations are honored as completed application materials are received. Inquiries about housing should be addressed to the Director, Residence Life and Housing, Virginia State University. Payments must be made as requested in order to effect the reservation of rooms. Assistance in locating off-campus housing also may be secured from this office.

Campus Parking

Parking permits are required of all persons affiliated with the University who plan to park vehicles on campus for an extended period. At the time of registration, interested students should obtain a brochure outlining current parking policy and purchase a parking permit (decal) if needed. The following general policies regarding parking apply to faculty, staff, and students:

All vehicles, with two exceptions, parked on the campus grounds must display a valid parking permit. The first exception is for vehicles operated by individuals who have been issued a "Handicapped" permit by the Commonwealth of Virginia. Vehicles displaying the "Handicapped" permit must park in spaces provided throughout the campus which are specifically marked for handicapped vehicles. All parking lots have at least one "handicapped" space and are strategically located to ease movement by drivers or passengers of the vehicle. The second exception is for short term visitors to the campus who are parked in the Honor Parking Lot No. 7, located at the corner of Jackson Place and University Avenue.

Visitors to the campus who are not eligible for a visitor's permit must park in the lot designated as "Honors Parking" (Lot No. 7) and pay the posted parking fee. A space in the Honor Parking lot has no specific time limit during any given day. An individual who removes a vehicle from the lot forfeits all rights to the space in which the vehicle was parked. The Honor Parking Lot is the only lot on campus in which a vehicle may be parked without a decal or permit. Fees for the Honor Parking lot are required at all times between the hours of 7:00 a.m. and 7:00 p.m.

Student Parking

Any vehicle with a University Student decal may park in a lot designated as "Student Parking."

Restricted Faculty/Staff Parking

Restricted Faculty/Staff Parking lots are marked with signs at the entrance to each parking lot. These lots are used by faculty/staff whose vehicles display the University Faculty/Staff parking decal. Unauthorized vehicles parked in these spaces will be ticketed and/or towed.

Questions regarding parking should be directed to the Department of Police and Public Safety at 524-5360.

Student Activities

The campus center, Foster Hall, serves as a social, cultural, educational and recreational center for all student groups. This center contains a snack bar and cafeteria, meeting rooms, information desk, television areas, music lounges, billiards and game areas, assembly hall, rooms for dancing, and art display space. The Foster Hall center serves as a focal point for campus hospitality.

Student Identification Card

Each currently enrolled student must possess a valid student Identification (ID), which may be revalidated for up to four (4) years. The Identification Card is used for health service, athletics, dining hall, library, special activities and other related services. The student is responsible for the use and misuse of the assigned ID card. A charge will be made for replacement of a lost or mutilated card.

Student Health Services

Memorial Hospital, named in honor of the loyal sons and daughters of the University who sacrificed their lives in World War I and II, is a health center with a dispensary and temporary facilities for bed-patients. Students may secure treatment by presenting the usual identification.

Health and accident insurance is required for full-time students. Students must demonstrate that they have full health and accident insurance. If students do not have insurance coverage, the University has several arrangements with private companies offering student health insurance policies. Information and applications relative to health insurance may be obtained at the Student Affairs Office.

Prior to enrollment, all full-time students enrolling for the first time at VSU are required to furnish a health history, to include proof of up-to-date immunizations against the following diseases: measles, rubella, polio, diphtheria, and tetanus. If a full-time student has not provided the University with this information, he/she will not be allowed to enroll or remain enrolled.

Computer Laboratories

The University operates a number of computer laboratories for student use. Several of the laboratories are specialized to meet the needs of specific discipline areas: mathematics, computer science, and career and technical studies. Others are provided for general student use.

Testing Services

Students may arrange to have standardized aptitude and achievement tests administered through the Graduate School Office. Information concerning these tests may be obtained from this office or from the Office of Institutional Planning and Assessment.

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.

Public Law 87-815

Veterans studying under this law should receive clearance from the Veterans Counselor to register. The Veterans Administration pays the cost of tuition, fees, books, and supplies.

FINANCIAL INFORMATION**TUITION AND FEES**

For information, see the 2006 – 2008 Student Guide for tuition, fees, and other financial information 2006-2008.

Graduate Tuition

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.

Auditing Fees

Students approved to audit a course will be charged at the same rate as for credited semester hours.

Admission Fee

Every application must be accompanied by a fee of \$25. This fee is non-refundable, non-transferable to another session, and non-deductible from the fees charged for tuition, room, board, etc.

Transcript Fee

The Registrar's Office is the source for all University transcripts. A fee of \$2 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 cap, gown, and hood necessary for University graduation ceremonies.

FINANCIAL ASSISTANCE

Qualified students requiring financial assistance can apply for loans, scholarships, grants and part-time employment through VSU's Office of Financial Aid, which you can contact at: (804) 524-5990 **or** (800) 823-7214. Find more information on the VSU Web site.

Graduate Assistantships/Fellowship

Virginia State University awards graduate assistantships annually to students who have demonstrated exceptional promise and achievement. These assistantships provide a stipend of \$4,500 to in-state students, and \$10,000 to out-of-state students per year. Graduate assistants may be required to work 15 hours per week.

Qualified students interested in applying for graduate assistantships should contact the department chairperson of the program area they wish to pursue.

Guaranteed Loans

Federal guaranteed loans are available to graduate student, whether they have full-time jobs or not. The maximum loan (currently \$8,500 a year for two years) is available to full-time students. Half the amount is available to part-time graduate students who are carrying at least six hours per semester.

Application for Fellowships, Assistantships, Loan

The Application for Graduate Fellowship/Assistantship is available in the Graduate Office. 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.

Veteran's Assistance

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.

Other Aid

Sponsored research programs offer 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 counselors are open to graduate students. Applications 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 Planning and Placement. Sometimes graduate students may find part-time jobs in the local community.

ADMISSIONS AND OTHER ACADEMIC REGULATIONS FOR A MASTER'S DEGREE

Admissions Requirements

An applicant for graduate study is expected to hold the bachelor's degree from a college of recognized standing. 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 student must submit an application to the Graduate School and receive a letter of admission before registering for courses.

A senior at Virginia State University who has a superior scholastic record and is within six hours of qualifying for the bachelor's degree may be admitted to graduate studies; but work applied toward the bachelor's degree may not be used as credit for the master's degree. Enrollment in graduate courses must be approved by the departmental chairman and the Dean of the School of Graduate Studies, Research and Outreach.

Admission requirements for the Doctor of Education degree in Educational Administration and Supervision are described in the section entitled, "Doctor of Education Degree Program."

Application Procedures

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 are expected to be made on the official graduate application form of Virginia State University, which may be obtained from the Graduate School Office. The completed application should be returned to the Graduate School Office. All supporting credentials, scores, and references should be mailed directly from the original source to the Graduate School Office. *Final admission determination will be made by the program to which the student has applied.*

The application *deadline* for admission to graduate study is May 1 for the Fall semester, and by November 1 for the Spring Semester. The University will make every effort to process applications received after these dates, but the student's registration may be delayed, late fees may result, or consideration for the desired term may not be assured.

Application Procedures for Student Seeking a Degree

1. Submit a completed application form with the fee of \$25 (cashier's check or money order made payable to Virginia State University) to the Graduate School Office. **Students who apply electronically must use the University's web site to pay the \$25.00 fee.**
2. Have two official transcripts from each collegiate institution attended sent to the School of Graduate Studies, Research and Outreach. To be considered official, a transcript must be received DIRECTLY from the institution concerned. Graduates of Virginia State must comply with this requirement.
3. An applicant has to 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 six credit hours of course work until they have met the GRE requirements of their respective program. After the first semester, the student needs to have met the specific GRE program requirements.
4. Requests for transfer credit for graduate courses already completed must be submitted to the student's major professor 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 course work with a grade point average of "C" or better.
6. Applicants applying for a graduate fellowship should be sure that the Application for a Graduate Fellowship is filled out and returned with their Application for Admission.

Application Procedures for Non-Degree Study

1. Submit a completed application form with a fee of \$25 (cashier's check or money order made payable to Virginia State University) to the Graduate School Office. **Students who apply electronically must use the University's web site to pay the \$25 fee.**
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 Graduate School Office. To be considered official, a transcript must be received **directly** from the institution. Graduates of Virginia State 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

Admission to the School of Graduate Studies, Research and Outreach as a graduate student is of three types—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. **Applicants who have not taken the GRE or do not have GRE scores available may apply for conditional admission.**
2. Applicants must meet the requirements for admission to the program of their proposed majors. (See program descriptions.)

Conditional Admission

Three classes of graduate students are granted conditional admission to Graduate School:

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 School 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 12 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 course work as non-matriculating "special" students.

Students admitted to resident workshops and institutes and to 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 Dean of the School of Graduate Studies, Research and Outreach 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 offer of admission is made by the Dean of the School of Graduate Studies, Research and Outreach to an applicant who has been admitted. The offer specifies the effective date of admission (which normally coincides with the semester requested

on the application), the category of admission being offered and the name of the faculty advisor assigned to the applicant. The offer of admission is good for one year.

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 Graduate School, 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 to the Graduate School, submitting a new application form with required application fees, 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 School of Graduate Studies, Research and Outreach 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

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 and receive grades of "S" where grades of "S," "U," or "P" are awarded. Only courses with grades of "A," "B," "C," "S," or "P" may be applied to semester-hour requirements for the degree.

Grades of "C" may constitute no more than 20% of the credits offered for graduation, or a maximum of two "C"s in two four-hour courses on the graduate level, whichever is greater. Semester hours with "C" grades in excess of this percentage or the allotted eight hours 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 "C" or better, except that the cumulative average for undergraduate prerequisites must be no less than "B."

Graduate students in non-degree programs are expected to meet and maintain the same academic standards as students in degree programs.

Although 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.

Admission to Candidacy

Admission to graduate study does not imply admission to candidacy for a degree. Students initially admitted into a program leading to a degree are evaluated later for advancement to degree candidacy. A student is eligible to apply for candidacy after he/she has completed a minimum of 12 semester hours of course work at this university in his/her approved program of study. He/she must, however, attain candidacy no later than the semester before he/she expects to graduate. In order to become a candidate for the master's degree, a student must satisfy the following requirements:

1. Satisfactory completion of all requirements for unconditional admission to the School of Graduate Studies, Research and Outreach and to the academic program, including satisfactory scores on the Graduate Record Examination.
2. Satisfactory completion of the foreign language requirement, where applicable.
3. A minimum of 12 semester hours of graduate-level courses in an approved program of study with a minimum grade-point average of B (3.00).
4. Evidence of proficiency in the use of the English language.
5. Approval of the major professor and of the minor professor where applicable.

The application for admission to candidacy should be filed in duplicate. Application forms are obtained from the Graduate Office and, upon their completion, must be returned to the Graduate Office. No student may enroll for Research and Thesis, Thesis in Absentia, Master's Project, or the Comprehensive Examination before he/she has been admitted to candidacy.

Application for Graduation

A candidate for the graduate degree or Certificate of Advanced Graduate Studies must file an Application for Graduation by dates published in the official academic year calendar prior to the appropriate Commencement Exercise.

Attendance

Responsibility for regular class attendance rests with the student. Regulations concerning attendance in a particular course are at the discretion of the instructor and are announced in the opening class session. 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

A student enrolled in a full program of studies, or its equivalent, may audit a course which contributes to his/her program provided his/her 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. No more than 12 semester hours of course work toward the degree may be certified to any employer by the Dean of Graduate Studies prior to attaining candidacy.

Only the Dean of Graduate Studies, Research and Outreach 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 School 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 in the Graduate Office.

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, department head and the Dean of the School of Graduate School, Research and Outreach is necessary.

It is the student's responsibility to request credit for such courses and upon completion have an official transcript submitted to the 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 of the major professor, the Dean of the School of Graduate Studies, Research and Outreach and the Chair of Graduate Professional Education Programs.

Course Load

The normal load for a full-time graduate student enrolled during a semester is twelve (12) semester hours; a maximum class load is seventeen (17) semester hours. To be considered in full-time study the student must be registered for not less than 12 semester hours of work.

The academic load of a graduate student cannot always be measured in terms of formal courses. Frequently, his assignment will consist largely or entirely of research. The Dean of the School of Graduate Studies, Research and Outreach will determine the extent to which these assignments are the equivalent of a full academic load.

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 School of Graduate Studies, Research and Outreach on recommendation of the major advisor. Without special permission, the course load for part-time students may not exceed 11 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 nine semester hours of credit by attending a three-week and a six-week session.

Course Numbers

Two levels of courses are open to graduate students. Courses numbered at the 400 level are open to advanced undergraduate and graduate students but must be approved for graduate credit by the major advisor prior to the students' enrolling in the same.

Courses numbered at the 500 and 600 levels are open to graduate students only. A graduate student's program of study must show at least fifty per cent (50%) of the courses offered for the degree in the 500-level series.

Degree Requirements

Graduate programs lead to the Doctor of Education (Ed.D.) in Educational Administration and Supervision, Master of Arts, Master of Science or Master of Education degree. The M.A. degree is conferred when the major is in Economics, English, or History. 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 that do not include Research and Thesis in the degree requirements. Candidates for the master's degree may elect a major in the fields of concentration listed below.

Biology
Career and Technical Studies
 Project Management Concentration
Counselor Education
Criminal Justice
Economics
Education
Educational Administration and Supervision
English
Counselor Education
History
Mathematics
Physics
Plant Science
Psychology
Sport Management

Master of Arts and Master of Science

General requirements for the Master of Arts and the Master of Science degree are a minimum of 30 hours, which include 24-27 hours of course work plus a thesis (formal research study) of 3-6 hours. Additionally, a 36 to 39 hour non-thesis option is available in selected disciplines.

Master of Education

The Master of Education degree may be granted upon fulfillment of any of the following minimum requirements or options:

- a. Thirty semester hours of courses plus an internship or practicum of 3-6 hours.
- b. Thirty semester hours of courses plus a project (including action research or other applied techniques).
- c. Minimum of 36 semester hours of courses. (Some programs require more than 36 semester hours.)

Certificate of Advanced Graduate Study

The Certificate of Advanced Graduate Study (CAGS) is designed to provide advanced graduate specialization by completing a prescribed program of study. A minimum of 30 semester hours beyond the master's degree will be required to complete the program. Persons entering the program must hold a master's degree. However, the bachelor's degree or the master's degree must be in an occupational area.

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 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.

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.

General Student Appeals

A student who considers any of the regulations of the School of Graduate Studies, Research and Outreach 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 School of Graduate Studies, Research and Outreach. The Committee is composed of six graduate faculty members, plus the graduate dean.

Grade Appeal

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 School of Graduate Studies, Research and Outreach if necessary.

If the appeal is not resolved at any of the above levels, the student may submit a written request for review of the situation by the Policies and Petitions Committee. The chair of this committee is the Graduate School Dean.

Grading System

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

I	The student, otherwise passing, has for good reason failed to complete all requirements. It must be removed in one year or be changed to F.
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 will be given.
U	The student has not demonstrated satisfactory progress in Research and Thesis.
AU	Audit
W	Withdrawn
NG	No grade given.

All grades earned are included in the determination of the cumulative average.

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.

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 as long as the requirement does not infringe upon the individual's rights. Appropriate classroom decorum should be described in the course syllabus.

Course Syllabus

Faculty members must provide students with a current course syllabus by the second meeting of 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;
- description of course content;

course objectives;
special assignments and examination schedule;
current bibliography, as appropriate;
classroom decorum and attendance policies; and
grading system and other pertinent information.

Graduate Instruction

Graduate instruction is given 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 on the basis of preparation comparable to that of the graduate faculty.

In general, approval to teach specific graduate courses is given instructors holding a doctoral degree and possessing experience and competence in the courses to be taught.

Graduate Record Examination (GRE)

At Virginia State University, all individuals seeking master's or post-master's 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 School. 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 or during the first semester of enrollment.

Application and Administration

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.

Required Standard

GRE scores vary by program. Refer to your program curriculum for the GRE requirement.

Review Courses

For validation purposes, two courses, ENGL 516 (English Writing Proficiency) and MATH 499 (Mathematics Review), are offered each semester and summer for students who have not met the GRE score requirements.

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, and the Dean of the School of Graduate Studies, Research and Outreach. Approval will not be given when the regular course is available or when the regular course has been unsuccessfully attempted. An outline of course requirements including proposed time schedule and number of credit hours to be assigned must be submitted to the graduate dean over the signature of the student, the advisor, and the instructor.

Language Requirements

Candidates for the Master of Arts or Master of Science degree must offer a minimum of two years of a modern foreign language in their undergraduate programs, or they must pass a reading examination of the language administered by a professor at VSU. French, German, and Russian are approved languages for science majors. For non-science majors, French, German, Russian, Italian, and Spanish are the approved languages, and may vary depending on the program of studies pursued. English is considered a tool language for all students, and may not be substituted as a foreign language for any student, domestic or foreign.

For students who have completed two years of a modern foreign language in high school, one year of foreign language in college will satisfy this requirement.

The language requirement is waived for majors in professional education programs or professional education program sequences, e.g., mathematics education. There is also no language requirement for the program, in economics, career and technical studies, and Psychology.

Probation/Dismissal

Graduate students must maintain a "B" average (3.00) in the courses taken in their approved graduate programs. A student who falls below 3.00 is put on probation with or without written notice from the Dean of the School of Graduate Studies, Research and Outreach. If the cumulative average is not raised to 3.00 in the following semester, students will be notified by the Dean, in writing, that they have been discontinued from the program.

Program Area Requirements

In addition to the general requirements of the Graduate School 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 Cards

A student's program of studies is not official until approved by the Dean of the School of Graduate Studies, Research and Outreach. The official program of courses for the master's degree must include a minimum of 50 per cent of the total program in major area courses.

Reinstatement

Graduate students suspended for academic reasons are never automatically reinstated. A student may appeal to the Policies and Petitions Committee to be given a chance to gain reinstatement. 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 and caused the student to be dropped; no new course work may be taken while the student is seeking to be reinstated. If the student succeeds that semester in raising the average to 3.00, the student must then appeal to the committee for full reinstatement. If, after reinstatement, the grade-point average falls below 3.00 again, the student will not be permitted to continue graduate study at Virginia State University.

Residence 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.

Retention

To be retained in an approved program of studies, a student is expected to maintain a minimum cumulative average of B. If the cumulative average in the approved program of studies falls below B, with or without candidacy, the student must bring the cumulative average up to B during the next period of enrollment in the approved program of studies. A student who fails to bring his/her average up to B, or whose average falls below B on a second occasion, will be dropped from the program in which he/she is enrolled.

For the purposes of retention, cumulative averages are to be computed on the basis of hours completed within a student's approved program of studies.

Schedule Changes

Schedule changes must have the approval of the student's advisor. With the approval of the advisor and the instructor of the class, a course may be added prior to the close of the second day of classes. A course may be dropped with a grade of "W" (withdrawn, no penalty) up to two weeks after mid-semester.

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. 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 can not be used for another degree whether taken at VSU or elsewhere.

Summary Procedures for the Master's Degree

1. Submit application (with fee) to the Graduate Office.
2. Have two official copies of transcripts from previous undergraduate and graduate study submitted by colleges/universities sent directly to the Graduate Office. Graduates of Virginia State need only 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 program administrator and Dean of the Graduate School, obtain three copies of the Student Program and Data Card from the Graduate Office. Plan program with advisor and return all three copies to the Graduate Office for approval by the Dean of the School of Graduate Studies, Research and Outreach. Upon approval from the Dean, the advisor will receive a copy, the student will receive a copy, and one copy will be retained in the student's file. Until the student completes this process, he or she is not considered to be in a degree or certificate program.
5. Apply for admission to candidacy after completion of a minimum of 12 semester hours of graduate work at VSU in the approved program. A student must attain candidacy no later than the semester before he or she expects to graduate. A cumulative B average, unconditional admission status, and completion of program requirements for candidacy are required for advancement to candidacy.
6. Candidates for the Master of Arts or Master of Science 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 the Master of Education degree will apply to defend the master's project (if accepting that option) or apply for the oral/written comprehensive at the beginning of the last term of study.
7. Comply with Schedule of Important Dates to Remember (available at the Graduate School Office) for the last semester of study. File application for the degree for the appropriate commencement by the deadline set in the University Calendar.

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 School of Graduate Studies, Research and Outreach 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 the 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 the grade of "U" at the end of the semester or term.

Two typewritten copies 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 in 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.

Time Limit for the Completion of Degree Requirements

All requirements for the master's degree must be completed within six years from the date of initial registration 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 Chairman, Policies and Petitions Committee, in care of the School of Graduate Studies, Research and Outreach.

Under compelling circumstances, 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.

All transfer credit for the degree must have occurred within the designated period (six years) prior to the date of graduation. Transfer courses are not eligible for an extension of time. Test scores submitted in support of applications for admission must also be within the six-year period.

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 PSYcology and Education, and Educational Research.

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

Withdrawal from Graduate Study

Students who withdraw officially from the University will receive grades of "W" in the courses in which they are registered.

Students who withdraw without following official withdrawal procedures are subject to receiving the grade of record (F) on the final instructor's grade report.

GRADUATE PROGRAMS AND COURSE DESCRIPTIONS

Graduate programs of study lead to the following degrees:

- * **Master of Education**
 - Counselor Education
 - Educational Administration and Supervision
 - Education

- * **Master of Arts**
 - Economics
 - English
 - History

- * **Master of Science**
 - Biology
 - Career and Technical Studies
 - Project Management Concentration
 - Criminal Justice
 - Mathematics
 - Plant Science
 - Psychology
 - Sport Management

- * **Master of Interdisciplinary Studies**
 - Interdisciplinary Studies

- * **Certificate Programs**
 - Certificate of Advanced Graduate Studies in Career and Technical Studies
 - Certificate of Graduate Studies in Project Management
 - Certificate Program in Nutrition and Dietetics

- * **Doctor of Education**
 - Educational Administration and Supervision

Biology

Graduate study in Biology is designed to prepare students for careers in teaching and research in state, federal, and private institutions, including colleges, universities, and research laboratories or for further study and teaching. Graduate study in Biology leads to the Master of Science (M.S.) degree. Students with undergraduate majors in other science areas are also encouraged to pursue graduate work in Biology. Additional work may be required of students whose undergraduate program in biology, chemistry, mathematics, or physics was too narrow or limited. The amount of work will be determined by the graduate committee of the department. A student might complete the degree requirements in a two-year program. However, the duration to complete the program may vary based on the individual student's experience and progress in research and course work. It is recommended that the interested graduate student contact the department for information about research and other departmental activities related to the graduate program. The program is dynamic due to lower student-faculty ratio and greater opportunity for faculty advising, counseling, research supervision, and utilization of research facilities.

Admission Requirements

For admission, the student must have the appropriate GRE Score as determined by the department. For information about the GRE score in different areas, applicant must contact the Department of Biology. All applicants must have in their undergraduate program 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 for this program. Six semester hours of mathematics is also

required. Applicants not possessing the above requirements may be admitted to the program upon the review and approval of the graduate committee of the department. The graduate student is expected to make up deficiencies identified by the graduate committee.

Program Requirements

To complete the program, a minimum of 30 semester hours including 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. Every effort is made to plan the graduate program around the needs and interests of the students.

A non-thesis option is also available. Each student enrolled in the non-thesis option must complete a minimum of thirty six semester hours and the Licensure Regulations by the Virginia Department of Education to become endorsed to teach biology. The candidate must also pass a written and/or oral comprehensive examination.

Course Descriptions

BIOL 508 BIOLOGY AND HUMAN AFFAIRS - 3 semester hours

F, even years

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 509 PARASITOLOGY - 3 semester hours, lecture

Sp, even years

The life processes of parasite helminthes with their effects on the host, and with the reactions of the hosts to their presence. Considerable time is devoted to life cycles, classification and morphology of parasitic worms, epidemiological factors, interrelations of parasite and host, and underlying principles of prevention and treatment.

Prerequisite: BIOL 411 Protozoology or BIOL 412 Invertebrate Zoology

BIOL 510 HUMAN GENETICS - 3 semester hours, lecture; 1 semester hour, laboratory

F

Theory and methods of analyses of genetic traits in individuals, families, and populations. Techniques include pedigree analysis, cytogenetics, tissue culture, and probability determination.

Prerequisite: General Genetics or permission of the instructor.

BIOL 511 TOPICS IN MODERN BIOLOGY - 3 semester hours

Sp, even years

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; permission of the department to register.

BIOL 512 ADVANCED PROTOZOOLOGY - 3 semester hours; lecture; 1 semester hour, lab

F, odd years

Concerned with protozoological research techniques and a general consideration of recent research studies. Also reading and preparation of technical manuscripts for publication will be emphasized. Topics are adapted to the needs and interests of the students enrolled.

Prerequisite: BIOL 411 Protozoology

BIOL 513 SEMINAR - 1 semester hour each registration

F, Sp

A one and one-half hour seminar is held each week. The first nine weeks of the seminar are devoted to topics such as: approaches to teaching biology, level(s) at which biology should be taught, teaching biology courses. Approximately six guest speakers will address the seminar during the year.

BIOL 514 ENDOCRINOLOGY - 3 semester hours

Sp

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

BIOL 514 ENDOCRINOLOGY LABORATORY (Optional) -1 semester hour **Sp**

BIOL 515 ADVANCED INVERTEBRATE ZOOLOGY - 3 semester hours **F, even years**

An intensive study of the classification, morphology, development, physiology and life histories of the invertebrates exclusive of insects.

Prerequisite: BIOL 313 General Zoology

BIOL 516 PHYCOLOGY - 3 semester hours lecture - 1 semester hour, laboratory **Sp, odd years**

A study of the divisions of the algae; emphasis is placed on those forms found in the fresh water of the local area. Studies of the structure, life histories, and evolution are made of representatives of the various division. Frequent field trips are made to collect and study the ecology of specimens which are later preserved and their morphology studied and classified. Consideration is given to certain aspects of the metabolism of algae such as nitrogen fixation, photosynthesis and ion-uptake, and also their economic importance.

Prerequisites: BIOL 310 Plant Morphology; BIOL 313 General Zoology

BIOL 517 MYCOLOGY - 3 semester hours, lecture; 1 semester hour, laboratory **F, odd years**

A study of the biology of fungi emphasizing a systematic treatment of various groups. Introduction to their development, morphology, physiology, ecology, and phylogeny.

Prerequisites: BIOL 310 Plant Morphology

BIOL 518 ADVANCED PLANT PHYSIOLOGY - 3 semester hours **F, even years**

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 - 3 semester hours, lecture; 1 semester hour, laboratory **Sp, odd years**

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

BIOL 521 PLANT MORPHOGENESIS - 3 semester hours, lecture; 1 semester hour, laboratory **F, odd years**

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

BIOL 522 INVESTIGATIONS IN BIOLOGY - 1 to 3 semester hours each semester **F, Sp, Su**

The department has facilities to enable qualified students to undertake studies of an investigative nature. The work is divided into four parts: Part A--Investigation and research in botany and ecology; Part B --Investigation and research in zoology; Part C-- Investigation and research in molecular biology; Part D--Investigation and research in genetics and developmental biology.

Prerequisite: Permission of the professor concerned

BIOL 524 RESEARCH AND THESIS - 2 to 6 semester hours **F, Sp, Su**

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 TEACHING AN ADVANCED GENERAL BIOLOGY COURSE - 4 semester hours **F, Sp, Su**

Designed for in-service teachers interested in obtaining experience in the teaching of an advanced biology course. This course is closely associated with Biological Science 116, a semester course for non-biology majors. Persons who enroll in Biology 525 will attend the biological science lectures, observe and participate in a two-hour organization and planning session each week and teach a laboratory course during the semester.

BIOL 526 EXPERIMENTAL EMBRYOLOGY - 3 semester hours; lecture; 1 semester hour lab **F, odd years**

Experimental morphology of growth and development: Fertilization, organ differentiation, and regeneration. The first part of the course will deal with classical experiments and concepts.

BIOL 533 INTRODUCTION TO NEUROSCIENCE – 3 semester hours**Sp**

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 WRITTEN COMPREHENSIVE EXAM - 0 semester hours**F, Sp, Su**

A requirement of the non-thesis M.S. option to be taken during the last semester. A candidate for the Master's 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 MICROBIAL BIOCHEMISTRY - 3 semester hours**Sp**

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: BIOL 241 Introduction to Microbiology or consent of the instructor.

BIOL 546.ADVANCED IMMUNOBIOLOGY - 3 semester hours**Sp, odd years**

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 semester hours**F**

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

Career and Technical Studies

The Career and Technical Studies (CTST) program is an interdisciplinary curriculum designed to provide post baccalaureate preparation in two concentrations: *Occupational Studies* and *Project Management*. Curricula in CTST lead to the Master of Science with a concentration in Occupational Studies, Master of Science with a concentration in Project Management, the Graduate Certificate in Project Management, and the Certificate of Advanced Graduate Study in Occupational Studies.

Occupational Studies Concentration. The program will meet the personal and **continuing** professional needs of community college teachers, cooperative extension agents, supervisors in education, business, and industry, and others associated with the career and technical studies enterprise. Students may specialize in agriculture subjects, business subjects, administrative systems management, industrial technology, family and consumer sciences, and general career and technical studies. The certificate of advanced graduate study is offered in general career and technical studies.

Project Management Concentration. The program leads to the Master of Science (M.S.) degree in Career and Technical Studies (CTST) with *concentration* in project management. The demand for professionals who can integrate and manage a company's project has created an emerging field in project management technology. 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 industrial standards 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) from planning and team-building through quality and cost management.

Master of Science: The Master of Science degree in Project Management (Concentration) requires a minimum of 30 semester hours which will include a three-semester hour of Master's Thesis (CTST 539) dealing with issues in project management or a minimum of 33 semester hours for the Non-thesis option. The non-thesis option will include CTST 525: Contract and Procurement Management and CTST 570: Integrated Project Management (the CAPM Certification). Candidates may take either the GRE or the GMAT and obtain an acceptable score to qualify for candidacy.

Admission: In addition to the general requirements for admission to the Graduate Division of the School of Graduate Studies, Research and Outreach, a minimum of 21 semester hours of undergraduate preparation in an occupational program or related area is required. Undergraduate majors in the following areas will be considered: agriculture, industrial technology, industrial education, family and consumer sciences, business management, computer and information systems, administrative systems management, human ecology, sociology, health occupations, business education, and associated fields.

Continuation Requirements: Continuation requirements for a degree in Career and Technical Studies adhere to the general requirements for the Graduate Division of the School of Graduate Studies, Research and Outreach.

Concentrations and Specialty Tracks: Two concentrations are offered in the Career and Technical Studies program. *Occupational Studies* and *Project Management*.

Occupational Studies. Students who elect the *Occupational Studies* concentration may receive the master of science with a specialization in agriculture subjects, business subjects, administrative systems management, industrial technology, family and consumer sciences, and general career and technical studies. The certificate of advanced graduate study is offered in general career and technical studies.

Project Management. Students who elect the *Project Management* concentration may received the master of science degree with a concentration in project management, or the graduate certificate in project management (a non-degree program) which requires 18 semester hours of coursework.

Master of Science, Occupational Studies Concentration (Thesis Option): Candidates for the Master of Science degree must complete a minimum of 30 semester hours, which include 24-27 semester hours of courses *plus* a thesis of three to six semester hours. The degree will not be granted without a thesis.

Master of Science, Occupational Studies Concentration (Non-Thesis Option): Candidates for the *non-thesis* option must complete *one* of the following:

- a. Thirty semester hours of courses *and* an internship or practicum of three to six semester hours.
- b. Thirty semester hours of courses *plus* a project (action research or other applied techniques).
- c. Thirty-six semester hours of course work.

Master of Science, Project Management Concentration (Non-Thesis Option): Candidates for this option must complete thirty-three semester hours of course work which includes three semester hours in CTST 570, Integrated Project Management or CTST 578, Master's Project in *Project Management*.

Master of Science, Project Management Concentration (Thesis Option): Candidates for this option must complete a minimum of 30 semester hours which will include a 3-semester hour of thesis, dealing with issues in project management.

Exit Requirements: All requirements for the master's degree must be completed within *six years* from the date of initial registration in the graduate program, excluding periods of military service. Extensions of no more than *two years* may be granted following a successful appeal to the Committee on Policies and Petitions of the School of Graduate Studies, Research and Outreach. All students must satisfactorily complete a comprehensive examination (oral, written, or both) which will cover the field of the student's major and minor work as well as the specialized area of the thesis if the program includes one.

Summary Requirements

M.S. Degree in CTST, Occupational Studies Concentration (Thesis Option)

General Core:

STAT 510 Statistical Procedures in Education and PSYCology.....	3
EDUC 513 Educational Research.....	3
EDUC 501 Foundations of Education.....	3

Career and Technical Studies Core:

CTST 502 History and Philosophy of CTST	3
CTST 504 Curriculum Development in CTST	3
CTST 508 Micro-computer Applications in CTST *OR CTST 505 Technology and Society.....	3

Electives:

Career and Technical Studies Electives.....	9
---	---

Research and Thesis

Research and Thesis (CTST 539)	3-6
--------------------------------------	-----

Total..... **30-33**

*Students who successfully complete a proficiency exam in Microcomputer Application should take Technology and Society (CTST 505) as a *core course*.

Summary Requirements

M. S. Degree in CTST, Occupational Studies Concentration (Non-Thesis)

General Core.....	9
Career and Technical Studies (Education) Core	9
Career and Technical Studies Electives	9
Electives	9
Comprehensive Examination.....	0
Total	36

Course Descriptions

CTST 502 HISTORY AND PHILOSOPHY OF CAREER AND TECHNICAL STUDIES - 3 semester hours

A study of the historical development of career and technical studies in the United States with emphasis on factors influencing present day philosophical thought in Career and Technical Studies.

CTST 503 CONFERENCE PLANNING AND DESIGN - 3 semester hours

Strategies for planning Career and Technical Studies conferences, including the development of techniques for productive results in solving problems through group action.

CTST 504 CURRICULUM DEVELOPMENT IN CAREER AND TECHNICAL STUDIES - 3 semester hours

Emphasis is placed on social-cultural foundations of Career and Technical Studies, social-psychological needs of learners, and the influences of educational philosophy on curriculum planning. Opportunity is given for students to apply principles of curriculum planning as they relate to training and development.

CTST 505 TECHNOLOGY AND SOCIETY - 3 semester hours

An examination of the influence of science and technology on modern cultures, including the idea of humanity itself. Exploration of the development of the American notion of progress and its connections with technological advance. The impact of technology on individuals and society through critical analysis of selected modern topics.

CTST 506 ADMINISTRATION AND SUPERVISION OF CAREERS AND TECHNICAL STUDIES - 3 semester hours

Study of administrative principles and practices of career-technical programs at the proprietary and post secondary school levels as they relate to institutional structure, curriculum development, personnel selection and development, finance, student development services, program evaluation, and physical plant management.

CTST 508 MICROCOMPUTER APPLICATIONS IN CAREER AND TECHNICAL STUDIES - 3 semester hours

Presents information processing applications as used in career and technical studies occupations and in instructional situations. Emphasis on skill development, methods, and materials of microcomputing instruction.

CTST 510 SEMINAR IN CAREER AND TECHNICAL STUDIES – 3 semester hours

Critical analysis of current issues in Career and Technical Studies. Topics for discussions and lectures are based on current issues, trends, and problems identified by student practitioners.

CTST 512 EXTERNSHIP/INTERNSHIP IN CAREER AND TECHNICAL STUDIES – 3 semesters hours

A planned field experience of advanced clinical/teaching practice or a planned administrative or supervisory experience providing supervised exposure and training at a site in a career and technical studies setting.

CTST 513 MEASUREMENTS IN CAREER AND TECHNICAL STUDIES – 3 semester hours

Techniques in evaluation of instruction: standardized and other tests according to types for appraising student performance are studied. Methods and practices in constructing, administering, interpreting, and using test items and measuring instruments in industrial laboratories and related courses are stressed.

CTST 514 CAREER AND TECHNICAL STUDIES IN POST-SECONDARY SCHOOLS – 3 semester hours

Administrative and curriculum practices and problems in Career and Technical Studies programs in community and junior colleges, proprietary schools, and four-year colleges.

CTST 516 INSTRUCTIONAL SYSTEMS IN CAREER AND TECHNICAL STUDIES – 3 semester hours

Systematic development of criterion-referenced training programs and courses. Emphasis on methods of teaching career and technical subjects categorized in the cognitive, affective, and PSYComotor domains.

CTST 518 ORGANIZATION AND ADMINISTRATION OF CAREER AND TECHNICAL STUDIES - 3 semester hours
Study of the legislation, laws, and administrative systems (federal, state, and local) affecting career and technical studies. Emphasis on principles, policies, organizational concepts, administrative structures, programs, fiscal and physical planning, management, personnel, public relations, evaluation, and accountability in occupational fields.

CTST 526 READINGS IN CAREER AND TECHNICAL STUDIES - 3 semester hours
Supervised reading in selected subjects. Review and critical analysis of textbooks, research, periodicals, and other literature in Career and Technical Studies.

CTST 535 SEMINAR: RESEARCH IN CAREER AND TECHNICAL STUDIES - 3 semester hours
Study of research methods, findings, and techniques in the field of Career and Technical Studies. Emphasis on reading and interpreting research; using research findings in solving instructional problems; uncovering potential topics for future research. Each student prepares a *research proposal*.

CTST 537 ORAL AND/OR WRITTEN COMPREHENSIVE EXAMINATION - 0 semester hour
Prerequisites: Student has been admitted to candidacy and is enrolled in or has completed last remaining courses as shown on program card.

CTST 538 MASTER'S PROJECT - 3 semester hours
The project is designed for students pursuing the Master of Science (M.S.) non-thesis option. Students are expected to design and conduct action research relevant to problem solutions in their discipline. A written document of the project is required and an oral examination will be given at the end of the experience.
Prerequisite: Admission to candidacy by the Graduate School

CTST 539 RESEARCH AND THESIS - 3 to 6 semester hours
Application of logical and scientific methods to issues in career and technical studies, e.g., surveys, field studies, experimental/historical methods of research. Opportunity is provided to conduct needed research in career and technical studies and to plan and conduct formal research study. The course is designed for students pursuing the Masters of Science (M.S.) degree. An oral defense of the written report is required.
Prerequisite: Admission to Candidacy by the Graduate School

CTST 540 THEORIES OF CAREER AND TECHNICAL STUDIES -3 semester hours
Foundations of career and technical studies, including conceptual, theoretical, and philosophical bases of career and technical studies.

CTST 549 SPECIAL TOPICS IN CAREER AND TECHNICAL STUDIES - 3 to 6 semester hours
Independent study of problems related to Career and Technical Studies, to include focus on one or two topics per semester enrolled: (1) evaluation of local programs; (2) organization, operation, and financing programs of CTST; and (3) recent technology-related developments in CTST which have implications for career and technical studies programs.

CTST 550 PROGRAM DEVELOPMENT, IMPLEMENTATION, AND EVALUATION IN EXTENSION SERVICES - 3 semester hours
Study of the various aspects of diagnosing, planning, implementing, supervising, and evaluating extension service programs. Students will be provided opportunities to observe, analyze, and plan extension service programs.

CTST 551 PRINCIPLES AND ORGANIZATION OF ADULT EDUCATION PROGRAMS - 3 semester hours
Characteristics of the adult student as learner, including exploration of the history, principles, and techniques of adult education. Student plan, conduct, and evaluate learning activities for developing leadership abilities in adults.

CTST 559 IMPROVING INSTRUCTION IN OFFICE SYSTEMS - 3 semester hours
Designed for persons interested in the study and research relating to instructional and training elements of office systems. Development of performance goals, units of instruction, and instructional materials required by the expansion of curriculum areas and student population. Attention is given to methods of individualizing instruction and to innovations in teaching-learning tasks, as well as to work with the educationally handicapped individual(s).

CTST 560 IMPROVING INSTRUCTION IN BASIC BUSINESS SUBJECTS - 3 semester hours
Designed for persons interested in the study of effective instructional technology and problems in basic business subjects. The course will include a review of sources of supplementary material and organization of units of instruction and projects.

CTST 571 INFORMATION PROCESSING: MULTI-MEDIA LITERACY - 3 semester hours

Designed for experienced business teachers. The course focuses on study of multimedia, how it is used, the impact it is having on society, what equipment is necessary, and how to use multimedia to help students become more productive, competitive, and successful. Participants develop skill in using major multimedia software programs.

CTST 572 SEMINAR: TOPICS IN INFORMATION PROCESSING - 3 semester hours

Exploration and examination of selected and contemporary issues in office and information technology, Spread Sheet Applications and Methods, or Database Management. Includes individual, group, and integrated approaches to problem solving.

CTST 573 SPREADSHEET APPLICATIONS AND METHODS - 3 semester hours

Intensive study of and skill development in the use of current spreadsheet software. Includes hands-on instruction using current databases software.

CTST 574 DATABASE MANAGEMENT - 3 semester hours

Principles of database management, usage, applications, and teaching suggestions. Students will use currently established software applications used by businesses.

CTST 575 CYBERSPACE, INTERNET, AND WEB PUBLISHING - 3 semester hours

Study of procedures, organization, and methods of desktop publishing as used in office occupations. Skill development in elements of desktop publishing using current publishing software and other components of page layout, composition, and graphics software.

**MASTER OF SCIENCE DEGREE: CAREER AND TECHNICAL STUDIES
PROJECT MANAGEMENT (CONCENTRATION)**

The program in Project Management leads to the Master of Science (M.S.) degree in Career and Technical Studies (CSTS) with *concentration* in project management. The demand for professionals who can integrate and manage a company's project has created an emerging field in project management technology. 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, industrial standards, 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) from planning and team-building through quality and cost management.

Master of Science: The Master of Science degree in Project Management (Concentration) requires a minimum of 30 semester hours which will include a three-semester hour of Master's Thesis (CTST 539) dealing with issues in project management or a minimum of 33 semester hours for the Non-thesis option. The non-thesis option will include CTST 525: Contract and Procurement Management and CTST 570: Integrated Project Management (the CAPM Certification). Candidates may take either the GRE or the GMAT and obtain an acceptable score to qualify for candidacy.

**Summary Requirements
Master of Science Degree**

Required Courses	Sem. Hrs.
CTST 509 Project Management Systems.....	3
CTST 511 Quality Management.....	3
CTST 519 Project Planning & Scheduling.....	3
CTST 520 Project Communications	3
CTST 521 Project Cost Management.....	3
CTST 527 Project Leadership.....	3
CTST 532 Risk Management and Analysis	3
Elective (in Project Management).....	<u>3</u>
Total	24
 Requirement for the Thesis Option	
CTST 536 Research Methodology.....	3
CTST 539 Master's Thesis	3

Requirement for the Non-thesis Option

CTST 515 Quantitative Methods and Analysis.....	3
CTST 525 Contract and Procurement Management.....	3
CTST 570 Integrated Project Management (CAPM Certification)	3

Course Descriptions**CTST 509 PROJECT MANAGEMENT SYSTEMS – 3 semester hours**

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 project planning and control. The project management body of knowledge including professional and social responsibility.

CTST 511 QUALITY MANAGEMENT – 3 semester hours

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 students with a set of quality concepts, tools, and knowledge required for their application in quality planning, quality improvement, and quality control.

CTST 515 QUANTITATIVE METHODS & ANALYSIS – 3 semester hours

The statistical analysis of data for professional applications and/or research with emphasis on quantitative methodologies. Populations, sample selection, descriptive and inferential statistics, significance, correlation, Chi Square, and ANOVA. Regression and concepts of reliability, validity, and levels of measurement.

Prerequisite: Introductory Statistics

CTST 519 PROJECT PLANNING AND SCHEDULING – 3 semester hours

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 the different methods of scheduling; network schedules and diagram; scheduling calculations and the critical path.

Prerequisite: CTST 509

CTST 520 PROJECT COMMUNICATIONS – 3 semester hours

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).

CTST 521 CONTRACT AND PROCUREMENT MANAGEMENT – 3 semester hours

Various 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.

CTST 525 PROJECT ESTIMATING AND COST MANAGEMENT – 3 semester hours

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: CTST 519

CTST 527 PROJECT LEADERSHIP – 3 semester hours

The human side of project leadership; motivating, organizing, and managing project teams; communication and conflict management issues. Emphasis on experiential skill development, its purpose in helping students to understand, analyze, and develop effectiveness in leading and managing others in project-based activities.

Prerequisite: CTST 521

CTST 532 RISK MANAGEMENT AND ANALYSIS – 3 semester hours

Typology of risk exposures. Inputs to risk management and identification. Risk management stages in the project life cycle. Quantitative and qualitative risk analyses; risk response planning; risk monitoring and control. Organizing for risk management.

CTST 535 CHANGE MANAGEMENT

Theories, principles, and forces of change. Perspectives on change—behavioral, psychodynamic, cognitive, and humanistic-psychology approaches; change management approach, tools, techniques, process, strategy, and activities. The leadership of change and making change happen.

CTST 536 RESEARCH METHODOLOGY – 3 semester hours

Hypothesis formulation and verification examined in areas of research interest. A research proposal will be presented to the program's graduate committee.

Prerequisite: STAT 510

CTST 565 ADVANCED PROJECT MANAGEMENT SYSTEMS – 3 semester hours

The alignment of corporate, industrial, organizational, and operational strategies into a project strategy as a means of achieving competitive advantage or adding value through projects. Project success, generic/value chain strategies; the diffusion of project innovation. Case studies and analysis of best practices.

Prerequisite: CTST 509, CTS 532

CTST 570 INTEGRATED PROJECT MANAGEMENT – 3 semester hours

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. The CAPM credentialing is recommended.

CTST 578 MASTERS PROJECT – 3 semester hours

Students are expected to design and conduct action research relevant to problem solution(s) in project management. A written document of the project is required and an oral exam will be given at the end of the experience. A professional exam (Certified Associate Project Manager) of the Project Management Institute may be required in lieu of the action research. A faculty member is required to supervise the project or review the exam.

CTST 579 THESIS – 3 semester hours

The candidates for Masters Thesis will be required to form their Graduate Committee of three faculty members, chaired by a full member of the graduate faculty.

Criminal Justice

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 entry into leadership positions in criminal justice professions; 2) provide advanced professional educational opportunities for those who already work in the field of criminal justice, and 3) 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 of Science degree in Criminal Justice 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.

Course Descriptions

Core Courses (18 credit hours required of all students)**CJUS 501 THEORIES OF CRIME AND CRIMINOLOGY - 3 semester hours**

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 semester hours

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 CRIMINAL JUSTICE - 3 semester hours

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 STATISTICS AND DATA ANALYSIS IN CRIMINAL JUSTICE - 3 semester hours

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 ANALYSIS IN CRIMINAL JUSTICE - 3 semester hours

The course will examine the federalization of crime policy, key actors in crime policy-making, enactment of different crime legislations by federal and state government, and public attitudes towards crime and terrorism. Students will learn how crime policy is made, who make them, and how crime policy-making impacts on crime control and punishment.

CJUS 506 ETHICS IN CRIMINAL JUSTICE - 3 semester hours

This course will examine the standards and codes of 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.

CONCENTRATION COURSES (12 credit hours)**Concentration 1: Domestic and International Security Issues****CJUS 511 INTRODUCTION TO HOMELAND SECURITY - 3 semester hours**

This course will introduce students to the history, structure and the development of the institutions of homeland security in America. The course will particularly focus on the various aspect of Homeland Security as outlined in the Office of Homeland Security's publication "National Strategy for Homeland Security". Through the use of case-based instructions, students will learn how different federal, state, and local agencies collectively work for homeland security in a highly complex environment.

CJUS 512 NATIONAL SECURITY AND INTERNATIONAL TERRORISM – 3 semester hours

This course will examine the rise of global terrorism and its impact on national security in America. The students will obtain knowledge about the Weapons of Mass, Destruction, bioterrorism, and cyber terrorism, and the threats they pose to America's homeland security, and the challenges they bring to America's criminal justice system.

CJUS 513 CYBER TERRORISM - 3 semester hours

This course will introduce students to the nature of cyber terrorism - a new digital weapon that poses serious threats to our financial system, transportation, communications, and emergency services and public safety. The course will examine the detection, prevention, and response to this emerging threat.

CJUS 514 TRANSNATIONAL ORGANIZED CRIME - 3 semester hours

In recent years, there has been an explosive growth of organized criminal groups who are engaged in transnational money laundering, drug trafficking, trafficking of women and children for sex, and illegal human trafficking. This course will examine the impact of these organized crime cartels on the institutions of the criminal justice system in America and other major industrialized countries.

CJUS 515 COMPARATIVE CRIMINAL JUSTICE - 3 semester hours

This course will examine the nature and the philosophy of the American Criminal Justice System by comparing and contrasting it with those of other industrialized countries such as the United Kingdom, Canada, Germany, China, and Japan. The course will particularly focus on how these different countries are responding to global terrorism, and restructuring their domestic security institutions.

CJUS 516 CIVIL RIGHTS AND CIVIL LIBERTIES IN CRIMINAL JUSTICE - 3 semester hours

This course will examine the impact of various recent legislations related to Homeland Security, such as the USA Patriot Act of 2001 and the National Homeland Security Act of 2003, on individual rights and civil liberties in America. The students will gain insights about the problem of balance between security and individual liberty in the context of the evolving problem of globalization and global terrorism.

CJUS 517 CRIME POLICY IN AMERICA - 3 semester hours

This course will examine the recent growth in legislations and policy related to domestic security and global terrorism in America and other major industrialized countries. The students will also obtain knowledge about the development of various security agencies and their broader impact on the criminal justice system.

CJUS 518 SECURITY AND EMERGENCY PREPAREDNESS - 3 semester hours

This course will examine the various recent federal and state legislations and policy initiatives related to emergency management and preparedness. The students will develop an understanding of the changing environment of domestic security in the context of global terrorism, and develop expertise to work in the areas of criminal justice related to emergency preparedness, both nationally and locally.

Concentration 2: Correctional Administration**CJUS 559 INTRODUCTION TO CORRECTIONS - 3 semester hours**

Nature of correctional work, aims and objectives of correctional administration, probation and practices, and the evolution of modern correctional institutions and practices.

CJUS 560 PRINCIPLES OF CORRECTIONAL OPERATIONS - 3 semester hours

Applying modern management methods and principles in correctional administration. Theoretical approaches for understanding modern correctional problems.

CJUS 561 MAJOR CLASSICS ON CORRECTIONS - 3 semester hours

Seminal works in the birth and evolution of modern prison and correctional institutions. The course will expose students to the classics of correctional thought and philosophy.

CJUS 562 INSTITUTIONAL TREATMENT AND THE OFFENDERS - 3 semester hours

This course will examine the modern philosophy and methods in the treatment of adult offenders and juvenile delinquents in correctional institutions. The students will learn the impact of institutional treatments on recidivism, and gain knowledge about the differences between institutional and community-based treatments.

CJUS 563 CORRECTIONS: REHABILITATION OF THE OFFENDERS – 3 semester hours

Analyzes the growth and evolution of the rehabilitative ideal and its application in correctional settings. The impact and evolution of different rehabilitative methods, including community-based interventions, faith-based interventions, counseling, self-help program, diversion, community services, and probation will be discussed. The future of the rehabilitative ideal in the context of the rise of new penology will be examined.

CJUS 564 CORRECTIONS: DRUG USE AND ABUSE - 3 semester hours

Nature and extent of drug abuse by inmates and probationers. Relations between drug abuse and recidivism. Prison-based drug addiction treatment and counseling program.

CJUS 565 PRISON DESIGN AND PRISON VIOLENCE - 3 semester hours

Relations between prison design and inmate behavior, violence, and rehabilitation. Study of the different models of prison design, including linear International Surveillance model, the Popular Remote Surveillance model, and Popular Direct Surveillance model.

CJUS 566 HEALTH CARE AND MENTAL HEALTH IN PRISON - 3 semester hours

Study of health care delivery systems in federal and state prisons. Explores the effects of long-term imprisonment on health care cost and other management consequences.

CJUS 567 ETHICS IN CORRECTIONAL MANAGEMENT - 3 semester hours

An overview of ethical issues related to corrections and correctional management. Understanding of contemporary correctional issues and their broader ethical contexts and significance.

Concentration 3: Criminal Justice Administration and Management**CJUS 550 SEMINAR IN ORGANIZATION AND ADMINISTRATION - 3 semester hours**

This course will provide a comprehensive overview of criminal justice administration and management with an emphasis on organizational theories. Different theories of 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 semester hours

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 diversity, and dispute resolutions.

CJUS 552 RESEARCH METHODS AND PLANNING RESOURCES - 3 semester hours

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 COMMUNITY THEORIES AND CRIMINAL JUSTICE - 3 semester hours

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 SEMINAR IN LEADERSHIP AND MANAGEMENT - 3 semester hours

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 JUSTICE MANAGEMENT - 3 semester hours

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 AND CRIMINAL JUSTICE MANAGEMENT – 3 semester hours

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 EVALUATION IN CRIMINAL JUSTICE MANAGEMENT - 3 semester hours

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 BUDGETARY ASPECTS OF CRIMINAL JUSTICE MANAGEMENT - 3 semester hours

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.

Concentration 4: Minorities and the Criminal Justice System**CJUS 530 MINORITIES & CRIME - 3 semester hours**

Interdisciplinary theories introduced to facilitate understanding of particular groups affected by the criminal justice system, including definitions and characteristics of behaviors as well as management, control, and prevention relative to these groups.

CJUS 531 THE POLICE & INNER CITY PROBLEMS - 3 semester hours

Role of the police officer in relation to the customs and problems of urban inner city communities. Comparative analysis of techniques used by law enforcement agencies to deal with crime specifically in inner cities.

CJUS 532 PROBLEMS OF THE AFRICAN-AMERICAN COMMUNITY AND THE CRIMINAL JUSTICE SYSTEM - 3 semester hours

Review of advanced research on crime and African-American communities with special attention to different aspects and role players in criminal justice system. Brings historical perspective in understanding the relationship that exists currently between the members of African-American community and the members of criminal justice agencies.

CJUS 533 AFRICAN-AMERICANS & CRIMINOLOGICAL THOUGHT – 3 semester hours

The role of new pedagogical thought in examining crime issues relative to society. Focuses on African-American criminology and its importance to the field of criminology.

CJUS 534 CRIMINAL JUSTICE IN A MULTICULTURAL SOCIETY 3 - semester hours

Society in a global economy tends to be multicultural and diverse. Maintaining law and order in a highly diverse environment requires special emphasis on the cultural dimensions of different ethnic, racial and religious groups. This course identifies issues surrounding offenders of different ethnic and religious groups and provides research based methods about how to deal with them.

CJUS 535 WOMEN AND CRIMINAL JUSTICE - 3 semester hours

Identifies issues surrounding women as offenders, victims, and criminal justice professionals. Investigates explanations for the involvement of women in illegal activities. Functions, powers, procedures, and limitations germane to women, with particular emphasis on those operating in the criminal justice field. Reviews the participation of women in law enforcement, judicial proceedings, corrections, and law making.

CJUS 536 COMPARATIVE PERSPECTIVES ON CRIME - 3 semester hours

Explores crimes from a global perspective and finds the involvement of foreign elements with the domestic law and order situation. Compares and contrasts law enforcement in the United States with police system in selected countries. Identifies similarities and differences in administration, organization, principal functions and objectives.

CJUS 537 CRIME, SEX, LAW AND ORDER - 3 semester hours

Explores the global ties that exist between the international trafficking of sex workers and local criminal interest groups. With the rise of global economy and internet connections, pornography has become a lucrative business enterprise for many members of organized crimes. The course examines the globalization of sex crimes and the issues of illegal trafficking of women and children.

CJUS 538 POLICE AND THE GHETTOIZATION OF COMMUNITIES - 3 semester hours

Examines the various perspectives on the nature of police roles in urban ghettos, particularly in African-American communities. Understanding of the perceptions of police in urban ghettos as law enforcement agents and as preservers of social order.

Criminal Justice Elective Courses**CJUS 570 ADVANCE DATA ANALYSIS AND USE OF SPSS - 3 semester hours**

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 IN CRIMINAL JUSTICE - 3 semester hours

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 semester hours

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 OF JUVENILE DELINQUENCY - 3 semester hours

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 semester hours

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 semester hours

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 AND THE CRIMINAL JUSTICE SYSTEM - 3 semester hours

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 semester hours

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 semester hours

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 semester hours

This course is designed for candidates who select Plan B toward fulfilling the requirements for the Master of Science in Criminal Justice. Students taking this option will complete a Policy Paper under the guidance of a criminal justice faculty member.

CJUS 599 RESEARCH AND MASTER'S THESIS - 6 semester hours

The candidates for Master's Thesis will be assigned a Graduate Committee of three faculties to supervise the completion of the thesis project. The Thesis must be defended in an oral defense.

Economics

The Department of Economics offers a program of graduate study in economics leading to the Master of Arts (M.A.) degree. This 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. A core in microeconomic theory, macroeconomic theory, and quantitative methods provides students with the foundation necessary to make sound decisions in different environments. These principles are further developed and reinforced in a variety of elective courses appropriate for many applied areas.

These program options can be completed over periods of as little as one year of full-time study or two years part-time. Late afternoon and evening classes permit the employed individual to pursue a degree without altering current employment status.

The M.A. program offers a concentration in Public Administration. The concentration is structured to integrate broad principles of decision-making criteria, cost-benefit analysis, and planning functions with problems pertinent to Public Administration. The courses in this concentration are designed to permit an overall view of both policy and applications of economic principles to the functional requirements of public administrators. Public Administration Theory is a requirement for the concentration. Possible courses in the Public Administration concentration include:

Economic Problems and Public Policy	Management Economics
Personnel Administration	Organizational Behavior
Public Administration Theory (required)	Population Economics
Public Policy Process and Evaluation	Public Finance
Public Sector Budgeting	Economics of Regulation
Internship in Public Administration	

Unconditional Admission

(a) An applicant is admitted unconditionally if the student has met all the general requirements of the Graduate School. b) has taken and passed the following courses: principles of microeconomics, principles of macroeconomics, and college algebra (or calculus). In addition, the Department requires Graduate Record Examination (GRE) with scores of 400 each in Verbal and Quantitative respectively.

Conditional Admission

An applicant is admitted on conditional status if the applicant has not met any of the requirements above but shows promise of being able to do the work. Once admitted, the student must complete all the deficiencies within the first semester of entrance to the program.

Program Requirement

A minimum of 30 semester hours of credit are required for completion of the M.A. degree program. Up to 9 of the 30 hours may be taken in related fields outside of Economics, in 400-level courses, or transfer graduate credits subject to the approval of the graduate advisor in Economics and the Graduate School. The core curriculum, which all majors are required to complete, includes the following courses:

ECON 510-ADVANCED MICROECONOMICS
 ECON 520-ADVANCED MACROECONOMICS
 ECON 530-QUANTITATIVE METHODS
 ECON 590-RESEARCH METHODOLOGY

Course Descriptions**ECON 500 GRADUATE PRINCIPLES OF ECONOMICS -3 semester hours**

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 semester hours

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 ORGANIZATION -3 semester hours

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 semester hours

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 semester hours

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 semester hours

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 semester hours

Monetary theory, policy, and banking institutions examined. Effectiveness and channels of monetary policy assessed along with implications for bank lending policies.

Prerequisites: ECON 210, ECON 211 or ECON 500

ECON 523 PUBLIC FINANCE -3 semester hours

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 ECONOMIC ADMINISTRATION THEORY -3 semester hours

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 semester hours

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 AND EVALUATION -3 semester hours

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 semester hours

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 semester hours

Study of advanced econometric methods, problems, and models.

Prerequisite: ECON 530 or consent of instructor

ECON 535 ORGANIZATIONAL BEHAVIOR -3 semester hours

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 semester hours

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 semester hours

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 ECONOMICS -3 semester hours

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 ECONOMICS -3 semester hours

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 semester hours

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 semester hours

The theory of international values, comparative advantage, and the gains from trade; alternative routes to adjustment in the balance of payments, capital movements.

Prerequisite: ECON or consent of instructor

ECON 570 HISTORY OF ECONOMIC THOUGHT -3 semester hours

Surveys historical contributions to the advancement of economic analysis, knowledge, and thought including the Physiocratic, Classical, Marginalist, Socialist, Neoclassical, Institutional, and contemporary schools of thought.

Prerequisite: ECON 210

ECON 580 READINGS IN ECONOMICS -3 semester hours

Independent supervised study in areas of particular interest to supplement course requirements.

Prerequisite: ECON 210

ECON 581 SPECIAL TOPICS IN ECONOMICS -3 semester hours

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 ADMINISTRATION -3 semester hours

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 IN PUBLIC ADMINISTRATION -3 semester hours

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 semester hours

Hypothesis formulation and verification examined in areas of research interest. A proposal is presented.

Prerequisites: ECON 510, ECON 530

ECON 598. COMPREHENSIVE EXAMINATION -0 semester hours

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 Graduate School, (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 semester hours

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.

English

The Department of Languages and Literature offers two program options leading to a Master of Arts degree with specialization in English.

Master of Arts Degree – Thesis Option

Admission Requirements

An applicant must meet the general requirements of the graduate division of the School of Graduate Studies, Research and Outreach and hold a bachelor's degree with a major in English, English Education, comparative literature, or some area of the Humanities with a minimum of 18 semester hours of undergraduate English courses beyond the freshman level. (Students who have not fulfilled these specific course requirements may complete them while pursuing the M.A.)

Program Requirements

The student will completed 36 semester hours in English studies. This total must include a minimum of 18 semester hours of coursework within the Department in the study of literature, including ENGL 555, Intensive Study of an Author (3 semester hours). Students must also take a course in methods of research, such as ENGL 517, Problems and Methods of Research. Students may take up to nine semester hours in related fields outside the Department with the approval of student's advisor. Additional coursework may come from the areas of linguistics, English education, or other Departmental offerings. To demonstrate their knowledge of the field, students will complete this program by taking ENGL 570, Comprehensive Examination.

Students are expected to have completed the equivalent of two years of college credit (12 semester hours) in a modern foreign language, such as French, German, or Spanish.

Program Summary – Thesis Option

Literature Studies	18 semester hours
Research Methods (e.g., ENGL 517)	3 semester hours
Elective (may include 9 semester hours outside the Department)	15 semester hours
Comprehensive Examinations (ENGL 570).....	0 semester hours
Total	36 semester hours

Master of Arts Degree – Non-Thesis Option**Admission Requirements**

An applicant must meet the general requirements of the graduate division of the School of Graduate Studies, Research and Outreach and hold a bachelor's degree with a major in English, English Education, comparative literature, or some area of the humanities with a minimum of 18 semester hours of undergraduate English courses beyond the freshman level. (Students who have not fulfilled these specific course requirements may complete them while pursuing the M.A.)

Program Requirements

Students will be required to complete a minimum of 18 semester hours of course work within the Department in the study of literature. Additional course work may come from the areas of linguistics, English Education, or other departmental offerings. Students may take three semester hours in a related field outside the Department with the approval of the student's advisor. No specific courses are required: students may choose from the complete Department offerings and should consult with their advisor as to the current courses which best meet their interests.

Students are expected to have completed the equivalent of two years of college credit (12 semester hours) in a modern foreign language, such as French, German, or Spanish.

Program Summary – Non-Thesis Option

Literature Studies (including ENGL 555).....	18 semester hours
Research Methods (e.g., ENGL 517)	3 semester hours
Elective (may include 6 semester hours outside the Department)	15 semester hours
Comprehensive Examination (ENGL 570)	0 semester hours
Total	36 semester hours

Course Descriptions**ENED 531. METHODS AND MATERIALS FOR THE ENGLISH CLASS - 3 semester hours**

Concentration in theoretical bases, organization, and management of different types of classes; aims of teachers and ways to create environments which will most likely promote these goals; relationships between students and teachers, students and students.

ENED 532. LINGUISTICS AND LANGUAGE INSTRUCTION - 3 semester hours

Study of significant linguistic research in the areas of modern grammatical theory, geographical and socio-cultural dialectology, language learning, and writing instruction; the implications of research findings for the English and language arts teacher.

ENED 533. PRACTICUM - 6 semester hours

A supervised graduate level field experience. The particular type of experience to be determined by the student's educational needs and interests in consultation with the student's graduate advisor. Designed to meet the student teaching requirement for those who have not yet done so.

ENED 534 WRITING WORKSHOP - 3 or 6 semester hours

A group of classes (scheduled during the summer session) designed to provide intensive training for teachers in developing strategies, techniques, and materials concerning the writer's craft. To provide opportunities for students to study past and current research in the field and to write papers in various modes and from different points of view.

ENGL 501 CHAUCER- 3 semester hours

Study of the Canterbury Tales, Troilus and Criseyde, and/or selected minor poems. Graduate course offered concurrently with ENGL 401.

ENGL 502 MILTON - 3 semester hours

Study of the chief poems and prose works of Milton. Some emphasis on Milton's religious and political ideas. Graduate course offered concurrently with ENGL 402.

ENGL 503 SHAKESPEARE I - 3 semester hours

Survey of Shakespeare's early work, with reading of selected plays and their study against the background of Jacobean social, racial, critical, and theatrical ideas. Emphasis on comedies and histories. Graduate course offered concurrently with ENGL 403.

ENGL 504 SHAKESPEARE II - 3 semester hours

Survey of Shakespeare's later work, with reading of selected plays and their study against the background of Jacobean social, racial, critical, and theatrical ideas. Emphasis on tragedies and romances. Graduate course offered concurrently with ENGL 404.

ENGL 505 THE ENGLISH NOVEL - 3 semester hours

Study of the English novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists. Graduate course offered concurrently with ENGL 405.

ENGL 506 THE AMERICAN NOVEL - 3 semester hours

Study of the American novel from its earliest expressions to the present. Emphasis on social and cultural contexts as well as principal novelists. Graduate course offered concurrently with ENGL 406.

ENGL 507 REALISM AND NATURALISM - 3 semester hours

Study of the ideas, literary methods, and influence of writers who furthered the development of the dominant mode of modern fiction. Graduate course offered concurrently with ENGL 407.

ENGL 508 LITERATURE OF THE AMERICAN SOUTH - 3 semester hours

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. Graduate course offered concurrently with ENGL 408.

ENGL 509 READINGS IN ENGLISH STUDIES - 1-3 semester hours

Variable content. Intensive study of a major issue, movement, form, theme, or figure in literature, film studies and/or language. May be repeated once for credit with different topic, with consent of department. Graduate course offered concurrently with ENGL 409.

ENGL 510 READINGS IN AFRICAN AMERICAN LITERATURE - 3 semester hours

Variable content. Intensive study of a major issue, movement, form, theme, or writer in African American literature and culture. May be repeated once for credit with different topic, with consent of department. Graduate course offered concurrently with ENGL 410.

ENGL 511 READINGS IN AFRICAN LITERATURES AND CULTURES - 3 semester hours

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. Graduate course offered concurrently with ENGL 411.

ENGL 512 CARIBBEAN LITERATURE - 3 semester hours

Survey of Caribbean literature, which explores fictional and non-fictional prose, poetry, and drama in order to gain an appreciation of the literature and cultures from which it springs. Graduate course offered concurrently with ENGL 412.

ENGL 516 ENGLISH WRITING PROFICIENCY - 3 semester hours

A course to enhance writing skills of graduate students with a need for improved verbal skills. Focuses on writing and verbal skills which will be helpful in a graduate program. Not to be counted as credit as part of a graduate program.

ENGL 517 PROBLEMS AND METHODS OF RESEARCH - 3 semester hours

Primarily for graduate students working for a higher degree or its equivalent. Techniques of research in English studies.

ENGL 520 SURVEY OF LITERARY THEORY AND CRITICISM - 3 semester hours

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 521 RHETORICAL TRADITIONS - 3 semester hours

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. Graduate course offered concurrently with ENGL 421.

ENGL 531 SEMINAR IN ENGLISH LITERATURE, 450-1660 -3 semester hours

Variable content. An examination of issues, themes, and/or genres in British literature of the Middle Ages and/or Renaissance. May be repeated for credit with different topic, with consent of department.

ENGL 532 SEMINAR IN ENGLISH LITERATURE, 1660-1837 - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in British literature of the Restoration, Neoclassical, and/or Romantic periods. May be repeated for credit with different topic, with consent of department.

ENGL 533 SEMINAR IN ENGLISH LITERATURE, 1837-PRESENT - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in British literature of the Victorian, Modern and Contemporary periods. May be repeated for credit with different topic, with consent of department.

ENGL 534 SEMINAR IN AMERICAN LITERATURE BEFORE 1800 - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in American literature up to 1800. May be repeated for credit with different topic, with consent of department.

ENGL 535. SEMINAR IN NINETEENTH CENTURY AMERICAN LITERATURE - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in American literature from 1800-1900. May be repeated for credit with different topic, with consent of department.

ENGL 536 SEMINAR IN TWENTIETH/TWENTY-FIRST CENTURY AMERICAN LITERATURE - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in American literature from 1900 to the present. May be repeated for credit with different topic, with consent of department.

ENGL 537 SEMINAR IN AFRICAN-AMERICAN LITERATURE - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in African-American literature. May be repeated for credit with different topic, with consent of department.

ENGL 538 SEMINAR IN WOMEN'S LITERATURE - 3 semester hours

An in-depth study of writings by women, examining major influential works from a variety of historical, social, and cross-cultural contexts, along with various critical theories constructed about women's literature.

ENGL 539 SEMINAR IN WORLD LITERATURE - 3 semester hours

Variable content. An examination of issues, themes, and/or genres in world literature. May be repeated for credit with different topic, with consent of department.

ENGL 540 SEMINAR IN LINGUISTICS AND LANGUAGE - 3 semester hours

Variable content. An examination of issues and problems in one or more of the major fields of linguistics study: phonology, morphology, syntax, semantics. May be repeated for credit with different topic, with consent of department.

ENGL 547 ADVANCED CREATIVE WRITING - 3 semester hours

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: Permission of the instructor

ENGL 550 STUDIES IN POETRY - 3 semester hours

Variable content. An examination of poetry as a genre. May be repeated for credit with different topic, with consent of department.

ENGL 551 STUDIES IN DRAMA - 3 semester hours

Variable content. An examination of drama as a genre. May be repeated for credit with different topic, with consent of department.

ENGL 552 STUDIES IN FICTION - 3 semester hours

Variable content. An examination of fiction as a genre. May be repeated for credit with different topic, with consent of department.

ENGL 553 STUDIES IN NON-FICTION - 3 semester hours

Variable content. An examination of non-fiction as a genre. May be repeated for credit with different topic, with consent of department.

ENGL 554 STUDIES IN YOUNG ADULT LITERATURE - 3 semester hours

Study of literature for and about adolescents/young adults. Students will analyze recent young adult literature and significant earlier texts. Some consideration of curricular and pedagogical issues.

ENGL 555 INTENSIVE STUDY OF AN AUTHOR - 3 semester hours

Variable content. An intensive and extensive study of a writer. Consideration of style, dominant ideas, influence, development, criticism of the writer. May be repeated for credit once with different writer, with consent of the department.

ENGL 556 CRITICAL APPROACHES TO LITERARY TEXTS - 3 semester hours

An introduction to literary criticism and to the theoretical approaches that inform it.

ENGL 560 RESEARCH AND THESIS - semester hours**ENGL 570 COMPREHENSIVE EXAMINATION - 0 semester hour**

An oral and written examination to assess the candidates' overall knowledge of course work pursued in the graduate program and their ability to apply this knowledge to designated sets of circumstances.

Graduate Professional Education Programs

Governance

The Graduate Professional Education Programs are housed within the Professional Education Unit. The Unit is the administrative arm that oversees the preparation of teachers and other school personnel. The programs in the Unit are approved by the Virginia Department of Education and accredited by the National Council for the Accreditation of Teacher Education (NCATE).

Unit Conceptual Framework

The conceptual framework reflects the Unit's shared vision for preparing quality educators for work in PreK-12 schools. The overall goal of the Unit 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. The following definitions are the foundation of the unit's candidate proficiencies at the initial and advanced levels:

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 learn.

Reflective: Reflecting upon and evaluating research and the success of past decisions in an effort to make better decisions in the future.

Unit Mission Statement

Creating a positive learning environment for all students and using evidence-based performance standards to develop reflective practitioners are central to the Professional Education Programs Unit's mission. The Unit 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.

THE DEPARTMENT OF GRADUATE PROFESSIONAL EDUCATION PROGRAMS

The following programs are offered for the preparation of teachers and other school personnel:

Master of Education (M.Ed.)	Master of Science (M.S.)	Doctor of Education (Ed.D)
<ul style="list-style-type: none"> • Education with concentrations in: <ul style="list-style-type: none"> ○ Elementary Education (PreK-6)* ○ Special Education (K-12)* • Counselor Education (PreK-12) • Educational Administration and Supervision PreK-12) 	<ul style="list-style-type: none"> • Counselor Education (PreK-12) • Community Counseling (Non-School setting) • Educational Administration And Supervision (PreK-12) • Educational Administration and Supervision (Non-school Setting) • Media and Technology (Non-School setting) 	<ul style="list-style-type: none"> • Educational Administration and Supervision (PreK- 12)

*Initial Teacher Preparation Programs

Admission Process

All applicants for the Graduate Professional Education Programs are required to submit the following documents to the School of Graduate Studies, Research and Outreach for initial screening:

1. Completed application to program with the \$25.00 fee
2. Two official transcripts from each collegiate institution attended (GP A of 2.5 or higher is required)
3. Proof of Graduate Record Examination (date taken and scores within the last five years)

Application Deadline

- May 1st for Fall admission
- November 1st for Spring admission

Upon initial screening the applications are forwarded to the Department Chair where they are given to each program coordinator for processing by the Admissions Committee. The committee reviews the applications based on the established program admissions criteria. These criteria can be found in the pages to follow. Applicants are notified of the committee's decision in writing by the Unit Head and the Dean of Graduate Studies, Research and Outreach. In addition to admissions standards, each program has established specific transition points for the candidates to meet once they enter the program.

Elementary Education (PreK-6)

Initial Licensure Program Description

The graduate program in Elementary Education 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 competent, caring, effective, and reflective professional educators who are committed to addressing the challenges of educating all students for multicultural and global learning communities. As competent educators, candidates will understand the central knowledge, concepts, skills, and dispositions necessary in the field of teaching. As caring educators, candidates will show respect for all learners in the educational setting and empower them to set achievable goals while maintaining high ethical standards. As effective educators, candidates will use research-supported instructional methods and best practices and performance-based assessments to guide the learning of the PreK-6 students. Finally, as reflective educators, candidates will critically examine all aspects of the teaching/learning process including essential dispositions to create a safe and positive classroom and school culture.

The Professional Education Program 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.
3. 3. Submit official transcripts to verify core content areas for Elementary Education
4. Have a Scholastic Aptitude Test (SAT) score of 1100 with minimum scores of 530 verbal and 530 on mathematics or, pass the Praxis I assessment, with scores of 178 in Reading, 178 in Mathematics and 176 Writing or a composite score of 532.
5. Submit the following documentation showing completion of assessments required by the Virginia Department of Education:
 - a. Passing Praxis II scores for Elementary Education
 - b. Passing score of 235 on the Reading and Writing sections of the Virginia Communication and Literacy Assessment or a composite score of 470 (required in December 2006)

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.
3. Submit an application for candidacy

Phase III: Candidacy

Candidates must

1. Complete all Graduate Elementary Education Core courses
2. Passing score of 235 on the Virginia Reading Assessment (required July 2006)
3. Participate in full-time Internship
4. Receive a clinical site supervisor evaluation
5. Receive a university supervisor evaluation

Phase IV: Program Completion

Candidates must

1. Complete a Master's Project: Action Research Project
2. Validate Technology Skills for Instructional Personnel (TSIP's)
3. Complete the Child Abuse Recognition and Intervention Training
4. Complete the Candidate Exit Survey

Prior to graduating, candidates are required to complete all licensure documents required by the Virginia Department of Education. The Unit will submit the forms and documentation for licensure.

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.

Curriculum Requirements

The Graduate Professional Education Programs in Elementary Education include the following course requirements:

3 semester hours	Restricted Course
9 semester hours	Common Core Courses
18 semester hours	Professional Courses

3 semester hours	Internship
3 semester hours	Master's Project: Action Research

Course Number	Course Title	Semester Hours
<i>Restricted Course</i>		
PSYC 512	Human Growth and Development	3
<i>Core Courses</i>		
EDUC 501	Foundation of Education	3
EDUC 513	Educational Research	3
STAT 510	Statistical Procedures in Education	3
<i>Professional Courses</i>		
EDUC 530	Curriculum and Instruction in the Elementary School	3
EDUC 531	Language Acquisition and Literacy in Elementary School	3
EDUC 532	Mathematics and Science Instruction in Elementary School	3
EDUC 533	Social Studies and the Creative Arts in the Elementary School	3
EDUC 538	Reading in the Content Areas	3
EDUC 541	Behavior Management in Educational Settings	3
<i>Internships and Seminar</i>		
EDUC 536	Internship in Elementary Education	3
<i>Master's Project: Action Research</i>		
EDUC 580	Master's Project: Action Research	3

Course Descriptions

EDUC 501 FOUNDATIONS OF EDUCATION - 3 semester hours

This course is designed to provide students with a sound basis for interpretation and evaluation of present day educational theories and practices by tracing the influence of historical, sociological, philosophical, and religious views upon the development of the education process.

EDUC 513 EDUCATIONAL RESEARCH - 3 semester hours

This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and a pilot study) with emphasis on the following: (1) statement of 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.

Prerequisite: STAT 510 Statistical Procedures in Education

EDUC 530 CURRICULUM AND INSTRUCTIONAL MATERIALS IN THE ELEMENTARY SCHOOL - 3 semester hours

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 classroom. 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 the educational process is emphasized as is the impact of curriculum design and implementation on the education of students with special needs.

EDUC 531 LANGUAGE ACQUISITION AND LITERACY IN THE ELEMENTARY SCHOOL - 3 semester hours

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.

EDUC 532 Mathematics and Science Instruction in the Elementary School - 3 semester hours

This course focuses on the research, issues, trends, theory and practice relative to instruction in mathematics and science in the elementary school. Attention is given to instructional approaches to identify 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 mathematics and science.

EDUC 533 SOCIAL STUDIES AND THE CREATIVE ARTS IN THE ELEMENTARY SCHOOL - 3 semester hours

This course focuses on the study of research, issues, trends, theory and practice relative to instruction in the social studies and creative arts in the elementary school. This course emphasizes the role and importance of social studies and the creative arts; curriculum integration; unit planning; and resources for the instruction, implementation, and evaluation of 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 social studies and the creative arts.

EDUC 536 INTERNSHIP IN ELEMENTARY EDUCATION - 3 semester hours

This course provides opportunities for in-service teachers and administrators to work directly with elementary-age children and their parents. Experiences include observation and participation in schools and the community as well as planning for guiding and evaluating technology and learning.

EDUC 538 READING IN THE CONTENT AREAS - 3 semester hours

This course is designed for elementary and secondary teachers to develop competencies in the teaching of reading in the elementary school. Emphasis is placed on the commonalities of reading skills as they relate 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 pupil assessment and for meeting instructional needs.

EDUC 541 BEHAVIOR MANAGEMENT IN EDUCATIONAL SETTINGS - 3 semester hours

This course explores individual and group behavior management techniques that address the management of student behavior, remediation of inappropriate social skills, and the development of appropriate social behavior. It includes the development of understandings relevant to those PSYCosocial aspects that affect self-esteem, behavior, and academic progress. The utilization of current and emerging technologies in the educational process is emphasized with special reference to elementary and special education settings.

EDUC 580 MASTER'S PROJECT - 3 semester hours

The Master's project requires students to plan, design, and implement an action research project that relates to problems and issues in one of the areas of concentration. A written document submitted in triplicate is required. The student must defend his/her project in an oral presentation before a faculty committee.

PSYC 512 HUMAN GROWTH AND DEVELOPMENT - 3 semester hours

This course focuses on the study of the principles of physical, mental, emotional and social growth of the individual and their implications for the learning process.

STAT 510 STATISTICAL PROCEDURES IN EDUCATION - 3 semester hours

This is a general terminal course designed primarily for graduate students enrolled in professional education research, PSYCOlogy, 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.

Note: EDUC 580 Master's Project: Action Research is required of all candidates enrolled in the Master of Education degree program. Also, concentrated courses and restrictive courses may have field experiences embedded in the course requirements.

Degree in Special Education (K-12)**Program Description**

The graduate program in Special Education offers a program of study that leads to a Master of Education degree with a concentration in Special Education for candidates who seek an endorsement in Learning Disabilities, Mental Retardation, and/or Emotional Disturbance. The program has been aligned with the Unit's Conceptual Framework outcomes to support the development of competent, caring, effective, and reflective professional educators who are committed to addressing the challenges of educating all students for multicultural and global learning communities. As competent educators, candidates will understand the central knowledge, concepts, skills, and dispositions necessary in the field of teaching. As caring educators, candidates will show respect for ailleamers in the educational setting and empower them to set achievable goals while

maintaining high ethical standards. As effective educators, candidates will use research-supported instructional methods and best practices and performance-based assessments to guide the learning of the K-12 students with exceptional learning needs. Finally, as reflective educators, candidates will critically examine all aspects of the teaching/learning process including essential dispositions to create a safe and positive classroom and school culture.

The Professional Education Program 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

Candidate 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 Special 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.
3. Submit official transcripts to verify core content areas for Special Education endorsement.
4. Have a Scholastic Aptitude Test (SAT) score of 1100 with minimum scores of 530 verbal and 530 on mathematics or, pass the Praxis I assessment, with scores of 178 in Reading, 178 in Mathematics and 176 Writing or a composite score of 532.
5. Submit the following documentation showing completion of assessments required by the Virginia Department of Education:
 - a. Passing Praxis II scores for Elementary Education is required to be considered highly qualified
 - b. A passing score of 235 on the Reading and Writing sections of the Virginia Communication and Literacy Assessment or a composite score of 470 (required in December 2006)

Program Area 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 GP A at the graduate level in order to remain in the program. If candidates fail to maintain the 3.0 GP A, they will be placed on probation until this criterion is met.
3. Submit an application for candidacy

Phase III: Candidacy

Candidate must

1. Complete all Graduate Special Education core courses
2. Passing score of 235 on the Virginia Reading Assessment (required July 2006)
3. Participate in full-time Internship
4. Receive a clinical/site supervisor evaluation
5. Receive a university supervisor evaluation

Phase IV: Program Completion

Candidate must

1. Complete Master's Project: Action Research
2. Validate Technology Skills for Instructional Personnel (TSIP's)
3. Complete the Child Abuse Recognition and Intervention Training
4. Complete candidate exit survey

Prior to graduating, Candidates are required to complete all licensure documents required by the Virginia Department of Education. The Unit will submit the forms and documentation for licensure.

Phase V: Graduate Follow-up

Candidate must

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.

Curriculum Requirements

The Graduate Professional Education Programs in Special Education include the following course requirements:

3 semester hours	Restricted Course
9 semester hours	Common Core Courses
18 semester hours	Professional Courses
6 semester hours	Endorsement Area Courses (LD, MR, or ED)
3 semester hours	Internship
3 semester hours	Master's Project/Action Research

Course Number	Course Title	Semester Hours
<i>Restricted Course</i>		
PSYC 512	Human Growth and Development	3
<i>Core Courses</i>		
EDUC 501	Foundation of Education	3
EDUC 513	Educational Research	3
STAT 510	Statistical Procedures in Education and PSYCology	3
<i>Professional Courses</i>		
EDUC 502	Communication and Collaboration in Education	3
EDUC 503	Legal and Ethical Issues in Special and Inclusive Education	3
EDUC 540	Diagnosis of Learning and Behavioral Problems	3
EDUC 541	Behavior Management in Educational Settings	3
EDUC 542	Transition Education for Students with Disabilities	3
EDUC 543	Speech and Language Development: Disability and Intervention	3
EDUC 550	Developing Language and Reading Skills of Exceptional Learner	3
<i>Endorsement Area Courses</i>		
Learning Disabilities		
EDUC 544	Learning Disabilities in Children and Youth	3
EDUC 547	Students with Learning in Disabilities: Curriculum and Instructional Methods	3
Mental Retardation (MR)		
EDUC 545	Mental Retardation in Children and Youth	3
EDUC 548	Students with Mental Retardation: Curriculum and Instructional Methods	3
Emotional Disturbance (ED)		
EDUC 546	Emotional Disturbance in Children and Youth	3
EDUC 549	Students with Emotional Disturbance: Curriculum and Instructional Methods	3
<i>Internship</i>		
EDUC 553	Internship in Special Education	3
<i>Master's Project/Comprehensive Written and Oral Examination</i>		
EDUC 580	Master's Project/Action Research	3

Course Descriptions

EDUC 501 FOUNDATIONS OF EDUCATION - 3 semester hours

This course is designed to provide students with a sound basis for interpretation and evaluation of present day educational theories and practices by tracing the influence of historical, sociological, philosophical, and religious views upon the development of the education process.

EDUC 502 COMMUNICATION AND COLLABORATION IN EDUCATION - 3 semester hours

This core education course presents an overview of strategies and technologies appropriate to the development of effective communication with students, parents and other family members, school personnel, members of relevant professional disciplines, and the general community pertinent to the quality education of students in regular education, special education, and inclusive settings. The use of technology to enhance effective functioning in the roles of consultant and collaborator is explored with specific competencies identified and developed. Emphasis is also given to the use of technology in increasing competency in the management of instruction and behavior by professionals involved in collaboration.

EDUC 503 LEGAL AND ETHICAL ISSUES IN SPECIAL AND INCLUSIVE EDUCATION - 3 semester hours

This course provides a critical appraisal of the current nature, scope, and dimensions of contemporary and traditional education, special education, and inclusive education at the local, state, and national levels. Special emphasis is placed on the roles of both regular and special educators as collaborative teachers in inclusive settings. In addition, theoretical, legal, and practical issues and recent research and program development and evaluation concerned with the treatment, education, and rehabilitation of exceptional individuals are extensively reviewed. The utilization of current and emerging technologies in the educational process is emphasized.

EDUC 513 EDUCATIONAL RESEARCH - 3 semester hours

This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and a pilot study) with emphasis on the following: (1) statement of 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.

Prerequisite: STAT 510 Statistical Procedures in Education

EDUC 540 DIAGNOSIS OF LEARNING AND BEHAVIOR PROBLEMS - 3 semester hours

This course is designed to provide knowledge of current research and issues in the assessment of exceptional individuals. This course focuses on techniques and procedures for assessing, diagnosing, and remediating learning and behavioral problems. An increase in skill in administering and scoring assessment instruments and interpreting test data is expected. Candidates are expected to demonstrate competence in implementing the diagnostic-prescriptive process as related to special education populations. The utilization of current and emerging technologies in the educational process and diagnostic procedures appropriate to elementary-age students is emphasized.

EDUC 541 BEHAVIOR MANAGEMENT IN EDUCATIONAL SETTINGS - 3 semester hours

This course explores individual and group behavior management techniques that address the management of student behavior, remediation of inappropriate social skills, and the development of appropriate social behavior. It includes the development of understandings relevant to those psychosocial aspects that affect self-esteem, behavior, and academic progress. The utilization of current and emerging technologies in the educational process is emphasized with special reference to elementary and special education settings.

EDUC 542 TRANSITION EDUCATION FOR STUDENTS WITH DISABILITIES - 3 semester hours

This course focuses on the study of curriculum models appropriate to educating students with disabilities. Emphasis is placed on the development of pertinent knowledge, skills, and values in career, vocational, leisure and social skill development. Experiences include career, transition, vocational exploration and programming. The utilization of current and emerging technologies in the educational process is emphasized in the development of career, leisure, and social skills for students with special needs.

EDUC 543 SPEECH AND LANGUAGE DEVELOPMENT, DISABILITY AND INTERVENTION - 3 semester hours

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. Emphasis is given to teaching reading skills to students with language and learning difficulties.

EDUC 544 LEARNING DISABILITIES IN CHILDREN AND YOUTH - 3 semester hours

This course presents the characteristics and educational and related needs in terms of theoretical underpinnings and specific age-span/development issues related to cognitive functioning, multicultural influences, emotional adjustment, social development, medical interventions, and the effective delivery of instruction to learners with specific learning disabilities.

EDUC 545 MENTAL RETARDATION IN CHILDREN AND YOUTH - 3 semester hours

This course explores the etiology of mental retardation with special attention to the implications for instructional programming and the provision of special education and related services by the public schools and other agencies. Definitions, classification systems, characteristics, incidence, sociocultural aspects, and the effects of diverse sociocultural influences are studied.

EDUC 546 EMOTIONAL DISTURBANCE IN CHILDREN AND YOUTH - 3 semester hours

This course provides students with knowledge of the most commonly used definitions, classification systems, characteristics, incidence and prevalence, diagnosis, and etiology of behavioral and emotional problems of children and youth. Theoretical constructs of emotional disturbance provide the context for interventions that are introduced. The candidate is made knowledgeable about the implications of educational research, the application of educational technology, as well as issues and trends, including mainstreaming, inclusion, collaborative teaching, and P. L. 101-476 (Individuals with Disabilities Education Act).

EDUC 547 STUDENTS WITH LEARNING DISABILITIES: CURRICULUM AND INSTRUCTIONAL METHODS - 3 semester hours

This course explores instructional programming, and student and program evaluation appropriate to learners with specific learning disabilities with the goal of facilitating their integration in the educational mainstream. 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 548 Students with Mental Retardation: Curriculum and Instructional Methods - 3 semester hours

A course surveys methods and materials as well as curricular approaches, modifications, and models, especially those that facilitate the integration of students with mental retardation into the continuum of educational programs and services. The utilization of current and emerging technologies in the educational process is emphasized.

EDUC 549 Students with Emotional Disturbance: Curriculum and Instructional Methods - 3 semester hours

This course is designed to acquaint the student with the major theoretical models and instructional programming techniques appropriate to the education of students with emotional disturbance. Emphasis is also placed on strategies for managing the physical and instructional environment; the academic, behavioral, and affective development of students from diverse sociocultural backgrounds; the inclusion of these students in the educational mainstream; and relevant research related to instructional modifications and curriculum development. The utilization of current and emerging technologies in the educational process is emphasized.

EDUC 550 DEVELOPING LANGUAGE AND READING SKILLS OF EXCEPTIONAL LEARNERS - 3 semester hours

This course provides the candidates with a strong knowledge base and requires 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. Current related research, trends, and issues are examined.

EDUC 553 INTERNSHIP IN SPECIAL EDUCATION - 3 semester hours

This supervised field experience provides the graduate candidate with an opportunity to use and develop skills, attitudes, and competencies necessary to be successful in managing and instructing exceptional individuals with diverse needs and backgrounds. The candidate will apply strategies and competencies gained from related courses to the assigned educational setting(s).

EDUC 580 MASTER'S PROJECT - 3 semester hours

The Master's project requires students to plan, design, and implement an action research project that relates to problems and issues in one of the areas of concentration. A written document submitted in triplicate is required. The student must defend his/her project in an oral presentation before a faculty committee.

PSYC 512 HUMAN GROWTH AND DEVELOPMENT - 3 semester hours

This course focuses on the study of the principles of physical, mental, emotional and social growth of the individual and their implications for the learning process.

STAT 510 STATISTICAL PROCEDURES IN EDUCATION - 3 semester hours

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.

Counselor Education

The Department of Professional Education Program offers a program in Counselor Education, which leads to the Master of Science or Master of Education degree. The Counselor Education program also offers an option which leads to the Pupil Personnel Services Endorsement. This course of study professionally trains and prepares those who wish to pursue careers in school counseling (PreK-12) in elementary, middle/junior high or high school settings. In accordance with the Professional Education Program Unit's Conceptual Framework, the Counselor Education program prepares competent, effective, caring, and reflective counselors who create positive educational environments for all students. The Counselor Education program also offers an option for those who possess a Master Degree and seek endorsement in Pupil Personnel Services to be a School Counselor. As competent counselors, candidates will understand the knowledge, concepts and skills necessary to address the challenges and needs of all students. As caring counselors, candidates will be committed to and demonstrate high ethical and professional

standards. As effective counselors, candidates will develop counseling programs based upon the knowledge of learning, teaching and student development and will use multiple sources of information and data to facilitate the counseling process. Finally, as reflective counselors, candidates will examine their personal values, beliefs, and goals, as well as, integrate ethical and professional standards to become an effective practitioner who facilitates a positive environment for all students.

The Professional Education Unit 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 minimum undergraduate academic grade point of 2.8
2. Submit a personal statement describing personal characteristics, personal development reasons for seeking this degree, personal and professional experiences that influenced you to pursue counseling, and attributes you possess which contribute to your effectiveness as a counselor
3. Submit 3 Professional Recommendations (addressing character, academic promise, suitability for the counseling profession)
4. Submit a resume of work experience and education
5. Submit 2 official transcripts
6. Present a competitive GRE score, less than 5 years old.

A personal interview with the program faculty admissions committee may be requested. Under certain conditions, a student may be admitted provisionally.

Pupil Personnel Services Endorsement Criteria for Program Admission

1. Must hold a Master's degree
2. Personal statement describing personal characteristics, personal development reasons for seeking this endorsement, personal and professional experiences that influenced you to pursue counseling, and attributes you possess which contribute to your effectiveness as a counselor
3. Submit 3 Professional Recommendations (addressing character, academic promise, suitability for the counseling profession)
4. Submit a resume of work experience and education
5. Submit 2 official transcripts
6. A personal interview with the program faculty admissions committee may be requested.

Transfer Students

Students transferring into the Counselor Education graduate program will have to adhere to the same program admission criteria.

Phase II: Midpoint - Admission to Candidacy

Candidates must

1. Complete a minimum of 12 hours of course work
2. Maintain a B average or above in all content and core course
3. Submit an application for candidacy

Phase III: Candidacy

Candidates must

1. Advance to candidacy
2. Complete all required coursework
3. Participate in a 200 hour practicum PreK-6
4. Participate in a 200 hour practicum 6-12
5. Receive an on-site supervisor evaluation
6. Receive an university supervisor evaluation
7. Submit counseling practicum portfolio

Phase IV: Program Completion

Candidates must

1. Successfully complete the oral and written comprehensive exam
2. Complete a candidate exit survey

Prior to graduating, Candidates are required to complete all licensure documents required by the Virginia Department of Education. The Unit will submit the forms and documentation for licensure.

Phase V: Graduate Follow-up

Candidate must

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.

Counselor Education (PreK-12)

The Master of Education degree program requires a minimum of 48 semester hours of academic credit (no more than 6 of which may be transferred from another university) and a written/oral comprehensive examination. This includes three (3) core courses, ten (10) program courses, three (3) specialization courses, and one (1) advisor-approved elective course.

Core Courses (9 semester hours)

COUN 528	Analysis of Individual Growth and Development
EDUC 513	Educational Research
COUN 526	Measurement and Evaluation in Counseling

Program Course Number	Course Title	Semester Hours
EDUC 513	Educational Research	3
COUN 523	School Counseling (PreK-12)	3
COUN 524	Ethics in Counseling	3
COUN 525	Principles of Counseling	3
COUN 526	Measurement and Evaluation of Counseling	3
COUN 527	Career Development and Counseling	3
COUN 528	Analysis of Individual Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques of Counseling	3
COUN 531	Group Procedures in Counseling	3
COUN 532	Counseling for Special Needs	3
COUN 537	Practicum	3
COUN 541	Counseling Children	3
COUN 549	Internship	3
COUN 553	Multicultural Counseling	3
COUN 599	Oral/Written Comprehensive Examination	0

Specialized Course Number	Specialized Course Titles	Semester Hours
COUN 523	School Counseling (PreK-12)	3
COUN 532	Counseling Strategies for Special Needs	3
COUN 541	Counseling Children	3
	Elective Courses (3 semester hours – not an exhaustive list)	
COUN 533	Problems and Adjustment	3
COUN 554	Diagnosis and Treatment	3
COUN 555	Family System	3
EDUC 203	Seminar in Education	3
EDUC 220	Educational Technologies	3
PSYC 513	Educational PSYCology	3

Counselor Education (PreK-12)

The Master of Science degree program in Counselor Education (PreK-12) requires a minimum of 54 semester hours of academic credit (no more than 6 of which may be transferred from another university). The M.S. places greater emphasis on research and evaluation. Candidates are required to complete a quantitatively based research thesis. This program includes three (4) core courses, ten (9) program courses, three (3) specialization courses, and one (1) research course.

Core Courses (9 semester hours)

COUN 526	Measurement and Evaluation in Counseling
COUN 528	Analysis of Individual Growth and Development
EDUC 513	Educational Research

Program Course Numbers	Program Course Titles	Semester Hours
STAT 510	Statistical Procedures in Education	
COUN 524	Ethics in Counseling	3
COUN 525	Principles of Counseling	3
COUN 527	Career Development and Counseling	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques of Counseling	3
COUN 531	Group Procedures in Counseling	3
COUN 537	Practicum	
COUN 549	Internship	3
COUN 553	Multicultural Counseling	3
Specialized Course Numbers	Specialized Course Titles	
COUN 523	School Counseling (PreK-12)	3
COUN 532	Counseling for Special Needs	3
COUN 541	Counseling Children	3
Course Number	Thesis	
COUN 539	Research and Thesis	3

Pupil Personnel Services Endorsement

This program is designed to allow candidates to meet the Commonwealth of Virginia certification requirements for an endorsement in school counseling. Candidates must currently possess a M.Ed., M.S. or M.A. degree. This program requires a minimum of 39 semester hours of academic credit (no more than 6 of which may be transferred from another university) and a written comprehensive examination. This includes ten (10) program courses and three (3) specialization courses.

Program Course Numbers	Program Course Titles	Semester Hours
COUN 524	Ethics in Counseling	3
COUN 525	Principles of Counseling	3
COUN 526	Measurement and Evaluation in Counseling	3
COUN 527	Career Development and Counseling	3
COUN 528	Analysis of the Individual Growth and Development	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques of Counseling	3
COUN 531	Group Procedures in Counseling	3
COUN 537	Practicum	3
COUN 599	Oral/Writing Comprehensive Examination	0
Specialized Course Number	Specialized Course Title	Semester Hours
COUN 523	School Counseling Seminar	30

M.S. Community Counseling (Non-school setting)

This program is designed for candidates interested in working in a community agency and/or non-school setting. Master of Science degree program requires a minimum of 54 semester hours of academic credit (no more than 6 of which may be transferred from another university). The M.S. places greater emphasis on research and evaluation. Candidates are required to complete a quantitatively based research thesis. This program includes four (4) core courses, nine (9) program courses, three (3) specialization courses, and one (1) research course.

Core Courses (9 semester hours)

COUN 526	Measurement and Evaluation in Counseling
COUN 528	Analysis of Individual Growth and Development
EDUC 513	Educational Research
STAT 510	Statistical Procedures in Education

Program Course Numbers	Program Course Titles	Semester Hours
COUN 524	Ethnics in Counseling	3
COUN 525	Principles of Counseling	3
COUN 527	Career Development and Counseling	3
COUN 529	Theories of Counseling	3
COUN 530	Techniques of Counseling	3
COUN 531	Group Procedures in Counseling	3
COUN 537	Practicum	3
COUN 549	Internship	3
COUN 553	Multicultural Counseling	3
Specialized Course Numbers	Specialized Course Titles	
COUN 536	Community/Agency Counseling	3
COUN 554	Diagnosis and Treatment	3
COUN 555	Family System	3
Research Course Number	Research Course Title	
COUN 539	Thesis	3

Course Descriptions

COUN 523 SCHOOL COUNSELING (PreK-12) - 3 semester hours

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: COUN 526 Measurements and Evaluation in Counseling
COUN 531 Group Procedures and Counseling

COUN 524 ETHICS IN COUNSELING - 3 semester hours

This course is designed to acquaint students with the ethical, legal, and professional issues in counseling. Current trends in the venues and practice of counseling will be covered.

COUN 525 PRINCIPLES OF COUNSELING - 3 semester hours

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 AND EVALUATION IN COUNSELING - 3 semester hours

This is an advanced course in group testing, organized to acquaint counselors and other school personnel with the various types of standardized tests, with emphasis on scoring, computations, and interpretation procedures.

COUN 527 CAREER DEVELOPMENT AND COUNSELING - 3 semester hours

This course explores the scope and purpose of the career development process, with special attention given to the theories and research related to career counseling. Occupational, 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 ANALYSIS OF INDIVIDUAL GROWTH AND DEVELOPMENT - 3 semester hours

This course is designed to assist counselors in studying individuals and their problems, helping pupils understand themselves, and assisting pupils to plan 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 semester hours

This course is designed for the candidate to critically analyze the major theories of counseling. Emphasis is placed upon the rationale underlying counseling and theoretical approaches.

Prerequisites: COUN 524 Ethics in Counseling; COUN 525 Principles of Counseling

COUN 530 TECHNIQUES OF COUNSELING - 3 semester hours

This course focuses on the concepts, strategies, and techniques of the counseling process. Attention is given to relationship building and practical application of the major counseling theories.

Prerequisite: COUN 529 Theories of Counseling

COUN 531 GROUP PROCEDURES IN COUNSELING - 3 semester hours

This course is designed to help counselors learn how to organize and lead effective groups in various settings. Candidates will study group dynamics and group procedures with an emphasis on the developmental needs of all ages.

Prerequisites: COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling

COUN 532 COUNSELING FOR SPECIAL NEEDS - 3 semester hours

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 PROBLEMS AND ADJUSTMENT - 3 semester hours

This course focuses on the nature and causes of adjustment problems and of the various techniques utilized by individuals to cope with such problems. The role of motivation in behavior and adjustment is examined along with the evidence of adjustment and maladjustment. Attention is also given to counseling interventions that can assist individuals in learning to cope effectively with adjustment problems.

COUN 536 COMMUNITY/AGENCY COUNSELING - 3 semester hours

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 PRACTICUM - 3 semester hours

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 build on previous practicum experiences.

Prerequisites: Degree candidacy
Completion of at least 40 semester hours towards degree
Faculty endorsement

COUN 538 Integrative Seminar - 3 semester hours

This seminar is designed for master's degree candidates in their final semester of course work. Students will demonstrate their competencies in integrating knowledge and skill acquired through training and experience..

Prerequisites: COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling;
COUN 531 Group Procedures and Counseling

COUN 539 Thesis - 3 semester hours

This course provides the opportunity for a formal and directed quantitative research investigation into counseling topics, issues, problems and/or outcomes.

Prerequisites: Degree candidacy
Completion of at least 40 semester hours towards degree
Faculty endorsement

COUN 541 COUNSELING CHILDREN - 3 semester hours

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.

COUN 548 SEMINAR IN TOPICAL ISSUES - 3 semester hours

This seminar focuses on topical issues and problems of special interest in counseling.

COUN 549 INTERNSHIP - 3 semester hours

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 build on previous practicum experiences.

Prerequisite: Faculty endorsement

COUN 553 MULTICULTURAL COUNSELING - 3 semester hours

This course is designed to covers the issues, characteristics, and needs relevant to diverse populations as they relate to counseling. Candidates explore counseling from a multicultural perspective.

COUN 554 DIAGNOSIS AND TREATMENT - 3 semester hours

This course 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 principles and models of biopsychosocial assessments, case conceptualization, concepts of normalcy and psychopathology leading to diagnoses and appropriate counseling plans.

Prerequisites: COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling;
COUN 536 Seminar in Community Services

COUN 555 FAMILY SYSTEMS - 3 semester hours

This course 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.

Prerequisites: COUN 529 Theories of Counseling; COUN 530 Techniques of Counseling
COUN 536 Seminar in Community Services

COUN 599 ORAL AND WRITTEN COMPREHENSIVE EXAMINATION - 0 Semester Hours

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 one of the last/final two (2) semesters of enrollment in the program. This course is required of all students seeking M.Ed. in Counseling.

Prerequisites: Degree candidacy must be met a minimum of one (1) semester prior to course Registration
Completion of at least 42 semester hours towards degree
Faculty endorsement

EDUC 513 EDUCATIONAL RESEARCH - 3 semester hours

This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and a pilot study) with emphasis on the following: (1) statement of 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.

Prerequisite: STAT 510 Statistical Procedures in Education

STAT 510 STATISTICAL PROCEDURES FOR EDUCATION AND PSYCHOLOGY - 3 semester hours

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.

Educational Administration and Supervision

The program in Educational Administration and Supervision, offers a program of study that leads to the M.S., M.Ed., or Ed.D. in Educational Administration and Supervision for candidates who seek an endorsement as a school or district level administrator. The outcomes of the programs have been aligned with the unit's conceptual framework outcomes to support the development of competent, caring, effective and reflective professional administrators who are committed as leaders to addressing the challenges of educating all students for multicultural and global learning communities. As competent leaders, candidates will understand the central knowledge, concepts and skills necessary in the administrative field. As caring leaders, educational leadership candidates will show respect for all stakeholders in the educational setting and empower them to set achievable goals while maintaining high standards. As effective leaders, candidates will use research-based instructional methods and best practices and performance assessments to guide the implementation of the instructional process. Finally, as reflective leaders, candidates will step back from themselves and the situation to examine all aspects of the teaching/learning/administrative process, including essential dispositions to create a positive school culture and learning environment.

**MASTER OF SCIENCE AND MASTER OF EDUCATION IN
EDUCATIONAL ADMINISTRATION AND SUPERVISION (PREK-12)***

The course of study in this major leads to a Master of Science or 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. The Master of Education degree requires 45 hours of courses, including an internship and an oral and written comprehensive examination.

Completion of the School Leadership Licensure Assessment, with a minimum score of 165, is required by the state of Virginia for licensure.

***Endorsement only option (non-degree program):** Candidates holding a Masters degree in appropriate educational areas may meet endorsement requires after completing required content courses to include an internship. All graduate school and program requirements must be met prior to admission.

Requirements and Transition Points

Phase I: Admission

Candidates must:

1. Hold a professional, five-year renewable teaching license.
2. 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.
3. Present a competitive GRE score, less than 5 years old. Under certain conditions, candidate may be admitted provisionally for one semester or 6 hours of coursework prior to submission of GRE scores.
4. Provide a reflective personal essay describing educational leadership aspirations.
5. Have an undergraduate GP A of not less than 2.8 on a 4.0 scale.
6. Maintain a 3.0 GPA at the graduate level in order to be retained in graduate school.
7. Have three letters of recommendation from individuals familiar with applicants experience as an educational professional and potential as an educational leader.
8. Submit 2 original transcripts of all undergraduate and graduate credits.

Phase II: Midpoint - Admission to Candidacy

Candidates must

1. Complete a minimum of 12 hours of course work
2. Maintain a B average or above in all content and core course
3. Submit an application for candidacy
4. Complete the Professional Education Program Leadership Assessment (required completion of minimum of half of content courses prior to the assessment)

Phase III: Candidacy

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

Phase IV: Program Completion

Candidates must

1. Successfully complete three years teaching experience
2. Successfully complete oral and written comprehensive exam
3. Complete candidate exit survey

Prior to graduating, Candidates are required to complete all licensure documents required by the Virginia Department of Education. The Unit will submit the forms and documentation for licensure.

Phase V: Graduate Follow-up

Candidates have an option to

1. Participate in a graduate and employer follow-up survey
2. Submit School Leadership Licensure Assessment Data

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.

Curriculum Requirements

Course Number	Course Title	Semester Hours
EDUC 501	Foundation of Education	3
EDUC 513	Educational Research	3
STAT 510	Statistical Procedures in Education and PSYCOlogy	3
EDAS 581	Supervision of Instruction	3
EDAS 582	Organization and Administration	3
EDAS 583	Public School Law	3
EDAS 584	Curriculum Development	3
EDAS 585	Personnel Administration	3
EDAS 586	Evaluation of Instruction	3
EDAS 587	School Plant Management	3
EDAS 588	School Finance	3
EDAS 589	School Community Relations	3
EDAS 679	Internship/Seminar	3
EDUC 520	Technologies of Media	3
PSYC 512/515	Human Growth and Development/Learning Theory	3
*EDAS 597	Oral and Written Comprehensive Exam	0
**EDAS 599	Research and Thesis	0

Endorsement Only (non-degree program)

Course Number	Course Title	Semester Hours
EDUC 581	Supervision of Instruction	3
EDUC 582	Organization and Administration	3
EDUC 583	Public School Law	3
EDUC 584	Curriculum Development	3
EDUC 585	Personnel Administration	3
EDUC 586	Evaluation of Instruction	3
EDUC 587	School Plant Management	3
EDUC 588	School Finance	3
EDUC 589	School Community	3
EDUC 679	Internship/Seminar	3
EDUC 520	Technologies of Media	3
PSYC 512/515	Human Growth and Development/ Learning Theory	3
EDAS 597	Oral and Written Comprehensive Exam	0

Educational Administration and Supervision

(Non-Endorsed)

A program of study is offered which leads to the Master of Science degree in Educational Leadership for students wishing to pursue Educational Leadership/Management careers in public or non-public settings related to education. This degree program will not lead to endorsement as a public school administrator. Rather, the program concentrates on such duties as educational training of developers or managers in industry, government and businesses related to the educational field. This is a 39 semester credit hour program. The applicant should be presently in a military, industrial, managerial or other supervisory position.

Course Requirements

Core Courses (9 semester hours)

EDUC 501	Foundations of Education
EDUC 513	Educational Research
STAT 510	Statistical Procedures in Education and PSYCOlogy

The candidate and faculty advisor agree on a program of study to include not less than five EDAS courses and four cognate courses in the area of leadership concentration plus one elective.

Suggested EDAS Content Courses (15 semester hours)

EDAS 581 - Supervision of Instruction
EDAS 583 - Public School Law
EDAS 589 - School-Community Relations
EDAS 678 - Comprehensive Seminar
EDAS 512 - Strategies for Implementing Multi-Cultural Education
EDUC 520 - Technologies of Media

Cognate Courses (15 semester hours)

Of the 15 semester hours required in cognate courses, 12 must be in leadership courses

Course Descriptions**EDAS 581 SUPERVISION OF INSTRUCTION - 3 semester hours**

This course addresses principles, methods and techniques used to improve educational programs in all schools. Consideration is given to classroom supervision and various methods for the education of teachers in service.

EDAS 582 ORGANIZATION AND ADMINISTRATION - 3 semester hours

This course focuses on 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.

EDAS 583 PUBLIC SCHOOL LAW - 3 semester hours

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 semester hours

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 585 PERSONNEL ADMINISTRATION - 3 semester hours

This course is designed to equip leaders in education with background knowledge in the organization and administration of personnel programs and services for educational institutions. Special attention is given to basic philosophies, principles, responsibilities and functions of personnel administration. It also explores and analyzes the rules, regulations, staff organization and utilization, and professional assessments and negotiations.

EDAS 586 EVALUATION OF INSTRUCTION - 3 semester hours

This course is organized to promote an understanding of evaluation as it is related to the instructional process, and to greater facilitate the use of recognized evaluation procedures. Students will take a critical look at current instructional practices, performance based teacher education, performance contracting, contracts for learning, interaction analysis, and the roles of various participants who provide an effective teaching-learning situation.

EDAS 587 SCHOOL PLANT MANAGEMENT - 3 semester hours

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 semester hours

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 semester hours

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 679 PRACTICUM/INTERNSHIP - 3 semester hours

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.

EDAS 599 RESEARCH AND THESIS/PROJECT - 3 semester hours

This course is designed for formal research study in the candidate's major field. Approval of major professor required

EDUC 501 FOUNDATIONS OF EDUCATION - 3 semester hours

A one-semester course designed to provide students with sound basis for interpretation and evaluation of present day educational theories and practices by tracing the influence of historical, sociological, philosophical, and religious views upon the development of the education process.

EDUC 513 EDUCATIONAL RESEARCH - 3 semester hours

This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and a pilot study) with emphasis on the following: (1) statement of 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.

Prerequisite: STAT 510 Statistical Procedures in Education

EDUC 520 TECHNOLOGIES OF MEDIA - 3 semester hours

This two-semester course emphasizes the utilization of current and emerging technologies of media and their integration with other components of a learning system. The various electronic and computer assisted technologies are stressed as well as software support for use in community colleges, public agencies, and business settings.

PSYC 512/515 HUMAN GROWTH AND DEVELOPMENT/LEARNING THEORY - 3 semester hours

This course is the study of the principles of physical, mental, emotional and social growth of the individual and their implications for the learning process.

STAT 510 Statistical Procedures in Education - 3 semester hours

This is a general terminal course designed primarily for graduate students enrolled in professional education research, PSYCOlogy, 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.

Media and Technology (Non-Endorsed)

The Master of Science (M.S.) program in Media and Technology at Virginia State University prepares students to design effective learning experiences and environments that incorporate media and technology competencies to engage learners and improve learning. This is a non-endorsed program that does not lead to licensure. The Master of Science degree program requires a minimum of 36 hours.

Program Core Courses

The University pattern for programs that have a base in professional education fields includes a requirement of nine semester hours in a common core. The program required core courses include:

Course Number	Course Title	Semester Hours
EDUC 501	Foundation of Education	3
EDUC 513	Education Research	3
STAT 510	Statistical Procedures in Education & PSYCOlogy	3

Students enrolled in this program will be required to complete nine hours in the education core. The nine semester hours of the education core are designed to strengthen learning experiences to enhance the achievement of specialized learning outcomes. The courses include the following:

EDUC 502	Communication and Collaboration	3
EDUC 503	Legal and Ethical Issues in Special and Inclusive Education	3

Media and Technology Course Requirements

Students are required to complete the following courses:

EDUC 520	Technologies of Media	6
EDUC 521	Design of Media and Technologies	3
EDUC 522	Information Processing: Cyberspace, Internet, and WEB Publishing	3
EDUC 523	Internship	3
EDUC 524	Seminar in Media and Technology	3
EDUC 546	Special Topics	3
EDUC 560	Oral and Written Comprehensive Examination	0

Course Descriptions

EDUC 501 FOUNDATIONS OF EDUCATION - 3 semester hours

This course is designed to provide students with a sound basis for interpretation and evaluation of present day educational theories and practices by tracing the influence of historical, sociological, philosophical, and religious views upon the development of the education process.

EDUC 502 COMMUNICATION AND COLLABORATION IN EDUCATION - 3 semester hours

This core education course presents an overview of strategies and technologies appropriate to the development of effective communication with students, parents and other family members, school personnel, members of relevant professional disciplines, and the general community pertinent to the quality education of students in regular education, special education, and inclusive settings. The use of technology to enhance effective functioning in the roles of consultant and collaborator is explored with specific competencies identified and developed. Emphasis is also given to the use of technology in increasing competency in the management of instruction and behavior by professionals involved in collaboration.

EDUC 503 LEGAL AND ETHICAL ISSUES IN SPECIAL AND INCLUSIVE EDUCATION - 3 semester hours

This course provides a critical appraisal of the current nature, scope, and dimensions of contemporary and traditional education, special education, and inclusive education at the local, state, and national levels. Special emphasis is placed on the roles of both regular and special educators as collaborative teachers in inclusive settings. In addition, theoretical, legal, and practical issues and recent research and program development and evaluation concerned with the treatment, education, and rehabilitation of exceptional individuals are extensively reviewed. The utilization of current and emerging technologies in the educational process is emphasized.

EDUC 513 EDUCATIONAL RESEARCH - 3 semester hours

This course is oriented to the methodology of research and investigation in education. The candidates develop, with guidance, a research outline (and a pilot study) with emphasis on the following: (1) statement of 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.

Prerequisite: STAT 510 Statistical Procedures in Education

EDUC 520 TECHNOLOGIES OF MEDIA - 3 semester hours

This two-semester course emphasizes the utilization of current and emerging technologies of media and their integration with other components of a learning system. The various electronic and computer assisted technologies are stressed as well as software support for use in community colleges, public agencies, and business settings.

EDUC 521 DESIGN OF MEDIA TECHNOLOGIES - 3 semester hours

This course engages students in consideration of design principles and strategies that facilitate the integration of media and technology. Attention is given to a variety of design principles, with emphasis on recent contribution from cognitive science and related fields for use in community colleges, public agencies and in business settings.

EDUC 522 INFORMATION PROCESSING: CYBERSPACE, INTERNET, AND WEB PUBLISHING - 3 semester hours

This course is designed to study procedures, organizations, and methods of teaching desk-top publishing. Skills are developed in elements of desktop publishing using current software and other components of page layout, composition, and graphics software.

EDUC 523 INTERNSHIP IN MEDIA AND TECHNOLOGY - 3 semester hours

This internship provides the student with an in-depth experience regarding the role, function, and scope of media technology.

EDUC 524 SEMINAR IN MEDIA AND TECHNOLOGY - 3 semester hours

This seminar provides an in-depth exploration of the current state of the art and future directions in the field of media and technology. It focuses on, reading, researching, and discussing the philosophy, principles, and strategies underlying media and technology.

EDUC 546 SPECIAL TOPICS - 3 semester hours

This course is designed for students to pursue current topics of special interest in media and technology. Topics may be studied and researched through related professional conference participation, discussion groups, assigned readings and reports, and/or in-depth investigative papers.

STAT 510 STATISTICAL PROCEDURES IN EDUCATION - 3 semester hours

This is a general terminal course designed primarily for graduate students enrolled in professional education research, PSYCOlogy, 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.

Doctor of Education – Educational Administration and Supervision

The Doctor of Education degree in Educational Administration and Supervision is to provide a professional doctoral program opportunity for leaders who will be called upon to meet the education challenges of a changing society, and to provide candidates with the knowledge and skills necessary to promote the success of all students in the region, state, and nation. The program is designed specifically for individuals who seek to serve as educational leaders in PreK-12 public school settings.

Requirements and Transition Points**Phase I: Admission**

Candidates must

1. Have earned a Master's degree from a regionally accredited institution;
2. Have (3) years of administrative experience in a certified position in a public/private school or have equivalent leadership experience
3. Have a grade point average of at least 3.3 in all graduate work previously attempted;
4. Have three 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;
5. Submission official transcripts of all previous undergraduate and graduate credits;
6. Have competitive scores on the Graduate Record Examination (GRE), within five (5) years;
7. Submit a writing sample.

Application Deadlines:

March 1st for fall admission

Phase II: Coursework

1. Completion of coursework totaling 54 credit hours
2. Maintenance of GPA = 3.3 for 2 years of coursework
3. Pass Comprehensive Examination

Phase III: Candidacy

Candidates must

1. Advance to candidacy
2. Complete 54 credit hours (including 6 credit hours of internship)
3. Earn a passing grade on the Comprehensive Examination

Phase IV: Program Completion

Candidates must

1. Candidate must complete six (6) credit hours for dissertation
2. Complete Dissertation Defense

Phase V: Graduate Follow-up

Candidates have an option to:

1. Participate in a graduate and employer follow-up survey

Course Number	Course Title	Semester Hours
EDAS 700	Historical and Philosophical Foundation of Education	3
EDAS 701	Multicultural Education	3
EDAS 703	Advanced Seminar: Planning and Management of Finance	3
EDAS 704	Advanced Seminar: Human Resources Management	3
EDAS 705	Advanced Seminar: School law and Policy Studies	3
EDAS 706	Advanced Seminar: School Community and Public Relations in Education	3
EDAS 707	Advanced Seminar: Administrative and Instructional Leadership	3
EDAS 720	Educational Statistics	3
EDAS 721	Research, Design, and Evaluation Methodology	3
EDAS 722	Qualitative Research	3
EDAS 723	Quantitative Research	3
EDAS 730	Leadership Internship	6
EDAS 739	Research Seminar in Education	3
EDAS 740	Dissertation	6

Areas of Academic Concentration (AAC)*

- Counselor Education
- Special Education
- Elementary Education
- Media and Technology

*The purpose of this requirement is to provide opportunities for candidates to develop their knowledge and skills in areas related to Educational Leadership. Typically, candidates will enroll in 12 hours of coursework in one area. With the permission of the Doctoral Committee, variations may be approved. In no case will fewer than 6 hours in each of two areas be approved.

Note: Additional semester hours may be necessary for candidates whose background and experience need enrichment prior to being formally admitted into the doctoral program.

Course Descriptions

EDAS 700 HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF EDUCATION - 3 semester hours

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 MULTICULTURAL EDUCATION - 3 semester hours

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 ADVANCED SEMINAR: PLANNING AND MANAGEMENT FINANCE - 3 semester hours

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 [mance, 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 ADVANCED SEMINAR: HUMAN RESOURCES MANAGEMENT - 3 semester hours

This course provides a study of personnel services for educational and public agency administrators. Selected personnel functions including planning, recruitment, retention, selection, induction, compensation, and evaluation are discussed.

EDAS 705 ADVANCED SEMINAR: SCHOOL LAW AND POLICY STUDIES - 3 semester hours

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 ADVANCED SEMINAR: SCHOOL COMMUNITY AND PUBLIC RELATIONS IN EDUCATION - 3 semester hours

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 ADVANCED SEMINAR: ADMINISTRATIVE AND INSTRUCTIONAL LEADERSHIP - 3 semester hours

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 EDUCATIONAL STATISTICS - 3 semester hours

This course will canvass the application of basic statistical procedures to the decision-making process. There will be an emphasis on the most often employed statistical procedures and the ways these procedures support administrative decision-making and organizational change processes. Also, emphasis will be on research conducted in schools, presenting methods that are appropriate for school-based research. Candidates will be able to evaluate, design and conduct educational research specific to the school improvement process.

EDAS 721 RESEARCH, DESIGN, AND EVALUATION METHODOLOGY - 3 semester hours

This course is designed to teach the student how to match the research design to the substantive problem in education without further distorting the problem. The first half of the course will cover the basics of research design. The second half will cover program evaluation.

EDAS 722 QUALITATIVE RESEARCH - 3 semester hours

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 semester hours

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 - 6 semester hours

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 739 DISSERTATION SEMINAR – 3 semester hours

This is an introduction to research in educational 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. 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. Special attention will be paid to contemporary issues in American education, as well as those issues specific to schools within Virginia State University's service area.

Su

EDAS 740 DISSERTATION IN EDUCATIONAL ADMINISTRATION AND SUPERVISION - 6 Semester Hours

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, inform, or suggest changes in problems and dilemmas facing educational leaders should be reflected in an original, sophisticated, and high quality document. To facilitate the dissertation process, candidates will participate in regularly scheduled seminars designed to keep them on task and provide ongoing constructive faculty feedback. The end result will be a final dissertation and a successful defense. Classes are held mainly in the evenings and on Saturdays.

History

Admission Requirements

For admission into the history graduate program, the department admissions committee usually bases its evaluation on a broad set of criteria which include coursework, grades, test scores, statement of purpose or a writing sample, letters of recommendation, and other evidence of academic accomplishment and promise.

Undergraduate qualification

BA in History, or BA in another field with 18 credit hours in undergraduate History. Students with less than 18 hours of undergraduate History courses may enter the program provided they register simultaneously in undergraduate courses to meet the 18-hour requirement. Such undergraduate course credits earned will not count towards the graduate degree.

Transfer of credit

Up to nine semester hours earned at either another accredited graduate school or with another graduate program at Virginia State University may be transferred towards the Master's degree with the approval of the Coordinator(s) of the Graduate Program in History and the Department Chair. In all cases, an approximate grade of 'B' in the courses taken is required.

Graduate Record Examination (GRE)

Satisfactory scores on the Graduate Record Examination (GRE) General Test are required. In exceptional cases, a student may be allowed to fulfill the requirements by passing ENGL 516 (Advanced Writing) and/or MATH 499 (Mathematics Review).

Foreign Language

Graduate students in History are required to demonstrate intermediate level proficiency in a modern foreign language.

Application Procedure

In addition to the requirements set by the School of Graduate Studies, applicants to the history graduate program should submit a statement of purpose or a writing sample of about 1,000 words, as well as two letters of recommendation.

Program Coordinators

Students entering the History Graduate Program should consult with the Program Coordinators who will review their undergraduate records, determine their academic needs, provide them with faculty profiles, and advise on possibilities for graduate student assistantship. Program coordinators also advise the chair in the selection of a faculty advisor for the student. In collaboration with the Program Coordinators, faculty advisors are responsible for maintaining student records and periodically meeting with students to review their academic progress.

Advisors

The Department Chair will assign each student entering the program a *Faculty Advisor* who will be the student's *Major Professor*. Students in the thesis option may select a *Thesis Advisor* from among the Graduate Faculty in the department or have one assigned to them. The list of faculty profiles will assist the student in making the choice. The faculty advisor may be the same as the thesis advisor or a Program Coordinator. Students may change advisors if and when necessary.

Program Cards

The Program Card shows the list of possible courses to be taken in various categories from which a schedule for the student is derived. Students should therefore meet with their advisors to complete the Program Card, which will then be sent to the Graduate School for approval.

Course Requirements

Thesis Option

Required Courses:

- HIST 509: The Philosophy and Theory of History 3 credit hours
- HIST 510: Historiography 3 credit hours
- HIST 554: Historical Research Methods 3 credit hours
- HIST 555: Thesis 3 credit hours

American History Courses Minimum of 6 credit hours

World History Courses Minimum of 3 credit hours

The student would then choose additional electives to complete the total requirement of 30 hours for the M.A. degree. These electives must be either graduate courses offered in the Department of History and Philosophy, graduate courses offered at another accredited graduate school, or graduate courses offered by another graduate program at Virginia State University. No more than nine semester hours earned at either another accredited graduate school or with another graduate program at Virginia State University may be transferred towards the Master's degree in History. All transfers of credit must meet with the approval of the Coordinator(s) of the Graduate Program in History and department Chair.

Non-Thesis Option

Required Courses:

- HIST 509: The Philosophy and Theory of History 3 credit hours
- HIST 510: Historiography 3 credit hours
- HIST 536: Comprehensive Examination 0 credit hours

American History Courses

Minimum of 6 credit hours

World History Courses

Minimum of 3 credit hours

The student would then choose additional electives to complete the total requirement of 30 hours for the M.A. degree. These electives must be either graduate courses offered in the Department of History and Philosophy, graduate courses offered at another accredited graduate school, or graduate courses offered by another graduate program at Virginia State University. No more than nine semester hours earned at either another accredited graduate school or with another graduate program at Virginia State University may be transferred towards the Master's degree in History. All transfers of credit must meet with the approval of the Coordinator(s) of the Graduate Program in History and department Chair.

Courses by Category**Required Courses for All Graduate Students****HIST 509: The Philosophy and Theory of History (3.00 credit hours; Fall semester)****Prerequisite: None**

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.

*HIST 510: Historiography (3 semester hours, Spring semester)***Prerequisite: HIST 509**

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.

Additional Required Course for the Non-Thesis Option**HIST 536: Comprehensive Examination (0 semester hours; Fall and Spring semesters)**

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.

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.

Additional Required Courses for the Thesis Option**HIST 554: Historical Research Methods (3 semester hours, Spring semester)****Prerequisite: HIST 509**

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.

HIST 555: Thesis (3 semester hours; Fall and Spring semesters)**Prerequisite: HIST 554**

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.

Course List: American History

HIST 501—The Colonial Era in American History

HIST 506—Native Americans in Early American History

HIST 511—Special Topics in United States History

HIST 513—The Revolutionary Era in American History, 1763-1812
HIST 514—Seminar in Southern History
HIST 515—Antebellum and Civil War America
HIST 517—Seminar in Reconstruction
HIST 518—Industrialization, Expansion, and the Rise of the American Empire, 1850s to 1945
HIST 520—Seminar in American History After World War II
HIST 537—Economic and Business History of the United States
HIST 539—A History of the Constitution of the United States
HIST 540—From Freedom to Slavery: The Black Experience in North America to 1865
HIST 541—From Slavery to Freedom: The Black Experience Since 1865
HIST 543—History of Race Relations in the U.S.
HIST 545—Women's History
HIST 546—Modern American Social History
HIST 547—Oral History
HIST 551—Independent Study in American History
HIST 553—History of Black Education in the United States
HIST 559—A History of Black Religious Experiences in America
HIST 592—Coming to America: A History of Immigration to the Americas

Course List: World History

HIST 512—Special Topics in World History
HIST 525—Latin American History
HIST 542—History of Slavery in National and International Perspective
HIST 561—Africa to 1800
HIST 562—Africa Since 1800
HIST 563—The Atlantic World During Colonialism and Slavery
HIST 564—The Atlantic World in the Post-Colonial Era

Academic Performance

A graduate student whose GPA falls below 3.0 will be placed on probation. Failure to raise the GPA to 3.0 within a semester will lead to dismissal from the program. Students suspended for academic reasons may appeal to the Graduate Policies and Petitions sub-Committee of the Curriculum and Academic Issues Committee for reinstatement.

Special Topics Courses

A student can take up to two Special Topics courses (HIST 511 and HIST 512) as long as they do not duplicate courses taken or being taken.

Independent Study Courses

A student can take one Independent Study course (HIST 551) to further his/her special historical interest after a semester of study as long as it does not duplicate a course taken or being taken.

Completion of Graduate Program Requirements

All degree requirements must be completed within six years. Extensions of up to two years may be granted by the Graduate Policies and Petitions Sub-Committee.

Candidacy

A student will only be eligible for advancement to candidacy after completing a minimum of 12 semester hours with a 'B' average in the approved program of study and removing all conditions on admission. The student must have approval from his/her faculty advisor and the Program Coordinators to apply for admission to candidacy. Admission to candidacy must be completed no later than the preceding semester in which the student expects to graduate.

Thesis Option

At any point during the course of study, a student who has completed between 12 and 24 graduate semester hours can submit for review and approval, a thesis proposal to the Master's Defense Committee the student selects. The committee should consist of three graduate faculty, two of whom must be from the History Department (including the student's advisor).

Proposal: The thesis proposal must include:

- a thesis statement;
- an annotated bibliography;
- a plan of research.

Thesis Title Card: Candidates for the Master of Arts degree will file the Thesis Title Card approved by the advisor in the semester before the candidate expects to complete all requirements for the degree.

Thesis: The completed thesis must comply with the guidelines set by the Department of History and Philosophy as well as those of the School of Graduate Studies.

Review and Defense: Drafts of the thesis should be forwarded to the Master's Defense Committee for review and comments. The final draft of the thesis must be submitted to all members of the committee at least ten days prior to the scheduled defense date, which should not be later than the last day of classes during the semester in which the student intends to graduate. In certain cases, the student's work may be approved conditionally, pending certain changes as recommended by the committee.

Non-Thesis Option

At any point during the course of study, a student who has completed between 12 and 24 graduate semester hours can select a Master's Defense Committee. The committee should consist of three graduate faculty, two of whom must be from the History Department (including the student's advisor). The committee will determine the form of the final written and oral examinations.

Comprehensive Examination: The student must file with the Graduate School, a completed **Application for Comprehensive Examination** Form during the final semester of study or after he/she has completed all course work. The student, in consultation with the Master's Defense Committee, is responsible for scheduling the final written and oral exams at the end of the last semester of the student's course work.

Course Descriptions

HIST 501 THE COLONIAL ERA IN AMERICAN HISTORY – 3 semester hours

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 AMERICA – 3 semester hours

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 agricultural 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 States on Native American societies.

HIST 509 THE PHILOSOPHY AND THEORY OF HISTORY - 3 semester hours

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.

HIST 510 HISTORIOGRAPHY - 3 semester hours

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 SPECIAL TOPICS IN UNITED STATES HISTORY - 3 semester hours

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 IN WORLD HISTORY - 3 semester hours

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 THE REVOLUTIONARY ERA IN AMERICAN HISTORY, 1763-1812 - 3 semester hours

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 semester hours

A reading, writing, and research intensive seminar on aspects of Southern History.

HIST 515 ANTEBELLUM AND CIVIL WAR AMERICA - 3 semester hours

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 -Second Semester - 3 semester hours

Intensive study of various historical interpretations of Reconstruction (1865-1877) -- a reading, writing, and discussion intensive graduate seminar.

HIST 518 INDUSTRIALIZATION, EXPANSION, AND THE RISE OF THE AMERICAN EMPIRE, 1850s TO 1945 - 3 semester hours

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 AMERICA AFTER WORLD WAR II - 3 semester hours

Students will study the forces that changed America after World War II.

HIST 536 COMPREHENSIVE EXAMINATION - 0 semester hours

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 ECONOMIC AND BUSINESS HISTORY OF THE UNITED STATES - 3 semester hours

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 A HISTORY OF THE CONSTITUTION OF THE UNITED STATES - 3 semester hours

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 FROM FREEDOM TO SLAVERY: THE BLACK EXPERIENCE IN AMERICA TO 1865 - 3 semester hours

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 America, 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 FROM SLAVERY TO FREEDOM: THE BLACK EXPERIENCE SINCE 1865 - 3 semester hours

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 HISTORY OF SLAVERY IN NATIONAL AND INTERNATIONAL PERSPECTIVE - 3 semester hours

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 OF RACE RELATIONS IN THE U.S.- 3 semester hours

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 semester hours

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 semester hours

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 semester hours

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 IN AMERICAN HISTORY - 3 semester hours

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 OF BLACK EDUCATION IN THE UNITED STATES - 3 semester hours

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 semester hours

S

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: THESIS - 3 semester hours

F, S

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 A HISTORY OF BLACK RELIGIOUS EXPERIENCES IN AMERICA – 3 semester hours

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 semester hours

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 semester hours

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 THE ATLANTIC WORLD DURING COLONIALISM AND SLAVERY – 3 semester hours

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 THE ATLANTIC WORLD IN THE POST-COLONIAL ERA – 3 semester hours

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 TO AMERICA: A HISTORY OF IMMIGRATION TO THE AMERICAS - 3 semester hours

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

Interdisciplinary Studies is a 36-semester-hour consortium program, involving Virginia State University and Virginia Commonwealth University. The program of studies leads to the Master of Interdisciplinary Studies (M.I.S.) degree. The program requires completion of courses in at least three departments: 15-21 semester hours in one, 9-15 in the second, and 3-12 in the third. A minimum of 18 semester hours must be taken at Virginia State University, a minimum of nine semester hours may be completed at either or both schools. The Master of Interdisciplinary Studies degree program is administered directly by the graduate division of the School of Graduate Studies, Research and Outreach.

Mathematics & Computer Science

The areas of study available in the Mathematics & Computer Science Department lead to the Master of Science in Computer Science or Mathematics.

Computer Science

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. 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.

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 train 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 Degree in Computer Science. Each course work (core or elective) is a three-credit hour course.

The Thesis Option:

- Twenty four (24) credit hours of course work (4 core courses and any 4 courses from set of predetermine electives); and
- Six credit hours of thesis work:

4 Core Courses	-	12 credit hours
4 Electives Courses -		12 credit hours
Thesis	-	<u>6</u> credit hours
Total		30

The Non-thesis Option:

- Twenty seven credit hours of course work (4 core courses and any 5 courses from set of predetermine electives)
- Two graduate seminars (CSCI 690 (1 credit hour): Graduate Seminars I & CSCI 691 (1 credit hour): Graduate Seminar II) and
- A Master's project (CSCI 640 (4 credit hours): Master's Project)

4 Core Courses	-	12 credit hours
5 Electives Courses -		15 credit hours
2 Seminar Courses -		2 credit hours
Project	-	<u>4</u> credit hours
Total		33

Core courses: Each core course is a 3-credit hour course. All students must take the following four courses: Advanced Systems Architecture (CSCI 588)

Advanced Algorithms (CSCI 692)

Embedded Systems (CSCI 560)

Advanced Data Communications (CSCI 545)

Electives: Each of the elective courses is a 3-credit hour course.

Elective Courses				
Area	Course ID	Course Title	Hrs	Prerequisite
Algorithms	CSCI 693	Parallel Algorithms	3	CSCI 692
	CSCI 694	Algorithms for VLSI	3	CSCI 388
Architecture	CSCI 694	Algorithms for VLSI	3	CSCI 388
Artificial Intelligence	CSCI 602	Advanced Artificial Intelligence	3	CSCI 402
Computer Modeling and Simulation	CSCI 682	Computer Modeling and Animation	3	CSCI 480
	CSCI 770	Computer Simulation	3	CSCI 388
Cryptography	CSCI 670	Computer Security	3	CSCI 445
Database Systems	CSCI 556	Advanced Database Applications	3	CSCI 356
	CSCI 695	Data Mining	3	CSCI 692 CSCI 356
Graphics	CSCI 680	Algorithmic Graph Theory	3	MATH 490
	CSCI 682	Computer Modeling and Animation	3	CSCI 480
Language Theory	CSCI 660	Automata and Formal languages	3	CSCI 460
			3	
Networks	CSCI 647	Wireless Network and Mobile Computing	3	CSCI 645
	CSCI 670	Computer Security	3	CSCI 445
Numerical Computation	CSCI/MATH 560	Algebraic & Numerical Computation	3	CSCI 452
Software Engineering	CSCI 685	Software Engineering	3	CSCI 487
	CSCI 687	Advanced Software System Development	3	CSCI 487
	CSCI 689	Software Quality Assurance	3	CSCI 685

Mathematics

Admission Requirements

In addition to the requirements for admission to the Graduate School, applicants who wish to pursue degree programs in the Department of Mathematics must meet the following requirements:

For admission to a program leading to the Master of Science degree in Mathematics, the applicant must have an undergraduate degree in mathematics or at least 20 semester hours of college mathematics at the level of Calculus or above.

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 semester hours of core course works 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 (see list below) and pass a comprehensive examination. The comprehensive examination will be based on the material covered under 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 (see list below) 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.

Computer Science Course Descriptions

Core Courses:

CSCI 545 ADVANCED DATA COMMUNICATIONS - 3 semester hours **F, Sp**
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 its equivalent.

CSCI 488/588 ADVANCED SYSTEMS ARCHITECTURE - 3 semester hours **F, Sp**
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 388 or its equivalent.

CSCI 560 EMBEDDED SYSTEMS - 3 semester hours **Sp**
An introduction to embedded systems with emphasis on applications. Students will program a microcontroller using a complete development system.
Prerequisite: CSCI 388 or its equivalent.

CSCI 570 COMPUTER SIMULATION - 3 semester hours **Alternate Sp**
Advanced applications of discrete and continuous simulation modeling.
Prerequisite: CSCI 387 or its equivalent; STAT 340 or its equivalent.

CSCI 592 ADVANCED ALGORITHMS - 3 semester hours **F, Sp**
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 492 or its equivalent.

Elective Courses:

CSCI 456/556 ADVANCED DATABASE APPLICATIONS - 3 semester hours **F**
Applications of advanced database systems. Students will work on a series of projects using industry standard software.
Prerequisite: CSCI 356 or its equivalent.

CSCI 602 ADVANCED ARTIFICIAL INTELLIGENCE – 3 semester hours **F, Sp**
Topics include Machine Learning, Knowledge Representation and Discovery, Neural and Evolutionary Computation, and Intelligent Agents and Multi-Agent Systems.
Prerequisite: CSCI 402 or its equivalent

CSCI 647 WIRELESS NETWORKS AND MOBILE COMPUTING - 3 semester hours **Alternate F**
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 its equivalent; CSCI 645

CSCI 660 AUTOMATA AND FORMAL LANGUAGE – 3 semester hours **Sp**
The study of three mutually related topics: Languages, machines, and computability. Key topics include regular languages, finite automata, determinism and non-determinism I finite automata, pattern matching, context-free languages, push-down automata, Turing machines, resource-bounded computation.

CSCI 670 COMPUTER SECURITY - 3 semester hours **Alternate Sp**
Key concepts and algorithms involved in cryptography and computer security. Includes intrusion detection, firewalls, and digital signatures.
Prerequisite: CSCI 445 or its equivalent.

CSCI 680 ALGORITHMIC GRAPH THEORY - 3 semester hours**Alternate F**

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 its equivalent; CSCI 480 or its equivalent.

CSCI 682 COMPUTER MODELING AND ANIMATION - 3 semester hours**Alternate F**

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 its equivalent

CSCI 685 SOFTWARE ENGINEERING - 3 semester hours**Alternate Sp**

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 its equivalent.

CSCI 687 ADVANCED SOFTWARE DEVELOPMENT - 3 semester hours**F, Sp**

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 its equivalent.

CSCI 689 SOFTWARE QUALITY ASSURANCE - 3 semester hours**Alternate Sp**

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 semester hours**F**

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 692.

CSCI 695 DATA MINING - 3 semester hours**Sp**

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.

Prerequisite: CSCI 692 and CSCI 356 or its equivalent

CSCI 694 ALGORITHMS FOR VLSI - 3 semester hours**Alternate Sp**

Design and analysis of algorithms for design of VLSI circuits, VLSI test and simulation.

Prerequisite: CSCI 388 or its equivalent.

CSCI 600 THESIS I - 3 semester hours**F, Sp**

Research on a thesis that represents an original contribution with publishable results. *Prerequisite:* approval of graduate committee.

CSCI 601 THESIS II - 3 semester hours**F, Sp**

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.

CSCI 605 MASTER PROJECT - 4 semester hours**F, Sp**

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: Approval of graduate committee.

CSCI 610 GRADUATE SEMINAR I - 1 semester hour **F, Sp**
 Students present their work for their master's project or thesis.
Prerequisite: 12 credits at in computer science at the 500 level (or higher) or permission of Chair of graduate committee.

CSCI 611 GRADUATE SEMINAR II - 1 semester hour **F, Sp**
 Students present their work for their master's project or thesis.
Prerequisite: CSCI 610.

CSCI 639 INDEPENDENT STUDY IN COMPUTER SCIENCE - 3 semester hours

CSCI 640, 641, 642, 643 Special topics in Computer Science - 3 semester hours **Alternate F**
 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 instructor.

Mathematics Course Descriptions

Core courses:

MATH 510 DISCRETE MATHEMATICS - 3 semester hours **F, Sp**
 Counting techniques; Pigeon-hole principle; Binominal coefficients; Principle of inclusion-exclusion; generating functions; Stirling and Catalan numbers; permutations and graphs.
Prerequisites: Admission to the program

MATH 520 ALGEBRA I - 3 semester hours **F, Sp**
 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.
Prerequisites: MATH 425 or equivalent

MATH 530 REAL ANALYSIS I - 3 semester hours **F, Sp**
 Functions of bounded variation; Lebesgue measure; differentiation and integration; L_p spaces; introduction to Banach and Hilbert spaces.
Prerequisite: Math 401 or equivalent

MATH 540 NUMERICAL ANALYSIS - 3 semester hours **F, Sp**
 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.
Prerequisites: MATH 452 or equivalent

Elective Courses:

MATH 501 GEOMETRY - 3 semester hours **F, Sp**
 Points and lines connected with a triangle; circle properties; collinearity and concurrence; Menelaus' Theorem; Ceva's Theorem; Pappus' Theorem; Desargues Theorem; transformations; introduction to inversive and projective geometry.
Prerequisites: Admission to program

MATH 511 CODING THEORY - 3 semester hours **F, Sp**
 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.
Prerequisites: MATH 325 or equivalent

MATH 512 CRYPTOGRAPHY AND COMPUTER SECURITY - 3 semester hours **F, Sp**
 Public key cryptography; classical applications of finite fields and number theory; classical cryptography and cryptanalysis; monoalphabetic 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 519 SPECIAL TOPICS IN MATHEMATICS - 3 semester hours**Prerequisites:** Instructor's permission.**MATH 521 ALGEBRA II - 3 semester hours****Sp**

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 semester hours****F, Sp**

Linear transformations; solving linear equations; LU decomposition; determinants and relation to solving linear equations; eigen values and eigen vectors; 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.

Prerequisites: MATH 325 or equivalent**MATH 529 TOPICS IN ALGEBRA - 3 semester hours**

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 521 or instructor's permission.**MATH 531 REAL ANALYSIS II – 3 semester hours****Sp**

Abstract measures; mappings of measure spaces; integration sets and products spaces; the Fubini, Torelli and Radon-Nikodym theorems; the Riesz-Fischer representation theorem; Haar measures on locally compact groups.

Prerequisite: Math 530**MATH 532 COMPLEX ANALYSIS – 3 semester hours****Sp**

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 semester hours****Sp**

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 539 TOPICS IN ANALYSIS - 3 semester hours**

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 531 or instructor's permission.**MATH 545 GENERAL TOPOLOGY - 3 semester hours****F, Sp**

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 AND APPLICATIONS - 3 semester hours****F, Sp**

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.

Prerequisite: Math 301 or equivalent. Math 325 or equivalent**MATH 548 DIFFERENTIAL EQUATIONS - 3 semester hours****F, Sp**

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 549 TOPICS IN DIFFERENTIAL EQUATIONS - 3 semester hours**

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 548 or instructor's permission.

MATH 552 PARTIAL DIFFERENTIAL EQUATIONS - 3 semester hours**F, Sp**

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 and MATH 301

MATH 554 MATHEMATICAL MODELING IN LIFE SCIENCES - 3 semester hours**Sp**

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 559 TOPICS IN GEOMETRY - 3 semester hours

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 501

MATH 560 ALGEBRAIC AND NUMERICAL COMPUTATIONS - 3 semester hours**F, Sp**

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 300

MATH 562 MATHEMATICAL STATISTICS - 3 semester hours**F, Sp**

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.

Prerequisites: MATH 300 or equivalent

MATH 569 TOPICS IN GRAPH THEORY - 3 semester hours

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 490 or instructor's permission.

MATH 570 NUMBER THEORY - 3 semester hours**F, Sp**

Arithmetic functions; divisibility and prime factorization; residue classes; congruences; the prime number theorem; primes in arithmetic progression; quadratic reciprocity law; the arithmetic of quadratic fields; Diophantine equations; continued fractions, approximations and sieves.

Prerequisites: MATH 425 or equivalent

MATH 578 TOPICS IN COMPUTATIONAL MATHEMATICS - 3 semester hours

Content varies and will be selected by the instructor and the department. The course may be repeated for credit with different topics.

Prerequisites: MATH 560 or instructor's permission.

MATH 588 DIFFERENTIAL GEOMETRY - 3 semester hours**F, Sp**

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 semester hours**F, Sp**

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.

Prerequisites: MATH 490 or equivalent

MATH 592 OPTIMIZATION THEORY - 3 semester hours**F, Sp**

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.

Prerequisites: MATH 392 or equivalent

MATH 599 RESEARCH AND THESIS - 3 semester hours

Students must successfully complete two semesters of this 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.

Math Education Course Descriptions**MAED 571 GEOMETRY FOR TEACHERS - 3 semester hours****Sp, Su**

Standard topics from Euclidean geometry and of non-Euclidean geometries. Course will emphasize informal, inquiry based and proof approaches to geometry and make use of appropriate technology. Course is designed to make connections between advanced geometry topics and the teaching of geometry in elementary, middle and high school.

MAED 575 CALCULUS FOR TEACHERS I - 3 semester hours**F, Su**

Functions and their graphs, limits and rates of change, continuity, difference quotient, rules of differentiation, inverse functions, derivatives of trigonometric, exponential and logarithmic functions, curve fitting and applications of derivatives and an introduction to the techniques and applications of integration. Course is designed to make connections between calculus topics and the teaching of pre-calculus and AP calculus.

MAED 576 CALCULUS FOR TEACHERS II - 3 semester hours**Sp**

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

MAED 577 DISCRETE MATHEMATICS FOR TEACHERS - 3 semester hours**F, Su**

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 and functions, an introduction to 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.

MAED 578 STATISTICS FOR TEACHERS - 3 semester hours**S, Su**

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.

Statistics – Course Descriptions**STAT 510 STATISTICAL PROCEDURES IN EDUCATION AND PSYCHOLOGY - 3 semester hours****F, Sp, Su**

General terminal course for graduate students enrolled in professional educational research, psychology and guidance, covering descriptive and inferential statistics including one-way analysis of variance.

Prerequisites: Enrollment in Graduate School

STAT 511 BIOMETRY - 3 semester hours**F, Sp, Su**

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.

Prerequisites: STAT 480 or equivalent

STAT 520 ADVANCED STATISTICAL METHODS IN EDUCATIONAL RESEARCH - 3 semester hours**F**

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.

Prerequisites: STAT 330 or equivalent

STAT 562 MATHEMATICAL STATISTICS IV - 3 semester hours**Sp**

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 300, STAT 480 or equivalent

- STAT 565 NONPARAMETRIC STATISTICS II - 3 semester hours** **F**
Rank correlations, linear and monotonic regression, several related samples, balanced incomplete block design, randomization, rank transformation and goodness-of-fit tests.
Prerequisites: STAT 481 or equivalent
- STAT 568 DESIGN OF EXPERIMENTS - 3 semester hours** **Sp**
General linear model; fixed, random and mixed effects models; randomized block, incomplete block and Latin square designs; factorial designs; analysis of covariance.
Prerequisites: STAT 480 or equivalent
- STAT 570 STOCHASTIC PROCESSES - 3 semester hours** **Sp**
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 semester hours** **F**
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.
Prerequisites: STAT 480 or equivalent
- STAT 575 REGRESSION ANALYSIS - 3 semester hours** **F**
Linear and multiple regression; analysis of residuals; variable and model selection including stepwise regression; transformations, weighting and diagnostics to correct model inadequacies.
Prerequisites: STAT 480 or equivalent
- STAT 578 MULTIVARIATE ANALYSIS - 3 semester hours** **Sp**
Statistical theory associated with multivariate normal distribution; Wishart and related distributions; partial and multiple correlations; Hotelling's T^2 statistic; multivariate linear models; classification and discriminant analysis; principal components..
Prerequisites: MATH 325, STAT 480 or equivalent
- STAT 580 DESIGN OF SURVEYS IN RESEARCH - 3 semester hours** **Sp**
Methods of constructing and analyzing designs for experimental investigations; simple random, stratified and multistage sampling designs; and questionnaire construction.
Prerequisite: STAT 480 Probability and Statistics
- STAT 581 DESIGNS OF EXPERIMENTS IN RESEARCH - 3 semester hours** **F**
Methods of constructing and analyzing designs for experimental investigations; Latin square, split-plot, simple factorial designs; incomplete block designs.
Prerequisite: STAT 480 Probability and Statistics
- STAT 582 SPECIAL TOPICS IN STATISTICS - 3 semester hours** **Sp**
A study of some selected topics not included in formal classes for example, nonparametric (distribution-free) methods, sequential methods, the study of power and efficiency of statistical methods, computer programming and canned programs applied to growth curve and multivariate analysis or Monte Carlo techniques.
Prerequisite: STAT 480 Probability and Statistics
- STAT 583 SAMPLING THEORY II – 3 semester hours**
Estimation, relative precision, optimum allocation and stratum sizes in stratified random sampling; quota sampling; ratio and regression estimates; systematic and cluster sampling.
Prerequisites: STAT 382 or equivalent
- STAT 595. RESEARCH METHODOLOGY - 3 semester hours** **F**
Nature of and limitations in applied research methodology with emphasis on formulation of statistical models and hypotheses and empirical tests of hypotheses especially relevant to social and behavioral science disciplines.
Prerequisite: STAT 480 Probability and Statistics
- STAT 599 RESEARCH AND THESIS**
General linear model; fixed, random and mixed effects models; randomized block, incomplete block and Latin square designs; factorial designs; analysis of covariance.
Prerequisites: Graduate courses in Statistics and Instructor's permission.

Physics

The Department of Chemistry and Physics offers a program of studies leading to the Master of Science degree in Physics. Current research specialties include computer modeling of antiviral materials, fabrication, characterization of thin film growth; computer simulation of nanocrystalline materials, the nonlinear optical materials; non-intrusive optical measurements; solid-state laser material development, laser spectroscopy; inter alia, theoretical analyses of single molecule micromechanics experiments, computer simulations of stochastic search techniques employed in vivo by proteins seeking out target binding sites on nucleic acid substrates, and theoretical studies and computer modeling of the robustness of biological regulatory networks.

The VSU physics program has close relationships with a number of research laboratories, including the NASA Langley (Hampton, VA) and Goddard (Maryland) facilities. Students may pursue either experimental or theoretical research programs. There are advanced laboratories, computers, and major instrumentation for use by the students and faculty for the pursuit of their research objectives.

Virginia State University is one of the three founding members of the Southeastern Universities Research Association (SURA), which has grown to include 41 universities from across the Southeast. SURA operates the Thomas Jefferson National Accelerator Facility, located in Newport News, Virginia, for the Department of Energy.

Requirements for the Master of Science degree in physics include 30 semester hours of course work (15 of which must be in 500-level physics lecture courses), an original research thesis, plus school-wide requirements.

Course Descriptions

PHYS 510 EXPERIMENTAL PHYSICS I - 2 semester hours **F, Sp, Su**

Methods of experimental physics, training in the use of selected physics equipment. Subject matter areas related to research interests of staff members.

Prerequisites: PHYS 312 Thermal Physics; PHYS 314 Electromagnetism and Relativity

PHYS 511 EXPERIMENTAL PHYSICS II - 2 semester hours **F, Sp, Su**

A continuation of Physics 510-Experimental Physics I.

Prerequisites: PHYS 312 Thermal Physics; PHYS 314 Electromagnetism and Relativity;
PHYS 510 Experimental Physics I

PHYS 512 PHYSICAL ELECTRONICS - 3 semester hours **F, odd years**

Electron emission, excitation of electrons in solids, gas discharge phenomena, and an introduction to plasma physics.

Prerequisite: PHYS 315 Electromagnetism and Relativity

PHYS 513 ADVANCED DYNAMICS - 3 semester hours **Sp, even years**

General principles of analytical mechanics; methods of Lagrange, Hamilton and Jacobi applied to problems in mechanics.

Prerequisite: PHYS 313 Physical Mechanics

PHYS 514 ELECTRODYNAMICS - 3 semester hours **F even years**

Maxwell's equations, vacuum field equations, motion of electrons, Lienard-Wiechert potentials, self-energy and radiation damping, special relativity, co-variant form of field equations and equations of motion of charged particles.

Prerequisite: PHYS 315 Electromagnetism and Relativity

PHYS 515 PLASMA PHYSICS - 3 semester hours **Sp, odd years**

Plasma production and devices, plasma diagnostics, waves, instabilities, electromagnetic interaction with a plasma, radiation from plasmas, the pinch effect.

Prerequisites: PHYS 315 Electromagnetism and Relativity, MATH 350 Differential Equations, or special permission

PHYS 516 QUANTUM MECHANICS - 3 semester hours **Sp, even years**

The Schrodinger wave equation and applications to physical systems, perturbation theory, scattering, matrix mechanics, angular momentum including spin, the Klein-Gordan equation, the Dirac theory, second quantization, and an introduction to quantum field theory.

Prerequisites: PHYS 416 Introduction to Quantum Mechanics, PHYS 513 Advanced Dynamics,
MATH 350 Differential Equations

PHYS 518 SOLID STATE PHYSICS I - 3 semester hours **Sp, even years**

Crystal structure, crystal diffraction and the reciprocal lattice, crystal binding, elastic constants and elastic waves, phonons and lattice vibrations, thermal properties of insulators and free electron Fermi gas.

PHYS 519 SOLID STATE PHYSICS II - 3 semester hours **F, odd years**

Energy bands, semiconductor crystals, superconductivity, dielectric properties, ferroelectric crystals, diamagnetism and paramagnetism, ferromagnetism and anti-ferromagnetism and magnetic resonance.

Prerequisite: PHYS 518 Solid State Physics I

PHYS 520 METHODS OF THEORETICAL PHYSICS - 3 semester hours **F, even years**

Functions of several variables, partial differential equations, introduction to the theory of complex variables, other special functions.

Prerequisite: PHYS 418 Methods of Theoretical Physics

PHYS 524 RESEARCH AND THESIS - 3 semester hours **F, Sp, Su**

Guided original research directed at a physics faculty member's research interests. Required for the MS degree. May be taken twice with permission of instructor and Department Chair.

PHYS 530 GRAVITATION - 3 semester hours **Sp, even years**

Geometrodynamics, accelerated reference frames, differential geometry, the principles of equivalence, curvature of space time, weak gravitational collapse, blackholes, gravitational waves, and experimental tests of general relativity.

Prerequisites: PHYS 311 Optical Physics; PHYS 312 Thermal Physics; PHYS 313 Physical Mechanics; PHYS 315 Electromagnetism and Relativity; PHYS 416 Introduction to Quantum Mechanics

PHYS 550 SUBATOMIC PHYSICS I - 3 semester hours **F, even years**

A study of nuclei and elementary particles, reaction dynamics, particle accelerators, detection devices, particle classification, symmetries and conservation laws, quantum electrodynamics, the weak interaction, quantum chromodynamics, unified theories, the nuclear shell model and collective model, and nuclear reactions.

Prerequisites: PHYS 315 Electromagnetism and Relativity, PHYS 416 Introduction to Quantum Mechanics, PHYS 422 Atomic and Molecular Physics, or the equivalent

PHYS 551 SUBATOMIC PHYSICS II - 3 semester hours **Sp, odd years**

A continuation of Physics 550, Subatomic Physics I.

Prerequisite: PHYS 550 Subatomic Physics I

Plant Science

The Plant Sciences program encompasses all aspects of plant life integrating concepts and information from the molecular to the ecosystem level. The principal objective is to educate students in concepts and research methods in the various fields of crop, soil, and natural resources. This is accomplished through courses and research work that bridge a number of physical and biological sciences. This new degree program addresses the need to prepare students in basic courses such as plant molecular biology as well as applied courses such as in natural resource protection. The program also addresses the need for plant scientist to have strong statistical and computational skills appropriate to the broad ranager of advance plant science discipline. The Master of Science (M.S.) degree is designed to further the professional training of the student through formal courses while at the same time teaching how to conduct research and present pertinent results.

A minimum of 30 semester hours including thesis is required to obtain this M.S. degree. The thesis is designed to familiarize students with applied or knowledge-driven research and provide them with the hands-on opportunity in plant science research techniques and instrumentation. The curriculum includes core and elective courses, and seminar experiences. The core courses are Advanced Plant Sciences, Biometry, Chemical and Physical Principles of Soils, Genetics and Plant Breeding, Master's Thesis and Graduate Seminar. Broad based elective courses are offered including emerging disciplines such as Food Microbiology and Microbial Biochemistry. These newly designed courses prepare students to engage into current priority areas such as human nutrition, health, obesity, food safety, and bio-security. The other courses also provide opportunities for training in emerging technologies such as plant molecular biology, and Geographic Information Systems (GIS).

Admission Requirements

Admission requirements for the M.S. degree in Plant Science are similar to other masters' programs at the University. For admission to the program, the student must present a competitive GRE score and a minimum of 20 semester hours in the sciences. The credits in the sciences may be either graduate or undergraduate courses in mathematics, general chemistry, botany, soils, microbiology, physics, and related disciplines. Students who do not fulfill the science credits requirements may be admitted provisionally with the understanding that all conditions must be removed within one year of enrollment and none of the remedial science courses will count toward degree completion requirements.

Applicants for admissions to the M.S. Program in Plant Science will be given full consideration once a complete application package has been submitted. Each complete package will be forwarded to the M.S. in Plant Science Committee for review and interview of qualified candidates. This committee will make recommendations to the Chairperson of the Department of Agriculture and Human Ecology. The Chairperson of the Department of Agriculture and Human Ecology will then recommend the top candidates who meet all admission requirements to the Dean of the School of Graduate Studies, Research and Outreach. The Dean of the School of Graduate Studies, Research and Outreach will notify the candidates of their admissions status.

Program Requirements

The M.S. Degree in Plant Science will be conferred to candidates upon the completion of all academic requirements in effect at the time of their first registration, provided the students are continuously enrolled and the requirements are met within the specified time frame. All work towards the degree must be completed within six (6) years of the date of initial registration in the graduate program, excluding periods of military service.

1. Credit Requirements – Candidates for the Master of Science Degree must complete a minimum of 31 semester hours, which includes 24 semester hours of course work plus a thesis of six (6) semester hours. At least 80% of the credit hours presented for graduation must be at the 500 level or higher.
2. Grade Requirements – Degree applicants must maintain a grade point average of 3.00 (B) in the courses taken in their approved graduate program.
3. Transfer Credits – In the 31-hour program, nine (9) semester hours earned at another accredited graduate institution may be accepted toward the Master's degree. Such transfer credits must be approved by the major advisor and must be of "B" quality or higher. Transfer of credit in the core courses is prohibited.
4. Continuous Enrollment – Students in the graduate degree programs must meet the following conditions in order to maintain satisfactory progress toward the completion of the degree:
 - Achieve a satisfactory grade of "A" or "B" in all attempted coursework for graduate credit.
 - Must maintain a cumulative grade point average (GPA) of 3.0 at all time. A student who received two (2) "C" grades or one (1) "F" grade in coursework will be withdrawn from the graduate program. However, under special circumstances, students may appeal their withdrawal status by petitioning the Policy and Petitions Committee of the School of Graduate Studies, Research and Outreach.
5. Major Professor and Committee – All students entering the program shall be advised by a major professor and an advisory committee of faculty members. This group shall provide assistance with course selection, advice concerning the M.S. program, and direct research focus. The Committee shall consist of a minimum of three (3) members, all of who must be members of the VSU graduate faculty. Individuals who are not graduate faculty members, for example, from another institution or from industry must apply to the Dean of the School of Graduate Studies, Research and Outreach for temporary membership.

Curriculum

The curriculum requires a minimum of 31 credits, distributed as follows:

Plant Science Core Courses	13 credit hours
Plant Science/Biology Electives	12 credit hours
Masters Research and Thesis	6 credit hours

Core Course Descriptions

PLSC 510 BIOMETRY – 3 semester hours

The application of statistical techniques for biological/plant sciences. Topics would include sampling techniques, experimental designs, statistical techniques to characterize variation and management of data. This course is intended for imparting applied, hands-on training to plant scientists.

Prerequisite: MATH 121

PLSC 535 GRADUATE SEMINARY – 3 semester hours

Presentations and discussions of topics of current interests in plant science; review of literature on selected topics.

Prerequisite: Consent of advisor and instructor

PLSC 541 ADVANCED PLANT SCIENCE – 3 semester hours

Advanced course involving the physiology and determination of plant yield, advances in photosynthesis, respiration and transpiration, plant productivity under stress, biological nitrogen fixation and regulation of plant growth.

Prerequisite: SOCS 242

PLSC 544 GENETICS AND PLANT BREEDING – 3 semester hours

Theoretical and applied aspects of advanced principles and mechanisms related to heredity of quantitative and qualitative traits of plants and their movement. Methods and techniques used to breed crops.

Prerequisites: BIOL 320, PLSC 444, or PLSC 448

PLSC 545 CHEMICAL AND PHYSICAL PRINCIPLES OF SOILS – 3 semester hours

Mineralogical composition of soils, colloid and cation exchange phenomena, soil structure, plasticity, and soil water. Concentration diagrams related to solubility and dissolution of minerals and fertilizers in soils.

Prerequisite: SOCS 242

PLSC 549 MASTERS' THESIS – 6 semester hours

Research conducted towards completing the thesis requirements for M.S. in Plant Sciences.

Elective Course Descriptions**PLSC 508 GEOGRAPHIC INFORMATION SYSTEMS (GIS) – 3 semester hours**

An introduction to geographic data structures, computerized spatial display and analysis, and applications of GIS, with emphasis on natural resources management.

Prerequisite: Consent of instructor

PLSC 514 PLANT MOLECULAR BIOLOGY – 3 semester hours

A focus on principles and techniques related to manipulations of the hereditary material in plants related to function and improvement.

Prerequisite: BIOL 320

PLSC 520 WETLAND ECOSYSTEM AND MANAGEMENT – 3 semester hours

Origin and processes in the formation of wetlands. Functions and values of wetlands, wetland delineation, wetland classification, regulations that affect wetlands. The importance of wetlands to surface and groundwater quality. Techniques to manipulate or protect wetlands to meet the needs of human, aquatic and terrestrial wildlife.

Prerequisite: SOCS 242

PLSC 526 SAS FOR PLANT SCIENTIST – 3 semester hours

Training of students in the management, analysis, and interpretation of quantitative and qualitative data using SAS software.

Prerequisite: PLSC 500 Biometry

PLSC 527 CURRENT TOPICS IN PLANT SCIENCES – 3 semester hours

Independent current and advanced work on topics related to plant and soil science. Such topics include the use of plants in medicine and health, environmental issues, use of genetically modified organisms, international trade, production under adverse environments, etc.

Prerequisite: Consent of advisor and instructor

PLSC 534 PLANT PROTECTION – 3 semester hours

Diseases and insect-pest in plant production, integrated pest management, pesticide classification, toxicology, formulation, application techniques, safety, legal considerations, and environmental impact. Topics on the discovery and development of new pesticides. The course will be offered by an interdisciplinary team to cover pesticides used against all pests.

Prerequisite: CHEM 305 and 307

PLSC 538 CROP SCIENCE TECHNOLOGY – 3 semester hours

Production techniques for different soils, climate, moisture, and temperature requirements for successful crop production. Directions to crop management research and science; low input, sustainable agriculture.

Prerequisite: Consent of instructor

BIOL 531 FOOD MICROBIOLOGY – 4 semester hours

Role of microorganisms in food borne illness and food quality, spoilage, and preservation. Control and destruction of microorganisms in foods and their production environments. Hands-on laboratory experience with microorganisms found in foods. Focus on spoilage organisms, food borne pathogens, and microbial fermentation.

Prerequisite: Consent of instructor

BIOL 542 MICROBIAL BIOCHEMISTRY – 3 semester hours

The primary purpose of the course is to provide graduate and advanced students with a basic understanding of biochemistry, molecular and cellular biology. Other topics in the course include understanding the principles involved in membrane transport, permeation cell communication and signaling.

Prerequisite: Consent of instructor

Course Sequence

Year 1		
Fall Semester		Credits
PLSC 510	Biometry	3
PLSC 541	Advanced Plant Science	3
PLSC	Elective	3
Spring Semester		Credits
PLSC 544	Genetics and Plant Breeding	3
PLSC 545	Chemical and Physical Properties of Soils	3
PLSC	Elective	3
Year 2		
Fall Semester		Credits
PLSC 535	Graduate Seminar	1
PLSC	Elective	3
PLSC	Elective	3
Spring Semester		Credits
PLSC 549	Masters Thesis	6

Psychology

The Department of Psychology offers the Master of Science degree with concentrations in the following areas: (1) general Psychology, (2) and clinical Psychology. Students interested in becoming community college teachers 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 concentration. Outstanding performance in either area may lead to college teaching. Advisors are appointed to aid students in selecting and developing a program in terms of their interests.

Admission Requirements

***Students are admitted for the clinical Psychology track 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 Graduate School, the Department of Psychology requires a) a minimum of 15 semester hours in Psychology, including at least one course in each of the following: 1) social, personality, cognitive, or developmental Psychology, 2) research methods, quantitative methods, or experimental Psychology, and 3) physiological Psychology; b) a 3.00 grade point average (on a scale of 4.00 points) in Psychology or major area; and c) an overall undergraduate grade point average of 2.8.

Conditional Admission. Applicants can be granted conditional admission under the general provisions of the Graduate School 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, or a 3.00 grade point average during last two years of undergraduate course work, a minimum Graduate Record Examination (GRE) score of 900 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 including experimental or physiological Psychology; 2) earn a B- average in the first 15 graduate-level hours of their planned program of study; and 3) successful completion of PSYC 528.

Continuing Status. Continuing status is dependent upon maintaining a cumulative GPA of at least 3.0, with no more than two grades of C, 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.

Course Descriptions

PSYC 508 PSYCHOTHERAPY I: THEORIES OF PSYCHOLOGY - 3 semester hours

An overview of the major theories in psychology. Emphasis on the application of theories to the conceptualization of PSYCOlogical disorders and practice of therapy.

Prerequisite: Admission into the graduate Psychology program or permission of instruction

PSYC 510 PRO-SEMINAR - 3 semester hours

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 semester hours

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. Required of all graduate students in psychology.

PSYC 512 HUMAN GROWTH AND DEVELOPMENT - 3 semester hours

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 semester hours

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 semester hours

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 LEARNING THEORY - 3 semester hours

A critical analysis of the major theories of learning, including their similarities and differences.

PSYC 517 ADVANCED PSYCHOPATHOLOGY - 3 semester hours

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 semester hours

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 IN PSYCHOLOGY - 3 semester hours

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.

PSYC 520 PSYCHOLOGICAL ASSESSMENT I: INTELLIGENCE AND ACHIEVEMENT TESTING - 3 semester hours

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.

Prerequisites: Admission into the graduate clinical or educational Psychology program or permission of instructor

PSYC 521 PSYCHOLOGICAL ASSESSMENT II: PERSONALITY AND PROJECTIVE TESTING - 3 semester hours

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

PSYCHOLOGY - PRACTICUMS

Students are assigned to various service delivery agencies. Under supervision, they gain the practical experience essential to the development of skills in the use of psychological techniques. Ninety (90) clock hours of field work are required for three (3) semester hours credit.

Prerequisite for all practicum courses: Admission into the Clinical Psychology graduate program

PSYC 522 PRACTICUM I - 3 semester hours

Prerequisite: PSYC 508, Psychotherapy; PSYC 517, Advanced Psychopathology; PSYC 520, Psychological Assessment I

PSYC 523 PRACTICUM II - 3 semester hours

Prerequisite: PSYC 519, Psychotherapy II; PSYC 522, Practicum I

PSYC 524 PRACTICUM III - 3 semester hours

Prerequisite: PSYC 523, Practicum II

PSYC 525 INTRODUCTION TO COMMUNITY-CLINICAL PSYCHOLOGY - 3 semester hours

History and social implications of the de-hospitalization movement. Nature, organization, and delivery of community-based mental health services.

PSYC 526 MOTIVATION - 3 semester hours

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 semester hours

A critical analysis of the major theories of personality development.

PSYC 528 EXPERIMENTAL DESIGN AND DATA ANALYSIS IN PSYCHOLOGICAL RESEARCH - 3 semester hours

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 semester hours

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.

Prerequisites: Admission into the graduate psychology program or permission of instructor

PSYC 530 ETHICS AND PROFESSIONAL STANDARDS OF PRACTICE - 3 semester hours

Seminar reviews ethical principles and practice issues relevant to psychology.

Prerequisite: Admission into the graduate psychology program or permission of instruction

PSYC 531 INTRODUCTION TO GROUP THERAPY - 3 semester hours

A review of basic group psychotherapy.

Prerequisite: Admission into the graduate psychology program or permission of instruction

PSYC 532 DIAGNOSIS AND TREATMENT OF SUBSTANCE USE DISORDERS - 3 semester hours

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 instruction

PSYC 533 INTRODUCTION TO NEUROSCIENCE - 3 semester hours

An introduction to the research methodology of neuroscience, and an investigation of the neural basis of sensation, cognition, learning, and psychological disorders.

Prerequisites: The equivalent of one undergraduate course in physiological or biological psychology

PSYC 580 STATISTICAL METHODS IN HEALTH PSYCHOLOGY I - 3 semester hours

Quantitative methods of 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.

Prerequisite: The equivalent of one course in undergraduate statistics

PSYC 581 STATISTICAL METHODS IN HEALTH PSYCHOLOGY II - 3 semester hours

An introduction to multivariate tests, such as MANOVA, structural equation modeling, and multiple regression.

PSYC 582 STATISTICAL METHODS IN HEALTH PSYCHOLOGY II - 3 semester hours

An introduction to multivariate tests, such as MANOVA, structural equation modeling, and multiple regression.

Prerequisite: PSYC 581, Statistical Methods I

PSYC 599 RESEARCH AND THESIS - 3 to 6 semester hours**PSYC 603 HEALTH PSYCHOLOGY - 3 semester hours**

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 understanding the relationship of people's thoughts, emotions, motivations, and actions to their health.

PSYC 609 HISTORY AND SYSTEMS - 3 semester hours

Covers the history and various systematic theories of psychology. Explores the conceptual foundations of psychology from its inception to the present day.

PSYC 612 RESEARCH METHODS IN CLINICAL AND HEALTH PSYCHOLOGY - 3 semester hours

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: PSYC 580 Statistical Methods I; PSYC 581 Statistical Methods II

PSYC 620 CLINICAL PRACTICUM I - 1 semester hour

Practical application of skills developed in Psychotherapy II. Students will complete intake interviews, mental status exams, and diagnostic interviews with clients/patients.

Corequisite: PSYC 519 Psychotherapy II

PSYC 621 CLINICAL PRACTICUM II - 2 semester hours

Students will develop skills in individual psychotherapy with children and/or adults clients/patients.

PSYC 701 HEALTH PSYCHOLOGY: PSYCHOTHERAPY METHODS AND INTERVENTIONS - 3 semester hours

This course examines the history, as well as theories, models, and interventions designed to support health behavioral change and the management of disease.

Prerequisites: PSYC 508 Psychotherapy I; PSYC 519 Psychotherapy II

PSYC 702 NEUROPSYCHOLOGICAL ASSESSMENT - 3 semester hours

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 an practical knowledge, report writing and neuropsychological clinical practice.

PSYC 703 ASSESSMENT AND EVALUATION OF COMMUNITY HEALTH PROGRAMS - 3 semester hours

The student will focus on community needs assessment and evaluating changes in community services and programs and community status. Establish a scope of evaluation efforts and methods for designing and conducting program evaluation and research in community settings. Analyze 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 semester hours

The course covers the general principles underlying the use in of drugs to treat the major classes of mental illness. This will include antipsychotics (conventional and atypical), antidepressants, anxiolytics, moods stabilizers, and other psychotropic medications. Mechanisms of action, drug interactions, and pertinent aspects of differential diagnosis will be discussed. Psychiatric aspects of general medical conditions will be presented.

Prerequisite: PSYC 533 Neuroscience

PSYC 705 HEALTH EDUCATION AND BEHAVIORAL SCIENCE - 3 semester hours

An introduction to the underlying principles and theories of health education and behavior change for public health.

Prerequisite: Admission into the doctoral psychology program or permission of instructor.

PSYC 706 PROFESSIONAL ISSUES IN BEHAVIORAL MEDICINE CONSULTATION - 3 semester hours

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 711 RESEARCH IN HEALTH PSYCHOLOGY (SEMINAR) - 3 semester hours

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.

Prerequisite: PSYC 612 Research Methods

PSYC 713 HEALTH SERVICES ADMINISTRATION - 3 semester hours

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 coalition and teams.

PSYC 714 EPIDEMIOLOGY OF HEALTH BEHAVIORS/COMMUNITY EPIDEMIOLOGY - 3 semester hours

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 biological basis of health.

Prerequisite: PSYC 603 Health Psychology

PSYC 715 SOCIAL AND CULTURAL ASPECTS OF HEALTH AND ILLNESS - 3 semester hours

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 semester hours

Supervised experience with assessment, consultation, and intervention in a health care setting.

PSYC 721 ADVANCED CLINICAL PRACTICUM - 3 semester hours

Students choose specialized training experiences from a variety of community settings. This practicum can be taken more than once.

PSYC 725 COMMUNITY HEALTH PSYCHOLOGY PRACTICUM - 2 semester hours

An opportunity to apply knowledge and skills gained in academic courses in a working environment or community setting under the supervision of a preceptor. This must be a supervised experience with assessment, consultation, and intervention in a public health organization and or health care setting. To acquaint the student with population based programs for health promotion and disease prevention. Requirement: written and oral report to preceptor and course director. Setting: research, medical and social/environmental.

Sport Management

Admission. Participants applying to the Sports Management degree program will be selected based upon their leadership potential, preparation, employment history, and knowledge of current professional practices.

An applicant for graduate 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 student must submit an application to the Graduate School and receive a letter of admission before registering for courses.

A senior at Virginia State University who has a superior scholastic record and is within six hours of qualifying for the bachelor's degree may be admitted to Graduate Studies; but work applied toward the bachelor's degree may not be used as credit for the master's degree. Enrollment in graduate courses must be approved by the departmental chair and the Dean of the School of Graduate Studies, Research and Outreach.

Application Procedures for Sport Management (Health and Physical Education)

1. Submit a completed application form with the fee of \$25 to the Graduate School Office.
2. Students are admitted on a rolling basis. Applications are processed as they arrive through the published deadline.
3. Have two official transcripts from each collegiate institution attended sent to the School of Graduate Studies, Research and Outreach. To be considered official, a transcript must be received directly from the institution concern. Graduates of Virginia State University must comply with this requirement.
4. An applicant must have taken the GRE or MAT by the time s/he applies. 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 course work with a grade point average of "C" or better.
5. Letters of reference: Number Required:
Three (3) letters of reference are required.

Letters of recommendation should be requested from individuals who are capable and prepared to make judgments on the applicant's ability to complete graduate studies. Undergraduate faculty and advisors are the best sources. Character references are acceptable, but at least one letter should be from an individual in higher education. If the undergraduate work was completed a number of years ago, this may be a difficult request; therefore, one should use discretion when selecting the three best references.

6. No bachelor's degree in the discipline or a related discipline is required for admission?
7. Statement of Goals: The Goal Statement (350-500 words) should include three components: academic/professional goals, personal strengths that will contribute to success in the graduate program, and personal weaknesses that may inhibit success in the program.
8. Resume: A resume is required.
9. Transfer Credit: Graduate credits from an accredited institution may be transferred into the program. The credits must be equivalent to coursework offered at Virginia State University and the grade must be a "B" or better in order to transfer. The maximum number of credits a student may transfer is 9.

The processing procedures will be as follows:

1. Applicants for admission to the graduate program will be considered when all required materials have been submitted by the applicant. Applications should be submitted on or before February 1 of each year;
2. The Committee for Sport Management will review all applications and interview top candidates for admission;
3. Applicant acceptance into the program will be recommended by the Coordinator of Sport Management to the Chair of Health, Sport Management, and Recreation and the Dean of the School of Liberal Arts and Education (SLAE). The Dean of the SLAE will forward the recommendations for the top candidates who satisfy all the requirements to the Dean of Graduate Studies, Research and Outreach;
4. The Dean of the Graduate Studies, Research, and Outreach will notify the candidates of their admission or denial to the graduate program.

Time-to-Degree Completion

All requirements for the Graduate Degree Program in Physical Education must be completed within six years from the date of initial registration in the graduate program, excluding periods for military service. Students who encounter unique problems, which prevent compliance with this regulation, may appeal through the graduate program advisor to the Chair of the Policies and Petitions committee in care of the School of Graduate Studies, Research, and Outreach.

Under compelling circumstances, 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.

All transfer credit for the degree must have occurred within the designated period (six years) prior to the date of graduation. Transfer courses are not eligible for an extension of time. Test scores submitted in support of applications for admission must also be within the six-year period.

Withdrawal from the Graduate Program

Students who withdraw officially from the graduate program and the University will receive grades of “W” in the courses in which they are registered. Graduate students withdrawing from the program will not normally be permitted to enroll in future graduate courses. Students who encounter unique problems, which prevent compliance with this regulation, may appeal through the graduate program advisor to the Chair of the Policies and Petitions Committee, in care of the School of Graduate Studies, Research, and Outreach.

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 and receive grades of “S” where grades of “S”, “U”, or “P”, are awarded.

Grades of “C” may constitute no more than 20% of the credits offered for graduation, or a maximum of two “Cs” in two four-hour courses on the graduate level, whichever is greater. Semester hours with “C” grades in excess of this percentage or the allotted eight hours will not count toward the degree but will be calculated into the total cumulative average.

Although Virginia State University encourages a maximum of student responsibility, with a minimum of administrative regulation, it expects each student to maintain appropriate standards in s/he 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.

Culminating Exam

Comprehensive Exam Description – The 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 4 sections:

Section 1: ADMINISTRATION: Management theory, personnel management, risk management and liability, public relations, marketing, finance/fund raising and budgeting, 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 and problem areas 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.

The Graduate Faculty members in the Sport Management program write the questions, evaluate candidates answers. Each examination is evaluated by three faculty members. Comprehensive Exam Pass – A student will be given five hours to complete five sections of questions. There will be at least one required question in each section plus selected optional questions from each category. The examination will be graded by three Graduate Faculty members. Anonymity will be preserved. Graders will score each question of the basis of 1 to 10, with a score of 8 or above considered passing. An average score for the total exam is recorded by each grader. Finally, an average of the three scores is determined with an average score of 8 or above needed to pass. 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 three times a year: November, April, and June. Students must register for the examination with the graduate coordinator at the beginning of the semester. The examination runs from 9 a.m. to 2 p.m. and is proctored by a graduate faculty member.

Financing Opportunities

Virginia State University awards graduate assistantships annually to students who have demonstrated exceptional promise and achievement. In order to be eligible for the Graduate Sport Management Graduate Assistantship students must have an overall undergraduate GPA of 3.0. These assistantships provide a stipend of \$4500.00 to in-state students, and \$10,000 to out-of-state students per academic year. Recipients are required to work 15 hours per week under the supervision of a qualified full-time graduate faculty members in the Department of HPER at Virginia State University. A committee of graduate faculty members in the Department of HPER along with the Sport Management Program Coordinator will select the award recipients. Students must maintain a G.P.A. of 3.00 to renew their assistantships from semester to semester.

Sport Management Courses

The number of didactic credits required beyond the Baccalaureate: 30. Directed Research and Special Topics may be taken for a maximum of 6 semester hours.

Internship: All students must complete a minimum of 6 semester hours of internship. An internship manual will provide details of this class.

EDUC 513	Program and Curriculum Development in P.E.	3
PESM 502	Planning, Program Development, and Evaluation	3
STAT 510	Statistical Procedures Education and Psychology	3
PESM 505	Facility and Event Management	3
PESM 510	Readings in Sport Management	3
PESM 530	Sport and Marketing	3
PESM 531	Sport Seminar	3
PESM 532/PHED 406	Legal Issues in Sport	3
PESM 533	Sport Nutrition	3
PESM 534/PHED 407	Sport Psychology	3
PESM 538	Organization and Management of Athletics	3
PESM 566	Special Topics in Sport Management	3
PESM 570	Directed Research in Sport	3
PESM 571	Sport Management Internship	6
PESM 599	Oral/Written Comprehensive Examination	0

Health and Physical Education Courses

PESM 562	Program and Curriculum Development in P.E.	3
PESM 563	Health-Related Fitness Education and Assessment	3
PESM 564	Secondary Pedagogy in Sport Management	3
PESM 568	Current Issues in Physical Education	3
PESM 569	Principles of Sport Officiating	3
PESM 572	Field Experience in Physical Education	6

Course Descriptions

EDUC 513 - EDUCATIONAL RESEARCH - 3 semester hours

Seeks to provide students with a basic knowledge of the field of educational research through study and practical exploration of the techniques of research. A critical analysis of the different types of research and the various methods of acceptable styles for reporting data.

PESM 502 - PLANNING, PROGRAM DEVELOPMENT, AND EVALUATION - 3 semester hours

Students will be required to conduct an effective needs assessment and apply the data to develop and implement appropriate programs to meet the needs of the public. Students should also be capable of conducting effective evaluation using statistical applications.

PESM 510 - READINGS IN PHYSICAL EDUCATION - 3 semester hours

Identification of critical issues arising from current problems in physical education or sport management; exploration of points of view and possible solutions.

STAT 510 - STATISTICAL PROCEDURES IN EDUCATION AND PSYCHOLOGY - 3 semester hours

General terminal course for graduate student enrolled in professional educational research, psychology, and guidance covering elementary and advanced statistical methods.

Sport Management Courses

PESM 505 FACILITY AND EVENT MANAGEMENT - 3 semester hours

Evaluation of problems relating to programming of equipment and facilities; visits to and evaluation of surrounding facilities.

PESM 530 SPORT AND MARKETING - 3 semester hours

Evaluation of sport and 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 semester hours

Research and discussion of critical questions in physical education and sport management; topics to be studied will vary according to the concerns of seminar students.

PESM 532/PHED 406 LEGAL ISSUES IN SPORT - 3 semester hours

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements in regard to legal issues for a successful career as a Sport administrator. Ethics from a legal standpoint will be extensively researched and discussed. Graduate students will be required to research specific legal issue cases and apply them to practical situations.

PESM 538/PHED 401 ORGANIZATION AND MANAGEMENT OF ATHLETICS - 3 semester hours

The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements for a successful career as a sport administrator. Ethical issues as they pertain to the management and organization of athletics will be discussed extensively. Graduate students will be required to research specific athletic management objectives and apply them to practical situations.

Physical Education Courses**PESM 562 PROGRAM AND CURRICULUM DEVELOPMENT IN PHYSICAL EDUCATION - 3 semester hours**

This course is designed to examine the issues related to curriculum theory and design; developing curricula in relation to national, state and local standards; and program development and management. Emphasis is placed on the current standards in health and physical education, and the relationship of program development and teaching effectiveness.

PESM 563 HEALTH-RELATED FITNESS EDUCATION ASSESSMENT - 3 semester hours

Focuses on health education curriculum design and instructional techniques that can be utilized to promote health literacy in school settings. Development of a comprehensive school health curriculum using the National Health Education Standards and the Assessment Framework is emphasized including recommended scope and sequence, content, and skills. There will also be opportunities to observe practice and reflect on specific teaching and assessment strategies.

PESM 568 CURRENT ISSUES IN PHYSICAL EDUCATION - 3 semester hours

Current issues in contemporary physical education are examined, with an emphasis on formulating policies and procedures to alleviate problem areas. Particular attention is given to professional issues.

PESM 569 PRINCIPLES OF SPORT OFFICIATING - 3 semester hours

This course is designed to provide practical knowledge to develop, organize, and administer officiating rules. Emphasis will be placed on current rules, regulations, and governing bodies.

Elective Courses**PESM 533 SPORT NUTRITION - 3 semester hours**

Topics include current nutrition issues in Physical Education and Sport Management. Special emphasis will be placed on nutrient needs of athletes.

PESM 534/PHED 407 SPORT PSYCHOLOGY - 3 semester hours

Topics include personality, aggression, attitudes, competition stress, social facilitation, and small group research as related to athletes and individuals involved in sport. Graduate student will be required to research specific sport psychology objectives and apply them to practical situations.

PESM 564 SECONDARY PEDAGOGY IN PHYSICAL EDUCATION - 3 semester hours

This course is designed to examine the issues related to teaching physical education, and developing secondary physical education curricula in relation to national, state and local standards. Emphasis is placed on current trends and teaching methods in secondary physical education, and on the relationship of reflective teaching and teaching effectiveness at the 6-12 grade levels.

PESM 566 SPECIAL TOPICS - 3 semester hours

This course is an intensive exploration of selected topics in Physical Education. Consideration of the sources, characteristics, and significance of the subject treated. May be repeated for credit more than once with a different topic.

PESM 570 DIRECTED RESEARCH IN SPORT - 3 semester hours

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.

Internship and Field Experience

PESM 571 SPORT MANAGEMENT INTERNSHP - 6 semester hours

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 hour credit is required (90 total contact hours).

Prerequisite: Completion of all requirements of the program; G.P.A. of 3.0, and consent of instructor.

PESM 572 FIELD EXPERIENCE IN TEACHING PHYSICAL EDUCATION - 6 semester hours

Each field experience provides students with the opportunity to put theory and technique into practice at the level of their teaching specialization. The students will also attend a seminar led by the university supervisor. Fifteen contact hours per semester hour credit is required (90 total contact hours).

Prerequisite: Satisfactory completion of all other requirements for degree completion, and the permission of the program coordinator (6 hours).

PESM 599 ORAL AND WRITTEN COMPREHENSIVE EXAMINATION - 0 semester hours

An oral and written examination to assess the candidate's overall knowledge of course work pursued in the graduate program, and his/her ability to apply this knowledge to designated sets of circumstances.

Prerequisite: Satisfactory completion of all other requirements for degree completion, and the permission of the program coordinator.

Note: The Nutrition/Dietetics Program is **not** a Graduate Program. It should be **deleted** from the graduate catalog.

**Post-Master's Certificate Programs
Certificate of Advanced Graduate Study (CAGS)**

The Certificate of Advanced Graduate Study (CAGS) in Career and Technical Studies is a 30-semester-hour program of study incorporating courses at the 600-level or above. A student must have completed a master's degree before being admitted to the program. The CAGS program is open to students whose bachelor's or master's degree is in one or more of the following fields: agriculture, business education, marketing education, health occupations, family and consumer sciences, technology education, industrial education, or related areas.

The CAGS program is designed specifically for persons who hold, or are preparing for positions as state and local directors, supervisors, assistant supervisors, and department heads of career/technical and adult education; for principals and administrators in public and private schools, or other institutions where career preparation is a primary objective; for persons engaged in manpower development; and for other Career and Technical Studies practitioners interested in organizing and administering Career and Technical Studies programs. Courses may also be selected from other occupational program areas to satisfy the requirements.

Career and Technical Studies

CTST 601	Foundations of Career and Technical Studies	3
CTST 605	Strategies for Teaching Career and Technical Studies	3
CTST 607	Legal Bases for Career and Technical Studies	3
CTST 609	Career and Technical Studies for Administrators	3
CTST 611	Program Evaluation and Accountability in Career and Technical Studies	3
CTST 621	Policy and Policy-Making in Career and Technical Studies	3
CTST 639	Internship	3
CTST 641	Externship	3
CTST 643	Seminar in Career and Technical Studies	3
CTST 649	Graduate Research Seminar in Career and Technical Studies	3
CTST 657	Oral and/or Written Comprehensive	<u>0</u>
		30

Course Descriptions**CTST 601 FOUNDATIONS OF CAREER AND TECHNICAL STUDIES - 3 semester hours**

A study of selected topics and their relation to Career and Technical Studies; organization, administration and evaluation; policy and policy development; school, business, industrial and community relations; and career education. Examines past, present and future aspects and developments of Career and Technical Studies; and outlines changes and future roles of Career and Technical Studies.

CTST 605 STRATEGIES FOR TEACHING CAREER AND TECHNICAL STUDIES - 3 semester hours

A course designed to help prepare vocational administrators and supervisors to assist teaching personnel in planning instructional activities for students. Includes lectures from specialists and visits to model programs.

CTST 607 LEGAL BASES FOR CAREER AND TECHNICAL STUDIES - 3 semester hours

Federal, state, and local legislation and executive orders affecting Career and Technical Studies. Interpretation of legislation and implications for program design, administrative practices, and agency function and design. Revision of current legislation to enhance career and technical programs.

CTST 609 CAREER AND TECHNICAL STUDIES FOR ADMINISTRATORS - 3 semester hours

Designed for school administrators and supervisors desiring an understanding of career and technical studies. Emphasis on regulations for the administration of CTST programs under the provisions of federal, state, and local legislations.

CTST 611 PROGRAM EVALUATION AND ACCOUNTABILITY IN CAREER AND TECHNICAL STUDIES - 3 semester hours

A study of concepts, principles, and methods of evaluation in Career and Technical Studies. Emphasis on criteria, appropriate instruments and personnel for evaluation of educational practices, problems and solutions, and program changes resulting from program evaluation.

CTST 621 POLICY AND POLICY-MAKING IN CAREER AND TECHNICAL STUDIES - 3 semester hours

An in-depth study of policy and policy making in Career and Technical Studies at the local, state and national levels. Investigation of basic purposes of policy, appropriate sources for policy-making, and current policy developments in Career and Technical Studies.

CTST 639 INTERNSHIP - 3 semester hours

A planned field experience in an administrative or supervisory position in Career and Technical Studies. Major emphasis on the needs of the student. Supervised jointly by a certified vocational administrator or supervisor and a member of the University graduate faculty.

CTST 641 EXTERNSHIP - 3 semester hours

A planned advanced clinical practice for the experience educator enrolled part-time in graduate study while holding a leadership position in Career and Technical Studies. Educational problems and practices are systematically analyzed and evaluated. Emphasis on investigation, discussion, and reports.

CTST 643 SEMINAR IN CAREER AND TECHNICAL STUDIES - 3 semester hours

Lectures and discussions on current problems in Career and Technical Studies as determined by interest of students and significant current events. Lectures by authoritative persons, group discussions, projects and presentations.

CTST 649 GRADUATE RESEARCH SEMINAR IN CAREER AND TECHNICAL STUDIES - 3 semester hours

A survey of research designs, research procedures, proposal developments, preparation of research reports, and dissemination of findings.

CTST 657 ORAL AND/OR WRITTEN COMPREHENSIVE EXAMINATION - 0 semester hours

**Certificate of Advanced Graduate Studies
Certificate of Graduate Studies in Project Management**

Project supervisors and/or 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 need.

Admission

In addition to the general requirements for admission to the graduate division of the School of Graduate Studies, Research, and Outreach (except the GRE requirement), a minimum of 21 semester hours of undergraduate preparation in an occupational program or a related discipline is required.

Completion Requirements

A total of eighteen (18) semester hours, including the required courses, must be completed with a minimum grade point average of B (3.00).

Required Courses	Sem Hrs.
CTST 509 Project Management Systems.....	3
CTST 519 Project Planning and Scheduling.....	3
CTST 527 Project Leadership.....	3
CTST 532 Project Cost and Risk Management.....	3
Elective Courses	
CTST 515/ECON 530 Quantitative Methods	3
CTST 523 Strategies and Perspectives in Project Management.....	3
CTST 525 The Legal Environment in Project Management.....	3
CTST 527 Project Leadership.....	<u>3</u>
	24

Certificate Program in Nutrition and Dietetics

The justification for creating the Certificate Program in Nutrition and Dietetics is to allow students to enroll in a university program while they are fulfilling the ADA DPD requirements. As students are completing the 39-72 semester hours required by the ADA, they will be qualified to apply for financial aid and student loans. Without offering a Certificate Program in Nutrition and Dietetics, students are required to pay graduation tuition, but since they cannot declare a major, they are not qualified to apply for financial aid or student loans. Since this is the only DPD accredited by the American Dietetic Association in the Richmond/Petersburg Virginia area, it is essential for this program to be recognized as an official VSU program. Completion of a DPD program is the only way students who have already earned a Bachelor's Degree can begin the process of obtaining the Registered Dietitian (RD) credentials. Satisfying the ADA DPD coursework permits students to then enroll in an ADA accredited Dietetic Internship and upon its completion, they are authorized to sit for the Registered Dietitian (RD) examination. Since this is an essential first step in the process of obtaining the credentials of RD, it is important that VSU facilitate this process for students by creating a Certificate Program in Nutrition and Dietetics.

Prerequisite: Baccalaureate Degrees

Course Requirements: The following courses are needed to complete the minimum didactic (educational) requirements of the American Dietetic Association (ADA) for entry level dietitians, based on Virginia State University's, ADA accredited curriculum. Completion of the Certificate Program will fulfill the ADA Didactic Program in Dietetics (DPD) course requirements.

			Sem Hrs.
Food Service	DIET 221	Principles of Analysis of Foods	3
Food Management	DIET 322	Meal Management/Lab	3
	DIET 435	Org & Mgmt of Food Service	3
Nutrition Science	DIET 310	Human Nutrition	3
	DIET 385	Nutritional Biochemistry	3
	DIET 424	Advanced Nutrition	3
Applied Nutrition	DIET 311	Nutrition in the Life Cycle	3
	DIET 410	Nutritional Counseling	2

Graduate Programs and Course Descriptions

	DIET 422	Community Nutrition	3
	DIET 431	Medical Nutrition Therapy I	3
	DIET 437	Medical Nutrition Therapy II	3
	DIET 489	Practicum in Dietetics	3
Professional Development	DIET 275	Seminar in Dietetic Practice	1
	FACS 440	Contemporary Apprch Curr & Tech	<u>3</u>
			39

The following support courses may be taken at any accredited university with prior approval by the Program Director.

Human Physiology	3
Microbiology/Lab	3
General Chemistry I and II/Labs	8
Organic Chemistry I/Lab	4
Advanced Communications	3
Business Principles/Management	3
Introduction to Psychology	3
Introduction to Sociology	3
Economics	3
Statistics	<u>3</u>
	36

GRADUATE FACULTY

- ABRAHAM, Arthur Professor, History
B.A., (Hons.), University of Durham U.K.; M.A., University of Sierra Leone; Ph.D., University of Birmingham, U.K.
- AGRAWAL, Krishan Murari Professor, Mathematics
B.S., M.S.A., College of Mathura; M.Se., Agra University; M.Se., Ph.D., University of Windsor.
- ALKEBULAN, Paul Associate Professor, History
B.A., University of California, Berkley, M.A., California State University, Hayward; Ph.D. University of California, Berkley.
- BAKHSHI, Vidya S. Professor, Mathematics
B.A., (Hons), M.A., Delhi University; Ph.D., Oregon State University.
- BAWUAH, Kwadwo Professor, Economics
B.A., Bethany College; MBA, Eastern Illinois University; Ph.D., Virginia Polytechnic Institute and State University.
- BEAVERS, Michelle M. Assistant Professor, Educational Administration and Supervision
B.S., M.Ed., Ph.D., Virginia Commonwealth University.
- BERNARD, Kenneth J. Associate Professor, Mathematics and Computer Science
B.S. Niagara University, M.A., Ed.D., University of Rochester.
- BEY, Leon W. Professor, Health, Physical Education and Recreation
B.S., Virginia State University; M.S., Ph.D., University of Nebraska-Lincoln.
- BLOUET, Olwyn Professor, History
B.A., University of Sheffield; M.A., Ph.D., University of Nebraska-Lincoln.
- BLUE, Bennis M. Assistant Professor, English.
B.S., Virginia State University; M.A., North Carolina Central University; Ph.D., The Ohio State University.
- BOYD-STARKE, Kimberly Assistant Professor, Educational Administration and Supervision.
B.A., Spelman; M.A. GA School of Professional PSYCology; M.S., Ph.D., Virginia Commonwealth University.
- BROOKS-BUCK, Judith Associate Professor, Educational Administration and Supervision
B.A., Bennett College; M.Ed., Ph.D., University of Virginia.
- BROWN, Larry Professor, Biology
B.A., Olivet College; M.S., Ed.D., Ball State University.
- BROWN-COBB, Renia E. Associate Professor, PSYCology
B.S., Virginia Commonwealth University; M.Ed., Ph.D., James Madison University.
- CHRISTIAN, SILAS H. Assistant Professor, Educational Administration and Supervision
B.A., M.Ed., Tuskegee University; Ph.D., University of Missouri
- CHEW, Richard Assistant Professor, History
B.A., Bucknell University; M.A., Ph.D., College of William and Mary.
- CLARK, Vernessa Associate Professor, PSYCology
B.S., Virginia State University, M.S., Ph.D., Howard University.
- CONWAY, Ismail Associate Professor, Educational Administration and Supervision.
B.A., Hampton University; M.A., The New School for Social Research; Ph.D., University of Virginia.
- CRAWFORD, Donna Associate Professor, English
B.A., University of Oregon; M.A., University of Washington; Ph.D., University of California-Riverside.
- DERBY, C. Nana Assistant Professor, Criminal Justice
Diploma in Education, University of Cape Coast, Ghana; M.A., Ph.D., Florida International University.

- DIMKPAH, Young O. Associate Professor, Economics
B.B.A., Eastern Kentucky University; M.A., Central Missouri University; Ph.D., Howard University.
- DUSSERE, David P. Associate Professor, English
B.A., Concordia College; M.A., University of Arkansas; M.S.L.S., Catholic University; Graduate Study University of Tubingen (Germany); Ph.D., University of Arkansas.
- ESEONU, Maxwell O. Professor, Economics
B.A., East Stroudsburg State College; M.B.A., University of Baltimore; Ph.D., Howard University.
- FIORE, Douglas, J. Associate Professor, Educational Administration and Supervision.
B.A., Hofstra University; M.S., Purdue University; Ph.D., Indiana State University.
- FLETCHER, Raymond, III. Associate Professor, Mathematics.
B.A., University of Maine at Orono; M.A., M.S., SUNY at New Paltz; Ph.D., Emory University.
- GILLIAM, Conrad M. Professor, Career and Technical Studies
B.S., M.S., Virginia State University; Ed.D., Virginia Polytechnic Institute and State University.
- GOODWYN, Deborah. Associate Professor, English.
B.A., North Carolina Central University; M.A., Duke University; Ph.D., Indiana University of Pennsylvania.
- GREENBERG, Byron Assistant Professor, PSYCology.
B.A., Ph.D., Loma Linda University.
- HARRIS, Toni Assistant Professor, PSYCology.
B.A., University of Virginia; M.S., Ph.D., Virginia Commonwealth University.
- HAILE, Dawit Professor, Mathematics and Computer Science
B.Sc., M.Sc., Addis Ababa University, Ethiopia; M.S. Virginia Commonwealth University; Ph.D., Southern Illinois University at Carbondale.
- HILL, Oliver W., Jr. Professor, PSYCology
B.A., Howard University; M.A., Ph.D., University of Michigan.
- HODGSON, James Associate Professor, Criminal Justice
B.A., M.A., Ph.D., York University.
- HOGAN, Wesley C. Assistant Professor, History
B.A., University of Pennsylvania; M.A., Ph.D., Duke University.
- HOLMES, John R. Associate Professor, English
B.A., M.A., University of Southwestern Louisiana, Ph.D., University of Colorado.
- HOPKINS, Reginald. Associate Professor, PSYCology
B.S., M.S., Florida A & M University; Ph.D., Howard University.
- HOSSAIN, Mokerrom Professor, Criminal Justice
B.A., M.A., Dhaka University; M.A., Dhaka University; M.A., Ph.D., University of California.
- HUNTER, James E. Professor, Educational Leadership
A.B., Shaw University; M.S., Ph.D., University of Illinois.
- HWANG, Jae-Kwang Assistant Professor, Economics
B.A., Hankuk University of Foreign Studies; M.A., Ph.D., University of Alabama.
- JAGANNADHAM, Gallakora Associate Professor, Geology
B.S., M. Tech., University of Sagar, India; M.S., Ph.D., University of North Carolina.
- JAVAHERI, Amir Associate Professor, Career and Technical Studies.
B.S., Tehran Polytechnic; M.S., Case Western Reserve University; Ph.D., University of Cincinnati.

- KANU, Andrew J Associate Professor, Health, Physical Education, and Recreation
BSG, MPH, HSD, Indiana University.
- KASELOO, Paul..... Associate Professor, Biology
B.Sc., M.Sc., University of Toronto; Ph.D., University of Wyoming.
- KNIGHT-MASON, Regina Associate Professor, Biology
B.S., M.S., Virginia State University; Ph.D., Howard University.
- KROHN, M. David Professor, Career and Technical Studies
B.A., Moorhead State University; M.B.A., University of Southern California; Ph.D., University of Iowa.
- MALCAN, Jay..... Associate Professor, Criminal Justice
B.A., University of Montana; M.A., John Jay College of Criminal Justice; Ph.D., Florida State University.
- MAXWELL, Delois Associate Professor, Educational Administration and Supervision
B.S., Morgan State University; M.S., Iowa State University; Ed.D., Morgan State University.
- NASIM, Aashir..... Associate Professor, Pology.
B.A., Augusta State University; M.S., Ph.D., Howard University.
- NEWBY, Earl F.....Assistant Professor, Educational Leadership
B.S., Tennessee State University; M.A.T., University of Louisville, Ed.D., Spalding University.
- NOELL-BATISTE, Linda Assistant Professor, Educational Administration and Supervision
B.A., M.Ed., Virginia State University, Ph.D., Virginia Commonwealth University.
- NORMAN, James S. Associate Professor, Educational Administration and Supervision
M.Ed., Virginia State University; Ed.D., Virginia Polytechnic Institute and State University.
- NWOKE, Ben U., CMfgE. Professor, Career and Technical Studies
B.Sc. (Hons.), University of Nigeria; M.S., Ph.D., Iowa State University.
- OMOTOYE, Richard O.....Associate Professor, Economics
M.S., Ph.D., Finance and Economics University.
- OSA, Justina Associate Professor, Educational Administration and Supervision
B.A., Ahmadu Bello University; M.Ed., University of Houston, MSLS, Ed.D., Clark Atlanta University.
- OVERTON, Reginald F..... Associate Professor, Health, Physical Education and Recreation
B.S. Middle Tennessee State University; M.S., United States Sports Academy; Ed.D., Temple.
- PARSONS-POLLARD, Nicolle Assistant Professor, Criminal Justice
B.S., M.S., Ph.D., Virginia Commonwealth University.
- PHILIPSEN, Dirk Associate Professor, History
B.A., College for Political Economy; M.A., Ph.D., Duke University.
- PROENZA-COLES, Christina Assistant Professor, History
B.A., Swarthmore College; M.A., M.A., Ph.D., New School University Graduate Faculty of Political and Social Science.
- REESE, Serena Associate Professor, Health, Physical Education and Recreation
M.A., California State University; Ph.D., University of Tennessee.
- RICHARDSON, Jeanita Associate Professor, Educational Administration and Supervision
B.S., Temple University; M.Ed., Ph.D., University of Virginia.
- ROBINSON, Claire W. Associate Professor, Education
B.A., Wilberforce University; M.S., State University of New York at Buffalo; Ed.D., Virginia Polytechnic Institute and State University.

- ROCKENBACH, Stephen Assistant Professor, History
B.A. Indiana University Southeast; M.A., Ph.D. University of Cincinnati.
- SAMPLE, Maxine Associate Professor, English
B.A., The College of New Jersey; M.A., Clark Atlanta University; Ph.D., Emory University.
- SARAVANABHAVAN, Sheila Associate Professor, Educational Leadership
B.A., M.A., Madurai University, India, M.A.; Ed.D., Northern Arizona University.
- SHAHIDULLA, Shahid..... Associate Professor, Criminal Justice
B.A., M.P.I.A., M.A., Ph.D., University of Pittsburgh.
- SHEN, Hua Associate Professor, Biology
B.Sc., Nan-Kai University; M.Sc., Ph.D., University
- SEN, Dilip I. Professor, Biology
D.V.M., Calcutta University; Ph.D., Howard University.
- SHELTON, Claiborne S. Associate Professor, Career and Technical Studies
B.S., M.Ed., Virginia State University; Ph.D., University of Iowa.
- SIDDIQI, Shaukat Professor, Biology
B.S., Peshawar University; M.S., Virginia State University; Ph.D., University of South Carolina.
- SINGH, Rana P. Professor, Mathematics
B.S., M.Sc., Banaras Hindu University, India; M.Sc., Ph.D., University of Windsor, Canada.
- STROBLE, Willie L., Jr. Assistant Professor, Counselor Education.
B.A., Virginia Union University; MSM, Troy State University; M.Ed., Virginia Commonwealth University; Ed.S., Ed.D., The College of William and Mary.
- TABANJEH, Mohammad..... Associate Professor, Mathematics
B.Sc., MSc., Yarmouk University; M.A., CCNY/CUNY; Ph.D., The Graduate School and University Center of The City University of New York.
- THOMAS, Freddy L. Professor, English
B.S., Morris Brown College; M.S., Indiana University; Ph.D., University of South Carolina.
- THOTA, Vykuntapathi Professor, Education
B.S., Osmania University, Hyderabad, India; M.S., Kansas State University; Ph.D., Michigan State University.
- TONI, Bourama Professor, Mathematics and Computer Science
B.S., M.S., National University of Ivory Coast; Ph.D. University of Montreal.
- TROTTER, Pamela..... Associate Professor, Psychology
B.A., Lincoln University; M.A., Ph.D., Kent State University.
- WALKER, Katrina Associate Professor, PSYcology
B.A., University of Virginia; Ph.D., University of South Carolina.
- WALTON, Isis Associate Professor, Criminal Justice
B.A., Talladega College; Ph.D., Wayne State University.
- WILSON, Carolyn, H. Assistant Professor, Educational Leadership
B. S., Norfolk State University; M.S., Old Dominion University.; Ed.D., George Washington University.
- WIMBUSH, George W. Professor, Mathematics
B.S., Grambling State University; M.S., Clark-Atlanta University; Ed.D., University of Houston.
- YOUNG, Gloria Professor, Career and Technical Studies
B.S., Philippine Women's University; M.S., University of Iowa, Dietetic Internship University of Iowa Clinics and Hospitals;
Ed.D., Nova University.

ASSOCIATE GRADUATE FACULTY

- AMINI, Majid..... Associate Professor, History
B.Sc., B.A., Ph.D., University of London.
- BHARDWAJU, Harbans Associate Professor, Biology
B.S., M.S., Punjab Agricultural University; Ph.D., University of Georgia.
- BOYD-STARKE, Kimberly Assistant Professor, PSYcology
B.A., Spellman; M.A., GA School of Professional PSYcology; M.S., Ph.D., Virginia Commonwealth University.
- BROWN, Retta M. Assistant Professor, Counselor Education
B.S., University of North Carolina; M.S., North Carolina A & T State University; Ed.D., University of Cincinnati.
- CIOBANU, Ceslav Eminent Scholar, Associate Professor, Economics
M.Sc., Ph.D., Moscow State University.
- GILCHRIST, Sylinda Assistant Professor, Counselor Education
B.S., M.Ed., George Mason University; Ed.D., George Washington University.
- GREENBERG, Byron E. Assistant Professor, PSYcology
B.S., Virginia Commonwealth University; M.S., Johns Hopkins University; MPh, Ph.D. Loma Linda University
- JOHNSON, Paulette W..... Associate Professor, Health, Physical Education and Recreation
B.S., Morgan State University; M.Ed., Springfield College; Ed.D., Virginia Polytechnic Institute and State University.
- MBAGWU, Godwin O. Distinguished Professor of Chemistry.
B.Sc. (Hons.), University of Nigeria; Ph.D., Virginia Commonwealth University.
- MCFARLAND, Richard M. Assistant Professor, Counselor Education
B.S., B.A., M.S., University of Arizona; Ed.D., Northern Arizona University.
- SHAHIDULLAH, Shahid..... Associate Professor, Criminal Justice
M.A., McMaster University; M.P.I.A., M.A., Ph.D., University of Pittsburgh.
- SPINNER, David..... Associate Professor, Criminal Justice
B.A., Delaware State University; M.A., Alabama State University; Ph.D., University of Maryland.
- STAMPLEY, Cheryl Associate Professor, Sociology, Social Work and Criminal Justice
B.A., Governors State University; M.S.W., University of Chicago; Ph.D., Loyola University.
- STEIN, David Associate Professor, Criminal Justice
B.A., City University of New York; M.S., Ph.D., Virginia Commonwealth University.

Index

Academic Credit	12
Academic Standards	12
Accreditation and Affiliations	2
Administration of Graduate Programs	1
Admission	10
Admission to Candidacy	13
Admission Fee	8
Admission Requirements	10
Application and Administration	17
Assistantships	8
Associate Graduate Faculty	102
Athletics and Recreation	4
Auditing Courses	13
Auditing Fees	8
Biology	21-24
Campus Parking	5
Careers	3
Careers and Graduate Study	3
Career and Technical Studies	24-30
Certificate of Graduate Studies in Project Management	96
Certificate Program in Nutrition and Dietetics	96
Certifying Hours	13
Change of Degree Program	13
Comprehensive Examination Fee	8
Computer Laboratories	6
Concurrent Enrollment	13
Continuing Education Credit	14
Counselor Education	50-52
Counselor Education (PreK-12)	52
Course Load	14
Course Numbers	14
Criminal Justice	30-35
Degree Requirements	14
Degree in Special Education (K-12)	47-51
Doctor of Education – Educational Administration and Supervision	63-65
Duplicate Credit	15
Economics	35-38
Educational Administration and Supervision	57-62
Elementary Education (PreK-6)	43-46
English	38-42
Faculty Advisors	15
Fellowships	9
Final Examinations	15
Financial Aid	4
Financial Assistance	8
Grade Appeal	15
Grades	16
Graduate Faculty	97
Graduation Fee	8
Graduate Instruction	17
Graduate Record Examination (GRE)	17
Graduate Professional Education Programs	42-64
Graduate Programs and Course Descriptions	21
Graduate Tuition	8
History	65-71
History and Philosophy of Graduate Study	2
Interdisciplinary Studies	71
Language Requirements	17
Late Registration Fee	8
Library Facilities	4

Loans	9
Master of Arts	15
Master of Education	15
Master of Science	15
Mathematics	72-79
Military Personnel	7
Parking	5
Part-time Jobs	9
Physics	80-81
Placement Services	4
Plant Science	81-84
Project Management (Concentration)	28-30
Psychology	84-88
Reinstatement	18
Required Standard	17
Residence Requirements	18
Schedule Changes	18
Retention	18
Sport Management	88-93
Student Activities	6
Student Health Services	6
Student Services and Facilities	4
Testing Services	7
Thesis Fee	8
Thesis and Project Standards	19
Transcript Fee	8
Transfer Credit	20
Transfer to a Degree Program	11
Tuition and Fees	8
Types of Admission	11
Withdrawal	20