Marie V. McDemmond
President
Mark R. Warner, Governor
Commonwealth of Virginia
Norfolk State University

NSU's mission:
To provide an affordable, high-quality education for an ethnically and culturally diverse student population, equipping them with the capability to become productive citizens who continuously contribute to a global and rapidly changing society.

Norfolk State's Leadership Vision

Strategic Imperatives:
- Enhance student success by providing high-quality instruction and support to ensure an improved graduation rate.
- Develop an efficient management structure to increase organizational efficiency and improve assistance across all areas.
- Increase total funding by identifying multiple sources and new initiatives to support the endowed faculty and academic services for NSU's constituents.

Core assets:
- Talented student body
- Public support
- Motivated faculty
- Tradition of Service
IMPORTANT INFORMATION REGARDING THE UNIVERSITY CATALOG

Policies regarding the enrollment of degree seeking (matriculated) students at Norfolk State University are listed below:

All students will follow the curriculum and the degree completion requirements specified in the University Catalog issued for the year of their initial enrollment as degree seeking students.

The University will honor degree completion requirements specific for students in the University Catalog for the year of initial enrollment, as long as such enrollment is continuous (summer semesters not included).

A student who does not maintain continuous enrollment (summer semesters not included) will follow the degree completion requirements specified in the University Catalog issued the year of re-enrollment.

Any student under any degree program who has re-enrolled in the University after interruptions of more than two semesters will be required to apply for readmission and meet the requirements of the current catalog.

A student who transfers to another degree program will follow the requirements specified in the University Catalog issued for the year of the transfer into the new degree program.

Students are held individually responsible for reading and complying with the University policies contained in the Catalog.

The Catalog is not an unchangeable contract but, instead, an announcement of present policies only. Implicit in each student's enrollment is an agreement to comply with University rules, policies, and regulations that the University may modify to exercise properly its educational responsibility.

AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY POLICY

It is the policy of Norfolk State University to provide equal educational opportunity, equal employment without regard to race, color, national origin, political affiliation, religion, sex, age, or disability. Any employee or student who feels discriminated against should be referred to the Ombudsperson.

STUDENT RIGHT-TO-KNOW ACT

Disclosure: Information pertaining to this Act is available in the Office of the Registrar and the Office of Institutional Research.
Academic Calendar
Fall Semester 2004

Faculty/Staff/School/Department ................................................................. Monday, August 16
Meetings, Faculty Information Workshops

Departmental Counseling & Registration .................................................... Tuesday, August 17 - Friday, August 20

Classes Begin ............................................................................................ Saturday, August 21

Late Registration Begins ........................................................................... Monday, August 23

Last Day to Drop a Course and Receive 100% Refund ............................... Thursday, September 2

Fall Convocation ....................................................................................... Thursday, September 9

Last Day for Late Registration/Adding Courses or Declaring Audit ........... Friday, September 3

Labor Day Holiday (No Classes) ................................................................. Monday, September 6

Last Day to Drop a Course and Receive 50% Refund ............................... Thursday, September 9

Mid-Semester Advisory Examination Period .......................................... Monday, October 11 - Saturday, October 16
(Grades posted 48 hours after each exam)

Mini-Term 2 (classes begin) ................................................................. Saturday, October 16

Last Day to Report Mid-Semester Advisory Grades ............................... Tuesday, October 19

Last Day to Drop a Course ....................................................................... Friday, October 22

Exit Examination of Writing Competency ............................................. Saturday, October 23

Registration for Spring 2005 Semester .................................................. Monday, October 25 - Friday, January 7, 2005

Last Day to Apply for May 2005 Graduation .......................................... Friday, November 19

Reading Day ............................................................................................ Wednesday, November 24

Thanksgiving Break .................................................................................. Thursday, November 25 - Sunday, November 28

Classes Resume ......................................................................................... Monday, November 29

Final Examination for Candidates .......................................................... Tuesday, November 30 - Monday, December 6
for December 2004 Graduation

Classes End ............................................................................................ Friday, December 3
(Last Day to Withdraw from the University)

Final Examination Period (for Continuing Students) ............................... Saturday, December 4 - Friday, December 10

Last Day to Report Final Grades for Candidates ................................... Wednesday, December 8
for December 2004 Graduation

Commencement ....................................................................................... Saturday, December 11

Faculty Conference .................................................................................. Monday, December 13

Last Day to Report Final Grades for Continuing Students ................... Tuesday, December 14

Note: Academic Calendar dates are subject to change. Visit NSU's Website (www.nsu.edu) for the most recent updates.
Academic Calendar
Spring Semester 2005

Faculty/Staff/School/Department ................................................................. Monday, January 3
Meetings, Faculty Information Workshops

Departmental Counseling & Registration ....................................................... Tuesday, January 4 - Friday, January 7

Classes Begin ................................................................................................. Saturday, January 8

Late Registration Begins ............................................................................. Monday, January 10
Martin L. King, Jr., Holiday (No Classes) ......................................................... Monday, January 17

Last Day to Drop a Course and Receive 100% Refund ................................. Thursday, January 20

Last Day for Late Registration/Changing Class Schedules or Declaring Audit .......................... Friday, January 21

Last Day to Drop a Course and Receive 50% Refund ................................. Thursday, January 27

Mid-Semester Advisory Examination Period ........................................ Monday, March 7 - Saturday, March 12
(Grades posted 48 hours after each exam)

Mini-Term 2 (classes begin) ........................................................................ Saturday, March 5

SPRING VACATION ................................................................................... Monday, March 14 - Sunday, March 20

Last Day to Report Mid-Semester Advisory Grades ................................ Tuesday, March 15

Last Day to Drop a Course ......................................................................... Friday, March 25

Registration for Summer and Fall 2005 Semester .................................... Monday, March 28 - Friday, August 26

Last Day to Apply for December 2005 Graduation .................................... Friday, April 1

Exit Examination of Writing Competency ................................................ Saturday, April 2

Final Examination for Candidates .............................................................. Monday, April 25 - Saturday, April 30
for May 2005 Graduation

Classes End ................................................................................................. Friday, April 29
(Last Day to Withdraw from the University)

Final Examination Period (for Continuing Students) ................................ Saturday, April 30 - Friday, May 6

Last Day to Report Final Grades for Candidates ........................................ Tuesday, May 3
for May 2005 Graduation

Alumni Banquet for Senior Class ............................................................... Friday, May 6

Commencement ......................................................................................... Saturday, May 7

Faculty Conference .................................................................................... Monday, May 9

Last Day to Report Final Grades (for Continuing Students) ................. Tuesday, May 10

Note: Academic Calendar dates are subject to change. Visit NSU’s Website (www.nsu.edu) for the most recent updates.
Academic Calendar
Fall Semester 2005

Faculty/Staff/School/Department ................................................................. Monday, August 15
Meetings, Faculty Information Workshops

Departmental Counseling & Registration .................................................. Tuesday, August 23 - Friday, August 19

Classes Begin ......................................................................................... Saturday, August 20

Late Registration Begins ......................................................................... Monday, August 22

Last Day to Drop a Course and Receive 100% Refund ................................. Friday, August 26

Last Day for Late Registration/Adding Courses or Declaring Audit .......... Friday, August 26

Labor Day Holiday (No Classes) ............................................................... Monday, September 5

Last Day to Drop a Course and Receive 50% Refund ................................. Thursday, September 1

Fall Convocation .................................................................................... Thursday, September 8

Mid-Semester Advisory Examination Period ........................................ Monday, October 3 - Saturday, October 8
(Grades posted 48 hours after each exam)

Mini-Term 2 (classes begin) ..................................................................... Saturday, October 8

Last Day to Report Mid-Semester Advisory Grades ............................... Tuesday, October 11

Last Day to Drop a Course ..................................................................... Friday, October 14

Exit Examination of Writing Competency .............................................. Saturday, October 29

Registration for Spring 2006 Semester .................................................. Monday, October 24 - Friday, January 6, 2006

Last Day to Apply for May 2006 Graduation ......................................... Friday, November 11

Reading Day .......................................................................................... Wednesday, November 23

Thanksgiving Break .............................................................................. Thursday, November 24 - Sunday, November 27

Classes Resume ....................................................................................... Monday, November 28

Final Examination for Candidates ......................................................... Tuesday, November 29 - Monday, December 5
for December 2005 Graduation

Classes End ........................................................................................... Friday, December 2
(Last Day to Withdraw from the University)

Final Examination Period (for Continuing Students) ............................... Saturday, December 3 - Friday, December 9

Last Day to Report Final Grades for Candidates .................................. Wednesday, December 7
for December 2005 Graduation

Commencement ..................................................................................... Saturday, December 10

Faculty Conference ................................................................................ Monday, December 12

Last Day to Report Final Grades (for Continuing Students) ..................... Tuesday, December 13

Note: Academic Calendar dates are subject to change. Visit NSU’s Website (www.nsu.edu) for the most recent updates.
Academic Calendar
Spring Semester 2006

Faculty/Staff/School/Department ................................................................. Monday, January 2
Meetings, Faculty Information Workshops

Departmental Counseling & Registration ....................................................... Tuesday, January 3 - Friday, January 6

Classes Begin ..................................................................................................... Saturday, January 7

Late Registration Begins ................................................................................ Monday, January 9
Martin L. King, Jr., Holiday (No Classes) ......................................................... Monday, January 16

Last Day to Drop a Course and Receive 100% Refund ......................... Wednesday, January 18
Last Day for Late Registration/Changing Class Schedules or Declaring Audit ........... Friday, January 20

Last Day to Drop a Course and Receive 50% Refund ................................ Wednesday, January 25

Mini-Term 2 (classes begin) ........................................................................ Saturday, March 4
Mid-Semester Advisory Examination Period ............................................. Monday, March 6 - Saturday, March 11
(Grades posted 48 hours after each exam)

SPRING VACATION ......................................................................................... Monday, March 13 - Sunday, March 19

Last Day to Report Mid-Semester Advisory Grades ................................ Tuesday, March 14

Last Day to Drop a Course ............................................................................. Friday, March 24
Exit Examination of Writing Competency ...................................................... Saturday, March 25

Registration for Summer and Fall 2006 Semester ................................... Monday, March 27 - Friday, August 25

Last Day to Apply for December 2006 Graduation .................................... Friday, March 31

Final Examination for Candidates ................................................................. Monday, April 24 - Saturday, April 29
for May 2006 Graduation

Classes End ..................................................................................................... Friday, April 28
(Last Day to Withdraw from the University)

Final Examination Period (for Continuing Students) ....................... Saturday, April 29 - Friday, May 5

Last Day to Report Final Grades for Candidates ........................................... Tuesday, May 2
for May 2006 Graduation

Alumni Banquet for Senior Class ................................................................. Friday, May 5

Commencement ............................................................................................... Saturday, May 6

Faculty Conference ....................................................................................... Monday, May 8

Last Day to Report Final Grades (for Continuing Students) ..................... Tuesday, May 9

Note: Academic Calendar dates are subject to change. Visit NSU’s Website (www.nsu.edu) for the most recent updates.
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GENERAL INFORMATION

HISTORY OF THE UNIVERSITY

Norfolk State College was founded in 1935. The College, brought to life in the midst of the Great Depression, provided a setting in which the youth of the region could give expressions to their hopes and aspirations. At this founding, it was named the Norfolk Unit of Virginia Union University. In 1942, the College became the independent Norfolk Polytechnic College, and two years later an Act of the Virginia Legislature mandated that it become a part of Virginia State College.

The College was able to pursue an expanded mission with even greater emphasis in 1956 when another Act of the Legislature enabled the institution to offer its first Bachelor's degree. The College was separated from Virginia State College and became fully independent in 1969. Subsequent legislative acts designated the institution as a university and authorized the granting of graduate degrees. In 1979, university status was attained.

Today, the University is proud to be one of the largest predominantly black institutions in the nation. Furthermore, it is committed to pursuing its vital role of serving the people of the Hampton Roads area.

MISSION STATEMENT

Norfolk State University's Mission is to provide an affordable, high-quality education for an ethnically and culturally diverse student population, equipping them with the capability to become productive citizens, who continuously contribute to a global and rapidly changing society.

Strategic imperatives:

- Enhance students' success by providing high-quality academic instruction and support and ensure an improved graduation
- Develop an efficient management structure to increase organizational efficiency and improve performance across all areas
- Increase total funding by identifying multiple funding sources and new initiatives to form a solid fiscal foundation and provide ongoing services for NSU's constituents

Core assets:

- Talented student body
- Public support
- Motivated faculty
- Tradition of service

INSTITUTIONAL GOALS

Institutional goals are derived directly from the mission statement and represent the direction the University intends to pursue over the decade.

1. The University shall continue to define those areas in which it can make the most effective contributions to the total educational enterprise of the community, state, nation, and the world.
2. The University shall continue to utilize its assembled expertise in research and public service to develop programs specifically related to urban needs.
3. The University shall continue to develop its management capability in order to provide adequate, efficient, and timely services to its constituents.
4. The University shall continue to maintain an environment which encourages its graduates to assume leadership roles in the community, state, nation, and world.

ACCREDITATION AND AFFILIATIONS

Norfolk State University is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools, (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the associate, baccalaureate, masters' and doctoral degrees.

Undergraduate and graduate programs at Norfolk State University which are accredited and the accrediting agencies are listed on the following page:
### SCHOOL’S ACCREDITING AGENCIES

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<thead>
<tr>
<th>School of Liberal Arts</th>
<th>Bachelor of Science in Nursing</th>
<th>National League for Nursing Accrediting Commission</th>
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<tbody>
<tr>
<td>School of Business</td>
<td>Bachelor of Science in Chemistry</td>
<td>American Chemical Society</td>
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<tr>
<td>School of Education</td>
<td>Bachelor of Science in Computer Science</td>
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</tr>
<tr>
<td>School of Science and Technology</td>
<td>Bachelor of Science in Building Construction Technology</td>
<td>National Accrediting Agency for Clinical Laboratory Sciences</td>
</tr>
</tbody>
</table>

### Other Affiliations
Other affiliations of the University include membership in the Administrative Management Society; American Alliance for Health Education, Recreation, Physical Education and Dance; American Association for Affirmative Action; American Association of Colleges of Nursing; American Association of Collegiate Registrars and Admissions Officers; American Association of State Colleges and Universities; American Council of Construction Education; American Public Health Association; American Society of Engineering Education; American Society of Manufacturing Engineering Association for Continuing Higher Education; Association of American Colleges; Association of Governing Boards of Universities and Colleges; Association of Information Systems Professionals; Association of Virginia Colleges; Central Intercollegiate Athletic Association; College Placement Council; Council for Advancement and Support of Education; Council of Social Work Education; Intercollegiate Music Association; and Mid Atlantic Association for School, College and University Staffing.

CAREER SERVICES
Career Services, located in Room 306/311 Mills E. Godwin, Jr. Student Center, provides students with a comprehensive array of career services. Career Services is responsible for the overall planning, development, and implementation of the University’s career services program for students and alumni.

Services include:

1. Identifying and developing employment opportunities.
2. Preparing students to conduct a successful job search. Job search assistance is provided in writing resumes, conducting job interviews, and developing a career network.
3. Directing/coordinating campus-wide career activities.
4. Serving as the University’s principal point of contact with employers.

Students register with Career Services to receive all of the services available. Registration and maintenance of a credential file with the office is recommended for seniors seeking employment in career positions upon graduation.

COUNSELING CENTER
The Counseling Center provides a range of counseling services for Norfolk State University students. Counseling services are free of charge to students. The Center provides professional help that includes individual and group counseling, crisis intervention, and educational outreach programming. Further, counselors are available to consult with students, parents and staff about various student life issues.

Difficulties in adjusting to university life, depression, troubled relationships, and inability to manage stress are some of the reasons that students have used counseling services. When a crisis occurs, counselors meet with affected community members to provide support and counseling. Crisis counseling is available to students 24 hours a day.

The Counseling Center staff includes both male and female counselors. All staff are trained and experienced in dealing with issues facing University students. Graduate students working under close supervision also provide counseling services.

Appointments to meet with a counselor can be made by phone or in person. Individuals attending counseling are assured confidentiality. For further information, please visit the Counseling Center in the Mills E. Godwin Student Center, Room 309, or call (757) 823-8173.

SUBSTANCE ABUSE SERVICES
The Counseling Center coordinates Norfolk State University’s substance abuse services. The staff is prepared to respond effectively in a caring manner to students affected by alcohol and other drug use, including their own use or that of their loved ones. Substance abuse education and prevention programs are also implemented by the Counseling Center, including National Alcohol Screening Day.

SUPPORTING STUDENTS THROUGH DISABILITY SERVICES (SSDS)
SSDS at Norfolk State University is committed to compliance to the law as designated in Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act (ADA) of 1990.

The program provides services to currently enrolled students with documented disabilities, including physical, psychological, traumatic head injuries, learning disabilities and other health concerns.

Admission to Norfolk State University is based solely on the entrance requirements as described in the college catalog. Disclosure of a disability during the admissions process is not required. Neither the nature nor the severity of an individual’s disability is used as a criterion for admission.

Students with disabilities who are planning to apply for admission to the University are encouraged to contact the SSDS office as soon as possible to determine if the University can accommodate a particular disability. Once accepted and enrolled, students requiring adjustments to buildings or classes, should contact the SSDS office at least forty-five (45) days prior to the beginning of class in order to allow time for adjustments to be made. SSDS cannot ensure that accommodations be made in a timely fashion with less notification.

Please note that services are also provided to persons with temporary disabilities acquired as a result of surgery, illness or injury. Written documentation of the disability (whether temporary or permanent) from a qualified professional is required before accommodations can be implemented.

For additional information, please contact the SSDS office located in the L. Beecher Brooks Library, Room 240, or call (757) 823-2014/2409.

INTERNATIONAL STUDENT AND SCHOLAR SERVICES
The Office of International Student and Scholar Services serves to assist international students and scholars with all matters related to immigration as well as to promote international education and intercultural understanding. The office disseminates information and acts as a referral source for students, staff, faculty, and the community. Services include advising students, scholars and faculty; processing immigration petitions; and serving as a liaison between the student or scholar and governmental agencies.
We are located within the Office of Student Affairs at 330 Harrison B. Wilson Hall. Hours of operation are 8 a.m. - 5 p.m., Monday – Friday.

SUGGESTED GUIDE FOR STUDENT ADJUSTMENT
Services and guidance in areas of student adjustment are afforded to assist students in developing priorities and sound bases for decision making. Certain latitudes of operation are provided to help students assume and demonstrate adult responsibility.

CLASS ATTENDANCE  A student is expected to attend all classes. The student assumes full responsibility for losses incurred because of absences. Instructors may permit students to make up work missed. (See Class Attendance Policy on Page 30)

UNIVERSITY ASSEMBLY: University Assembly represents a series of programs planned for college wide concerns. These programs are restricted in frequency. Since these programs are designed to communicate major concerns of the University, students are urged to attend and participate. Some programs may require compulsory attendance.

PARKING SERVICES: Vehicle registration is required for all automobiles using established parking areas on campus. Shuttle bus service is also operated within Parking Services and is available free of charge to the campus community. Shuttle stop signs are located throughout the campus, and buses run every 10-15 minutes.

Decal fees, parking passes and all parking/transportation inquiries should be directed to the Office of Parking and Transportation Services at 823-2211/2212. The office is located in Suites 125-126, Spartan Station Mall.

WITHDRAWAL: Whenever it becomes necessary to discontinue enrollment, students are required to secure “withdrawal forms” from their advisor/department head. Official withdrawal is essential to ensure that one’s academic record is not jeopardized and that financial matters are properly phased out. Failure to properly withdraw may hamper readmission or the possibility of transfer to another college or university.

GENERAL DECORUM: Students are encouraged and expected to conduct themselves in an acceptable and professional manner that reflects personal pride, dignity and respect. Care should be taken to demonstrate appropriate grooming habits and conduct that will bespeak a positive sense of direction and competitiveness.

DISCIPLINE: The Office of the Vice President for Student Affairs is responsible for the overall administration of the student judicial system. Students are expected to conform to all regulations and procedures published in the Student Disciplinary Policies and Procedures Handbook which may be secured from the Office of Student Services/Judicial Affairs, Room 325, Godwin Student Center. Students are responsible for respecting and complying with all laws and rights of good citizenship.

NOTE  The University has an extensive program involving speakers and performers who are invited to the campus by various University organizations. Sponsorship of guest speakers and performers does not necessarily imply approval or endorsement of views expressed, either by the sponsoring group(s) or the University.

STUDENT CENTER
The Mills E. Godwin, Jr. Student Center is an integral part of the University community. It exists for all members of the University family - students, faculty, alumni, and their guests. The Center provides for the cultural, educational, recreational, and social needs of the University. We urge all persons using the facility to observe socially acceptable standards of conduct.

The Center is the focal point of student activity on campus. It serves primarily as a facility to be used by the University community in the furtherance of cultural, social, and recreational programs of various kinds.

The Center Policy Board, which meets monthly, is comprised of students, faculty, and staff. The Program Committee plans and coordinates cultural, social, and recreational programs and activities for the University family.

STUDENT HEALTH SERVICES
Student Health Services are provided by Campus Health Services, which is located in the Spartan Station.

The basic health services provided under the student health program include diagnosis and treatment of minor illnesses and injuries; certain over the counter medication; supervised care in designated observation beds; selected medical supplies; general and emergency medical services; health education counseling, maintenance of immunization/health history records, forums, and materials on preventive health and other health and mental health related areas; and injections of allergy serum provided to the students at their own expense. The Center is staffed with highly skilled health care professionals, specializing in medical, surgical, family practice, gynecology, and emergency care.

The costs for the health care services listed above are paid by the University for students who are enrolled full-time. Costs incurred for care which exceeds the services listed above must be paid by the student or by his or her private health insurance. The University offers supplemental health insurance for interested students. Students are encouraged to purchase health insurance to cover medical needs.

STUDENT SUPPORT SERVICES
Student Support Services is a federally-funded program, providing a variety of supportive services for eligible program participants enrolled at Norfolk State University.

Program participants are selected by meeting one or more of the following criteria:
1. Low-income
2. First generation
3. Academic deficiency
4. Physical disability
The program provides for its participants tutorial services, skills development, counseling, cultural and educational enrichment activities, and numerous other support services in order to increase student retention and graduation from Norfolk State University.

STUDENT ACTIVITIES
The Office of Student Activities is responsible for the coordination and implementation of a creative, responsive, and diverse co-curricular program at Norfolk State University.

It is the goal of Norfolk State University to develop an individual who not only has mastered the content of his/her academic courses, but also has wide interests and skills in interpersonal relations. To aid in the formation of these added skills, the University promotes a wide range of student organizations and activities. Students are encouraged to take an active interest in the various academic, social, dramatic, debating, and religious activities.

OFFICIALLY RECOGNIZED STUDENT ORGANIZATIONS

DEPARTMENTAL ORGANIZATIONS

Accounting Association
American Physics Society
Association of Concerned Sociologists
Biology Society
Chemistry Club
DNIMAS Student Association
Early Childhood Education Club
Economics Club
English & Foreign Language Majors Club
Entrepreneurship Club
Finance & Banking Club
Fine Arts Guild
Health Services Management Association
History Club

Hotel, Restaurant & Institutional Management Club
Mass Communications Student Association
Marketing Club
Mathematics Club
Health Information Management Student Association
Medical Technology Society
Physical Education/Exercise Science Club
Physics & Engineering Club
Political Science Association
Psychology Club
Sociology Club
Spanish Club
Technology Education Association
Whitney Young Social Work Club

PROFESSIONAL DEPARTMENTAL ORGANIZATIONS

American Production and Inventory Control Society
Association of Black Journalist
Associated General Contractors of America
Association of Information Technology Professional
ASM/TMS Student Chapter
International Technology Education Collegiate Association
National Broadcasting Society
Optical Society of America
National Student Speech, Language, Hearing Association

Pre-Medical Society
Public Relations Student Society of America
Society for the Advancement of Management
Society of Manufacturing Engineers
Student Affiliate of The American Chemical Society
Student In Free Enterprise
Student National Technical Association
Student Nurses Association
Student Virginia Education Association
Thurgood Marshall Pre-Law Club

FRATERNITIES, SORORITIES, AND SOCIAL CLUBS

*Alpha Phi Alpha Fraternity, Inc
*Iota Phi Theta Fraternity, Inc.
*Kappa Alpha Psi Fraternity, Inc.
*Omega Psi Phi Fraternity, Inc.
*Phi Beta Sigma Fraternity, Inc.
*Alpha Kappa Alpha Sorority, Inc.
*Delta Sigma Theta Sorority, Inc.
*Sigma Gamma Rho Sorority, Inc.
*Zeta Phi Beta Sorority, Inc.
**Groove Phi Groove Fraternity, Inc.
**Kappa Kappa Psi Fraternity, Inc.

**Malik Sigma Psi Fraternity, Inc.
**Pershing Rifles Fraternity, Inc.
**Phi Delta Psi Fraternity, Inc.
**Pi Mu Alpha Sinfonia Fraternity, Inc.
**Pi Gamma Psi Fraternity, Inc.
**Chi Eta Phi Sorority, Inc.
**Gamma Psi Theta Sorority, Inc.
**Kappa Omicron Tau Sorority, Inc.
**Pershing Angels Sorority, Inc.
**Tau Beta Sigma Sorority, Inc.

*Member of Pan Hellenic Council
**Council of Independent Organizations
HONOR SOCIETIES

Alpha Kappa Delta (Sociology)  Kappa Delta Epsilon (Education)
Alpha Delta Mu (Social Work)  Kappa Omicron Nu
Alpha Kappa Mu Honor Society  NSU Honors Program
Beta Gamma Sigma (Business)  Phi Alpha Theta (History)
Beta Chi National Scientific  Pi Sigma Alpha
Beta Phi  Sigma Tau Delta (English)
DNIMAS  Spartan Alpha Tau
Epsilon Tau Sigma
Golden Key International Honor Society

LITERARY SOCIETIES/PUBLICATIONS

Lyman B. Brooks Debating Society  Spartan Echo (Newspaper)
Rhetorician  Spartan Reflections (Yearbook)

SPECIAL INTEREST CLUBS

AME Fellowship, Inc.  International Students
American Chemical Society  Music Educators National Conference
Association of Black Communicators  National Association for the Advancement
Association of General Contractors of America  of Colored People (NAACP)
Banking & Finance Club  National Council of Negro Women Association
Baptist Student Union  National Society of Black Student Engineers
Caribbean Student Association  Pre-Alumni Club
Cheerleaders  Residence Hall Student Association
Chess Club  Spartan Legion Marching Band
Circle K International Club  Student Ambassadors
Collegiate Secretaries International  Student Standing 4 Sickle Cell & HIV-AIDS
Concert Choir  Taekwondo Club
Consumer Services & Family Studies  University Dance Theatre
Data Processing Management Club  University Players
Food Science and Nutrition Club  Wesley Westminster
French Club  World Changers
Gospel Choir  Young Democrats
Graduate Student Association  Young Republicans
Honda All-Star Campus

ATHLETIC PROGRAM

VARSITY
The Department of Athletics is comprised of seventeen (17) varsity sports: baseball, women’s softball, basketball (men and women), football, cross country (men and women), track and field (men and women), indoor track (men and women), volleyball (men and women), tennis (men and women), and bowling (women).

Athletics constitutes an integral part of the campus community. It is the goal of athletics to provide unifying activities, which will contribute to the morale and spirit of the larger community as well as to the institution itself.

The Department of Athletics is a member of the National Collegiate Athletic Association (NCAA) and the Mid-Eastern Athletic Conference (MEAC).

THE INTRAMURAL PROGRAM
The Intramural Program at Norfolk State University provides opportunities for students, both male and female, to participate in individual and team sports activities on a regular basis. More specifically, it is the aim of the program to provide students the opportunity to:

1. Promote better health through exercise,
2. Make social contacts and friendships which could not readily be developed in the classroom,
3. Develop sportsmanship of the highest order, and
4. Learn important values developed through team spirit and cooperation.
The program of competitive intramural activities includes tennis, coeducational volleyball, basketball, football, etc. Students who do not ordinarily take part in sports are encouraged to participate and enjoy some type of physical activity. Since education should lay the foundation for lifetime habits, the skills acquired in the intramural program should motivate sports participation for a lifetime.

**STUDENT GOVERNMENT ASSOCIATION**

Through membership in the Student Government Association, all enrolled students participate in the government of the University. The purposes of the Association are to develop a spirit of cooperation in the activities affecting the University; to afford development through self expression, self control, and leadership; to encourage student initiative, and to act as an intermediary between the administration and students in matters of general welfare.

Decisions rendered by the Student Government Association are subject to the approval of the Executive Council.

**RESIDENTIAL LIFE**

**ON-CAMPUS HOUSING**

The residence halls are located on the east and west sides of the campus. Currently, University housing is not available to married or graduate students. Rooms are furnished with beds, closets, desks, dressers, and chairs. Students must provide their own linen (sheets, pillows, pillow cases, blankets and mattress covers). Each residence hall is supervised by the residence hall staff. The Residence Hall Student Association, consists of elected student representatives from each residential hall who assist residence hall staff in meeting the needs of residential students.

The dining halls, which are conveniently located to the residence halls, provide meals for student residents as a part of the Residence Hall Contract. Under the terms of the contract, meals are provided during periods when the University calendar indicates that the institution is officially open.

Housing information, applications, and current schedules will be sent to all students upon acceptance for admission to the University.

**RESIDENCE HALL PROGRAM**

The residence halls are a vital part of student life at Norfolk State University. Programs are designed to meet the needs of the residents and to create a meaningful living and learning environment that both challenges and supports the personal, social, recreational, cultural, and academic development of all residents.

**OFF-CAMPUS HOUSING**

The University has an off-campus housing referral listing to aid students in finding privately owned accommodations. Referrals are available in the Housing Office. Information is available about rooms, houses, and apartments that are available to students. Contracts or agreements are private matters between the student and landlord and not Norfolk State University. Students are urged to make living arrangements well in advance of the date that classes begin.

**VETERAN AFFAIRS**

The Veteran Affairs Office provides registration for VA benefits, counseling, and general assistance in admission to the University to veterans, dependents, active duty, and reservists.

Students enrolling under the Educational Assistance Program in accordance with the laws administered by the Department of Veterans Affairs may enroll in the degree programs offered by the University.

Norfolk State receives tuition payments for veterans under the Veterans Vocational Rehabilitation Program. However, all other students must make payments according to the schedule of fees or apply for advance pay 120 days prior to the semester.

**UNDERGRADUATE ADMISSIONS**

**GENERAL ADMISSIONS POLICIES AND REQUIREMENTS**

Norfolk State University fulfills its mission to provide opportunities for higher education for all people regardless of their socio-economic status, race, sex, age, religion, or national origin by identifying and accepting students with academic promise.

Norfolk State University seeks to admit in-state and out-of-state applicants whose education, preparation, aptitude, achievement, and motivation combine to indicate a reasonable probability of success in one or more of the University's schools.

The University makes an effort to maintain a diverse student population because of the benefits that accrue to all students and to the entire educational process. Further, the University reserves the right to base individual admission in any given year upon a variety of factors, including the number of applicants for available spaces. The standards in some programs may exceed the minimum University requirements because of space limitations, resources, and program design.

**ADMISSIONS CRITERIA**

1. The admissions criteria for Norfolk State University hereby stipulate that the applicant must have graduated from an accredited high school with a minimum grade point average of at least 2.0 on a four-point grading scale. Applicants must have a high school diploma or its equivalent. A “program completer” status is not equivalent to a high school diploma.

2. The applicant must submit minimum Scholastic Aptitude Test (SAT) scores or American College Testing (ACT) scores of 800 (17 ACT) when under 21 years of age.
3. The applicant should have a minimum total of 22 units distributed as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics*</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>History and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Fine Arts or Practical Arts</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

*Algebra I, Geometry, Algebra II recommended

4. The applicant must submit a medical history form signed by the student and a physician prior to the end of the first semester of enrollment.

5. Students with a high school equivalency diploma will be considered upon the successful completion of the General Education Development (GED) test with a minimum score of 250. GED graduates may be subject to the requirements outlined above. The University is interested in the quality of the applicant's academic preparation and the various indicators of overall promise as a student.

6. The applicant must submit two letters of recommendation.

APPLYING AS A FIRST-TIME FRESHMAN
When applying for admission as a freshman, the applicant must provide the followings:

1. An application completed in full and a $25 non-refundable application fee payable by certified check or money order or an official fee waiver
2. An official high school transcript forwarded by applicant's high school. It is the student's responsibility to ensure that final grades are sent immediately following graduation
3. SAT/ACT scores when 21 years of age or under
4. An official report of test results issued by the General Education Development (GED) testing center if applicable
5. Two letters of recommendation
6. $100 non-refundable enrollment deposit following acceptance.

*Home schooled applicants are required to submit a transcript of units completed and grades earned, SAT/ACT scores, two letters of recommendation, an application completed in full, and a $25 non-refundable fee.

REQUIREMENTS FOR ADMISSION TO SPECIFIC PROGRAMS

ADMISSION TO THE SCHOOL OF BUSINESS
First-time freshmen and transfer students who are classified as freshmen or sophomores are admitted into the lower division of the School of Business. Upon the completion of the freshman or sophomore level courses and a minimum grade point average of 2.0, students are admitted into the upper division of business course work. For other requirements contact the School of Business.

ADMISSION TO THE NURSING PROGRAM
Admission to the programs in the Department of Nursing is competitive and based on criteria which include completion of either high school or college prerequisites, demonstrated ability in mathematics and the natural sciences, minimal grade point average in previous academic work, and other requirements as specified in materials which can be obtained directly from the Department of Nursing.

PARTNERSHIP FOR ACADEMIC AND STUDENT SUCCESS (PASSport)
Norfolk State University and Tidewater Community College have created The Partnership for Academic and Student Success (PASSport) to help students who want to attend NSU to become more academically prepared for collegiate work prior to enrolling at NSU. The purpose of the program is to provide access and support to promising students who do not initially qualify for enrollment at NSU.

Please call the Office of Admissions (757-823-8396) for additional information regarding the selection process.

REQUIREMENTS FOR TRANSFER STUDENTS

1. Official transcripts from all colleges attended must be submitted. Transfer students must be in good standing at the last school attended and must have a minimum cumulative grade point average of 2.0.
2. The Office of Admissions makes the final determination concerning the acceptance of transfer credits from each college or university attended. Transfer credit may be accepted for course work with a grade of "C" or better from regionally accredited institutions of higher learning in accordance to established guidelines. Additional information about transfer credit is provided in the next section.
3. Applicants must submit two copies of the advanced standing to their advisor for review and approval.
4. High school transcripts are required if fewer than 15 semester hours are transferred.
5. Medical history prior to the end of the first semester of enrollment.

TRANSFER CREDIT
The Office of Admissions makes the final determination concerning acceptance, after all transcripts from each college attended have been received and reviewed. Transfer credit is accepted for course work with a grade of "C" or above from regionally accredited institutions of higher learning. Courses taken on a pass/fail basis may be considered for transfer credit if the official college or university transcript or official attachments, thereto, indicate that a passing grade is equivalent to a grade of "C" or better.
No more than 30 pass/fail semester credit hours may be considered for transfer credit. Academic departments will make the final determination of credits accepted toward the chosen curriculum.

OTHER SOURCES OF TRANSFER CREDIT
Additional transfer credits may be obtained in the following ways:

1. Advanced Placement Examinations
   Students who attain scores of 3, 4, or 5 on the Advanced Placement Examinations administered by the College Entrance Examination Board are eligible to receive credit on the basis of these tests. Scores should be forwarded directly from the College Board to the University. Information concerning the College Board Advanced Placement Examinations may be obtained from the Educational Testing Service, Princeton, New Jersey, or from your high school counselors and teachers. All AP scores must be sent to the Office of Admissions prior to enrollment.

2. College Level Examination Program
   Students who attain satisfactory scores on the Subject Examinations of the College Level Examination Program (CLEP) under the auspices of the College Entrance Examination Board are eligible to receive credit on the basis of such tests. However, the CLEP examination must be completed prior to or during enrollment at Norfolk State. Students should check with their advisor to ensure acceptability into the curriculum. Students applying for CLEP credit must have scores sent directly to the Office of the Registrar, Norfolk State University, 700 Park Ave., Norfolk, VA 23504. (Military service veterans who took CLEP, as part of the DANTES program, must have CLEP scores reported directly to the University from DANTES.)

   Selected CLEP Subject Examinations are offered nationwide monthly at national test centers. CLEP registration materials may be obtained from national test centers, from the Educational Testing Service, Princeton, New Jersey, or from the Assessment Center, Norfolk State University.

3. American College Testing Proficiency Examination Program (ACT PEP)
   Students seeking admission to the Baccalaureate Program in Nursing for Registered Nurses and who are not recent graduates of an articulating institution may receive 34 hours of lower level nursing credits through the use of ACT PEP. These examinations may be taken at centers throughout the nation. For more information contact the Department of Nursing.

4. Credit for Military Service
   Honorably discharged veterans of the United States Armed Forces may be allowed credit for military science and certain courses in health and physical education upon presentation of the Report of Transfer or Discharges (DD 214) to the Admissions Office. These forms should be submitted prior to the first semester of enrollment.

5. Credit for Military Service Schools
   Additional credit may be granted for service schools where equivalence in terms of college courses has been recommended for college credit in the Guide to the Evaluation of Educational Experience in the Armed Services, published by the American Council on Education. Appropriate documents must be submitted to the Office of Admissions or the Office of the Registrar for an evaluation of these credits.

6. Virginia Community College System Articulation Agreements
   Students transferring from a Virginia community college to Norfolk State University having completed an associate’s degree may be granted junior status. Please see the academic area for the listing of these agreements or the Transfer Brochure.

7. International Baccalaureate Exams
   Students who attain scores of 4, 5, 6, or 7 on International Baccalaureate examinations (IB) are eligible to receive credit on the basis of these tests. All IB scores must be sent directly to the Office of Admissions prior to enrollment.

ENROLLMENT DEPOSIT FEE
A non-refundable enrollment deposit of $100 is required of all entering students.

NON-DEGREE STUDENTS
Non-degree status is available to persons who are seeking teacher certification or who do not wish to pursue a degree program at Norfolk State University. Students on academic or disciplinary suspension are ineligible to apply as non-degree. Applicants should be prepared to present official credentials upon request. Financial aid and housing are not available except for students seeking teacher certification. Non-degree status does not guarantee future admission.

Non-degree students will not be considered as candidates for a degree or certificate until all admissions requirements are met and an application for enrollment is made and approved through the Office of Admissions. The University requires that a student apply for a degree program after completing 29 semester hours. Non-degree students are not required to have a letter of Advance Standing. A $25 non-refundable application fee is required.

INTERNATIONAL STUDENT ADMISSION
International applicants should submit the following items to the Office of Undergraduate Admissions:

1. Completed application
2. $25 Application Fee
3. Official or certified copies of all academic work and examination results
4. Two letters of recommendations
5. Proof of English proficiency for non-native English speakers
6. SATI or ACT scores for undergraduate applicants under the age of 21
7. Financial documents, including notarized affidavit of support and student certification form

Additional documents may be required

Due to the length of time required to obtain U.S. visas, applications for admissions must be received 3 - 4 months prior to the semester applicants wish to enroll. The Form I-20 or DS-2019 must be received in a timely manner as all documents must be submitted for review prior to an admission decision.

VIRGINIA IN-STATE TUITION GUIDELINES

ELIGIBILITY FOR IN-STATE TUITION
Listed are requirements for one to be eligible for in-state tuition rates in Virginia. The information is not intended to cover all situations, but to give an individual a basic understanding of the question of domicile.

DOMICILE
To be eligible for in-state tuition rates, students must be domiciled in Virginia for a minimum of one year before the first official day of classes. Domicile is defined as the student’s “present, fixed home where the student returns following temporary absences and where he or she intends to stay indefinitely.” In essence, domicile has two parts, and the student must meet both to qualify for in-state tuition. The student must reside in Virginia, and the student must intend to keep this as their home indefinitely.

As minors, students have the same domicile as their parents. Once the student becomes 24 years old, he or she can establish a domicile that is different from the parents. However, if a student is over 24 years old and is financially dependent on parents, normally the parents must be domiciled in Virginia before the student will be eligible for in-state tuition benefits.

FACTORS USED TO DETERMINE DOMICILE
The University reviews several factors when determining domicile, including:

1. Residence during the past year prior to the first official day of classes
2. State to which income taxes are filed or paid.
3. Driver’s License
4. Motor vehicle registration
5. Voter registration
6. Employment
7. Property ownership
8. Sources of financial support
9. Location of checking or passbook savings account
10. Other social or economic ties with Virginia and other states.

The presence of any or all of these factors does not automatically result in Virginia domicile. The factors used to support a case for in-state tuition benefits must have existed for one year before the first official day of classes.

Residence or physical presence in Virginia primarily to attend a college or university does not entitle students to in-state tuition rates. If a student enters an institution classified as an out-of-state student, that student will be required to provide clear and convincing evidence to refute the presumption that he or she is in the state primarily to attend, and does not intend to stay indefinitely. Applications for change of domicile are available in the Office of Admissions.

All applications and supporting documents must be received in the Office of Admissions prior to the start of the semester in which a change of domicile is sought. Domicile review and appeal procedures may take up to six weeks. If a student’s application is pending a decision, the student will be expected to pay out-of-state charges until written approval has been granted by the Domicile Committee.

Copies of the pertinent Virginia statute and guidelines issued by the State Council of Higher Education are on reserve in the University Library. For additional information, contact the Office of Admissions.

DIVISION OF FINANCE AND BUSINESS
Kevin Appleton, Vice President for Finance and Business
(757) 823-8011

The purpose of the Division of Finance and Business is to support the university’s teaching and learning environment in the areas of auxiliary services, food services, physical plant, postal services, student accounts and financial aid.

BOOKSTORE
The bookstore is a service element owned by Norfolk State University and operated by Follett College Stores. It is located in the Mills E. Godwin, Jr. Student Center. The bookstore provides the University community with the widest possible selection of goods and services of high quality at competitive prices, with particular attention being paid to academic requirements.

FOOD SERVICES
NSU Dining Services prepares home-style cooked meals for meal plan participants and customers. Meals are served at Scott Dozier Dining Hall & West Dining Hall which are conveniently located for students. Traditional meals also are served in the Faculty Dining Hall located adjacent to Scott Dozier Hall.
NSU Dining Services offers branded retail outlets such as Pizza Hut, Star Bucks Coffee and Sub-Connection. These retail dining areas are conveniently located on campus. The Spartan Station Food Court located at the Student Service Center provides specialty fast food and beverages for staff & students. Also located on the first floor of the Mills E. Godwin Center is the Sub-Connection Grill that prepares fresh sandwiches, and subs daily. NSU Dining Services also sponsors two Campus C-Stores to meet the needs of staff and students. The Starubucks Coffee cart is located in Wilson Hall Administration Building.

Catering services also are provided by NSU Dining Services. It is our commitment to accommodate customers and students with quality products and display incomparable service.

OPERATIONS - PHYSICAL PLANT
The Physical Plant Department provides all services needed to operate and maintain the University’s facilities. These services are provided by carpenters, painters, plumber/steam fitters, electricians, A/C mechanics, metal workers, locksmiths, housekeeping workers, grounds persons, laborers, engineers, administrative, and supervisory personnel.

In addition to operating and maintaining the physical plant, this department provides all labor services such as moving and hauling for the entire university community and services for the planning and executing of capital outlay projects and minor renovations and alterations to existing facilities.

POLICE DEPARTMENT
Norfolk State University Police Department has primary responsibility for security on campus. Norfolk State University Police Department’s mission is “to promote and maintain personal safety, and physical and environmental security.” The department's efforts include preventive measures through education and enforcement, to promote awareness of individual responsibility in safety and crime prevention. Norfolk State University Police Officers are sworn officers empowered and mandated to enforce federal, state and local laws.

Norfolk State University Police Department’s security policies and procedures comply with law enforcement regulations as established by the Commonwealth of Virginia and the Department of Criminal Justice Services.

POSTAL SERVICES
The Postal Service provides University faculty, staff and students with quality services when processing official campus and off-campus mail, as well as to provide postage meter service for the University community at the prevailing governmental rates for all classes of mail. Proper mail handling instructions and assistance to University faculty, staff and students is also provided.

INCLEMENT WEATHER
Decisions to close the University due to inclement weather will be made by the Vice President for Finance and Business in consultation with the President and other Vice Presidents. The decision to close Norfolk State University will be communicated by the Director of News & Media Relations via the area's media outlets.

During times of inclement weather (i.e. hurricane, tornadoes, etc.), employees and students can get information on NSU closings and cancellations from the following:

Radio Stations: Television Stations:
WNSB FM 91.1 WTKR CH 3
WOWI FM 103 WAVY CH 10
WJCD FM 105.3 WVEC CH 13
WHRV FM 89.5 and WVBT TV 43

For more information on this policy, please call the office of News & Media Relations at (757) 823-8373, the office of Finance and Business at (757) 823-8011 or the office of Risk Management at (757) 823-9142.

FINANCIAL INFORMATION AND SERVICES

OFFICE OF STUDENT FINANCIAL SERVICES
Student Financial Services offers services to students in the following areas:

- Cashier’s Office is located in Room 150, Harrison B. Wilson Administration Building. The hours of operation are Monday through Friday from 8:00 a.m. to 4:30 p.m. The Cashiers Office phone number is (757) 823-8381.
- Student Financial Aid Services is located in Harrison B. Wilson Administration Building, Room 130. The hours of operation are Monday through Friday from 8:00 a.m. to 5:00 p.m. The telephone number is (757) 823-8381.
- Student Accounts is located in Harrison B. Wilson Administration Building, Room 140. The hours of operation are Monday through Friday from 8:00 a.m. to 5:00 p.m. The telephone number is (757) 823-8381.

The University recommends that students use one of the local banks for banking needs. An automatic teller machine is located on campus.

Questions pertaining to payment plans, billing, and delinquent accounts should be directed to the Office of Student Accounts.

TUITION AND FEES
Tuition and fees are established annually by the University’s governing board, the Board of Visitors. Considerable effort is made to keep increases at a minimum. For fee information, students should obtain a current “Schedule of Tuition and Fees” and “Registration Information and Schedule of Classes” booklet from the Registrar’s or Admissions Office located in H. B. Wilson
Administration Building. These documents will include the current tuition, mandatory fees, room, board, and any special instructional fees.

Students who register during late registration will be assessed a late registration fee of $75.

Books, uniforms, supplies, professional dues, and examination expenses are paid separately from University charges. Students should consult their academic department for an estimate of these costs.

**MATRICULATION/ENROLLMENT FEE**
All first-time freshmen and transfer students must pay a one-time matriculation fee of $35.

All first-time and transfer students must pay a $100 non-refundable enrollment fee once accepted at Norfolk State University. For additional information about the enrollment fee, contact the Office of Admissions at (757) 823-8378.

**REGISTRATION PAYMENT DUE DATES**
All students are expected to pay prior balances and satisfy current tuition, fee, room and meal costs at the time of registration unless payment arrangements are made and/or awarded financial aid and other scholarships are sufficient to cover the costs.

In the event a student does not satisfy a semester’s charges per agreed upon terms, the student will be prevented from registering for future semesters.

**DEREGISTRATION**
If satisfactory payment arrangements are not made by established due dates, classes will be cancelled. If satisfactory financial arrangements are made before the registration period ends, students must re-register and are subject to late registration fees.

**PAYMENT OF TUITION AND FEES**
Students should be prepared to satisfy current tuition, fees, room and meal costs through either direct payment, financial aid, or one of the approved payment plans. Financial aid is the amount indicated on an award letter from the Financial Aid Office.

Current academic year Title IV financial aid funds will not be used to cover a prior academic year balance.

Non-University scholarships and work-study are not credited toward tuition and fees until funds are received; however, these awards may be used to establish a payment plan.

Students who register during late registration are expected to pay a late registration fee of $75. Payment may be made by cash, certified check, cashier’s check, personal check, money order, MasterCard, Visa or Discover Card. Checks and money orders should be payable to Norfolk State University and must include student’s name or student ID number.

**PAYMENT OPTIONS**
The University offers several options for paying tuition, fee, room and meal cost.

**OPTION 1** Pay tuition cost in full with cash, check, money order, VISA, MasterCard or Discover Card. If mailing payments, please allow for delivery time.

Mail payment to: Cashier’s Office
Norfolk State University
700 Park Avenue
Norfolk, Virginia 23504

**OPTION 2** Pay with a combination of financial aid grants and Ford Direct Loans, Parent Plus Loan, private loans and cash.

Note: Parent Plus and private loans must be approved by the lender before credit can be given for the loan amount. Apply for financial aid dollars early. The Free Application for Federal Student Aid (FAFSA) can be completed on-line at www.fafsa.ed.gov.

**OPTION 3** Pay monthly through the Academic Management Services (AMS) annual or semester monthly payment plans.

Benefits of this plan include:
* Manageable, interest-free installment payments
* Reduced need to borrow
* Tuition Insurance at no extra cost
* Combine plan with Financial Aid

There are two easy ways to enroll in the AMS Plan.* By Mail: Obtain and complete an AMS Enrollment Form. Forms can be obtained from AMS or Office of Student Accounts.
*By Phone: Call an AMS Education Payment Counselor at (800) 635-0120.

**OPTION 4** Pay by selecting the NSU 50% Spartan Payment Plan. The Spartan Plan is a semester only plan and there is a $50 processing fee. This plan may be selected if the remaining balance, after subtracting awarded financial aid, other scholarships, private loans, work study and deposits are 50% or less of total expenses. Students interested in the NSU Spartan Payment Plan should contact the Office of Student Financial Services at (757) 823-8381.
For balances greater than 50% total expenses, the AMS payment plan may be selected.

Note: The AMS Payment Plan is available to all students.

FINANCIAL AID FOR STUDENTS
The purpose of Norfolk State University’s financial aid program is to provide assistance to eligible students who, without such aid, would be unable to attend a university. Aid is awarded on the basis of need. Types of aid include scholarships and grants, loans and employment. Applications and additional information may be obtained at the Office of Student Financial Services.

The University offers a number of awards each year to eligible returning students and to students who have been accepted for admission. Some of these awards are available only to Virginia residents while others are awarded without regard to state residency.

A student must be enrolled at least half time, matriculating in a degree-seeking program or certification, and be in good academic standing in order to be eligible for financial assistance. However, certain programs require a student to maintain a full-time status.

Financial aid is awarded on an annual basis. Students are requested to reapply for financial aid each year and must continue to meet eligibility criteria. The priority deadline for applying for Norfolk State University’s administrated financial aid is April 15 for the ensuing academic year.

An entering student must be accepted for admission before receiving a financial aid award offer. Award notifications for on time applicants are normally mailed by June 1.

The information on financial aid contained in this catalog is subject to change or deletion as circumstances warrant.

FINANCIAL AID APPLICATION REQUIREMENTS
To be considered for financial aid, a student must complete and submit all information no later than April 15 preceding the academic year for which application is made. Applications and information received after this date will be reviewed as funds are available. The following information is required:

1. Free Application for Federal Student Aid (FAFSA)
   Students are required to complete the FAFSA in order to be considered for a financial aid award. The FAFSA may be obtained at any public library, high school, college, university or any financial aid office, including NSU. The Department of Education has made the FAFSA available on-line at www.fafsa.ed.gov. The FAFSA cannot be signed or mailed until January 1 of the academic year.

2. Verification of Taxable and Non-Taxable Income
   Upon request, students and parents may be required to submit a copy of their tax return and W-2 form(s). Non taxable income such as social security, veteran’s benefits, Aid to Dependent Children, etc., must be verified by submitting a written statement from the agency of certification. Students and parents with zero incomes must submit a notarized statement indicating such.

3. Graduate and Professional School Financial Aid Services
   Graduate students are required to complete the FAFSA.

4. Student Aid Report (SAR)
   Once the FAFSA is received and processed, the Federal Pell Grant processor will mail the applicant a report titled Student Aid Report (SAR). The applicant may submit all pages to the NSU Office of Financial Aid

5. Federal PLUS Applications
   Financial aid funds are limited and cannot meet the demonstrated needs of all students applying for financial aid. Because of this, parents may apply for a Parent Plus Loan. To apply for a Parent Plus Loan, parents must complete an application. The loan applications are available at banks, credit unions, savings and loan associations, and the NSU Office of Financial Aid. The application must be completed and submitted to the Financial Aid Office for processing.

MINIMUM ACADEMIC PROGRAM STANDARDS FOR FINANCIAL AID ELIGIBILITY

1. General Qualifications
   In order to receive grant, loan or work assistance, a student must maintain satisfactory academic progress in the course of study the student is pursuing at the University. Students who fail to maintain satisfactory progress may not receive any institutional, federal, or state grants, scholarships, or work-study assistance.

   Neither incompletes (I) nor course withdrawals (W) will count toward hours earned but will count toward hours attempted. Repeated courses will count toward hours earned if:
   a. a passing grade was received, and
   b. the course had not been counted previously toward hours earned.

2. Undergraduate Students
   a. The minimum academic standards required of all full-time undergraduate students to maintain eligibility for continued financial aid is indicated in Paragraph I, above.
   b. To be considered full-time an undergraduate student must be enrolled for a minimum of 12 credit hours per semester.

3. Part-time Undergraduate Students
   a. A student enrolled in fewer than twelve (12) semester hours is considered a part-time student. A student with a classload of nine to eleven (9 - 11) semester hours is classified as three quarter (3/4) time; a student with a
A class load of six to eight (6 - 8) semester hours is classified as half time. The classification is based upon the number of semester hours for which the student is officially enrolled on the last day for adding classes as published in the Norfolk State University Registration Information and Schedule of Classes booklet for the appropriate semester.

b. Financial aid eligibility for students who are enrolled less than full-time will be calculated on a prorated basis using the Academic Classification table shown below for full-time students. Part-time students also must meet and maintain all requirements as established by University, federal, and state guidelines.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS FOR FULL-TIME UNDERGRADUATES

Norfolk State University is required by federal regulations to adhere to minimum standards of satisfactory academic progress (SAP) that relate to a student’s eligibility for federally funded financial aid programs, including state, federal and institutional grant(s), scholarships, employment, and loan programs. Students must meet minimum satisfactory academic progress standards in order to receive and maintain eligibility for Title IV funds. The satisfactory academic progress standards apply to all students in degree seeking programs of study who wish to be considered for financial assistance. SAP is a qualitative as well as a quantitative measurement of courses attempted and courses completed. Completed hours must equal 66% of hours attempted to meet SAP standards.

Students must attain at least the minimum cumulative grade point average required for the number of credits earned for the academic classification level and must make satisfactory progress towards degree completion by advancing to the next academic classification level. Failure to maintain or exceed the minimum cumulative grade point average will result in the cancellation or denial of financial assistance. The minimum grade point average for each classification level is indicated below:

<table>
<thead>
<tr>
<th>Level</th>
<th>Total Credit Hours Earned</th>
<th>Cumulative Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>Fewer than 30</td>
<td>1.7 or higher</td>
</tr>
<tr>
<td>Sophomore</td>
<td>30 - 59 credit hours</td>
<td>1.8 or higher</td>
</tr>
<tr>
<td>Junior</td>
<td>60 - 89 credit hours</td>
<td>2.0 or higher</td>
</tr>
<tr>
<td>Senior</td>
<td>90 or more credit hours</td>
<td>2.0 or higher</td>
</tr>
<tr>
<td>Graduate</td>
<td>XXXXXXXXXXXX</td>
<td>3.0 or higher</td>
</tr>
</tbody>
</table>

These minimum standards must be met in order to be considered for any state, federal, or institutional financial assistance. Aid will be terminated for any student who does not maintain the minimum standard or qualitative measurements.

ENROLLMENT STATUS

For financial aid purposes, enrollment status is based on the following listed information:

<table>
<thead>
<tr>
<th>No. of Credit Hours</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twelve (12) or more hours</td>
<td>Full time</td>
<td>Full time</td>
</tr>
<tr>
<td>Nine (9) to eleven (11) hours</td>
<td>Three-Quarter time</td>
<td>Full time</td>
</tr>
<tr>
<td>Six (6) to Eight (8) hours</td>
<td>Half time</td>
<td>Half time</td>
</tr>
<tr>
<td>Three (3) to Five (5) hours</td>
<td>Less Than Half Time</td>
<td>Less than Half Time</td>
</tr>
</tbody>
</table>

Enrollment status is based on the number of credit hours for which students enroll for each academic term. Undergraduate and graduate students may be considered for financial assistance based on the number of credit hours enrolled for each term. If enrolled less than full-time, aid may be pro-rated based on reduced cost of attendance. If enrolled less than half time, only undergraduate students with Pell eligibility may be considered for assistance.

TO REINSTATE ASSISTANCE

In order to regain financial aid eligibility, students must enroll in classes at their expense in order to advance their cumulative grade point average to the minimum satisfactory academic standard. After successfully obtaining the minimum satisfactory academic standards in accordance with their classification level, students may be reinstated or considered for financial assistance for upcoming terms. It is the students’ responsibility to notify the Financial Aid Office when they have attained a cumulative grade point average that meets the minimum satisfactory academic progress requirement in the allotted time frame for awarding aid for the upcoming term.

RIGHT OF APPEAL

In order to appeal the decision of denial by the Financial Aid Office, students may submit a letter of appeal, along with all supporting documentation, to the Financial Aid Appeals Committee in the Office of the Vice President of Financial and Business, 310 Harrison B. Wilson Hall or mail letter of appeal, along with all supporting documentation, to Financial Aid Appeals Committee, Norfolk State University, 700 Park Avenue, Norfolk, VA 23504. Letters of appeal along with all supporting documentation may be faxed to (757) 823-8084.

Note: The letter of appeal must be submitted in writing and must include the student’s name, social security number, signature, address, and a detailed explanation addressing the extenuating circumstances leading to satisfactory academic progress standards not being met.

Supporting documentation of circumstances or explanation may be required for reinstatement. It is strongly recommended that students submit with the letter of appeal any supporting documentation. The Financial Aid Appeals Committee meets on the first and third Friday of each month to make decisions regarding satisfactory academic progress appeals.
A response to the student’s appeal will be forwarded to him or her and a copy of the response will be forwarded to the Financial Aid Office. The letter of appeal and supporting documentation will be retained in the student’s financial aid file.

**TYPES OF AID, GRANTS AND SCHOLARSHIPS**

1. **Federal Pell Grant**
   Federal Pell Grants are available to undergraduate students only and is administered by the Federal Pell Grant Office. Eligibility indices are determined by the Pell Grants Office based on data submitted by the applicant and/or family. Norfolk State University will permit a student to receive a Federal Pell Grant no more than the equivalent of 12 semesters. The student must be enrolled for at least 3 semester hours.

2. **Federal Supplemental Educational Opportunity Grant (FSEOG)**
   Federal Supplemental Educational Opportunity Grants are awarded to students who have financial need and are available to undergraduate students only with a maximum award of $4,000 per academic year. FSEOG is awarded to students with the highest need levels. Priority is given to students who are enrolled full-time and are Pell eligible.

3. **College Scholarship Assistance Program (CSAP)**
   Student must be enrolled the academic year for which the award is to be received, as at least a half time undergraduate in a degree program; student must also be a bona fide domiciliary resident of Virginia; student must demonstrate sufficient financial need; student’s course of study shall not be in religious training or theological education; student must be maintaining satisfactory progress; student must advance to next classification in order to be considered for CSAP.

4. **College Departmental Activities Scholarships**
   College Departmental Activities Scholarships are administered by certain college departments. However, all students applying for and receiving financial aid can receive financial aid only in an amount representative of the difference between the scholarships and the derived need of the student.

5. **Commonwealth Award**
   Commonwealth awards are available to Virginia students who have an overall average of “C” or better and evidence of need. Awards are renewable for three subsequent years as long as the student advances to the next classification and funds are available. Student must be enrolled at least half-time and awards may not exceed the cost of tuition.

6. **Graduate Fellowship (GF)**
   Graduate fellowships are limited fellowship awards to graduate full-time students on the basis of merit (B or better GPA) and/or financial need. Interested graduate students should contact their department or the Office of the Dean for Graduate Studies. The scholarships may not exceed the cost of tuition.

7. **NSU Foundation Scholarship Program**
   The purpose of the NSU Foundation Scholarship Program is to attract and retain students who have distinguished themselves by their scholarly achievements and their personal qualities. The program will make provisions for the awarding of scholarships valued at $2,000 each. Students nominated for the scholarship must be enrolled full-time. For additional information about the program, call or write the Office of Academic Affairs, Norfolk State University, (757) 823 8408.

8. **Army ROTC Scholarship Program**
   The ROTC Program provides financial assistance for the undergraduate education and training of highly qualified and motivated young men and women who desire to pursue careers as commissioned officers in the United States Army after graduation from college. For additional information about the program, call or write the Army ROTC Department, Norfolk State University, (804) 623 8541.

9. **Navy ROTC Scholarship Program**
   The Naval Reserve Officers Training Corps (NROTC) Program provides opportunities for young men and women to qualify for commissions in the United States Naval Reserve while attending college. The NROTC Scholarship Program provides tuition and other financial benefits. It is a highly competitive program maintained for one purpose – to educate and train qualified young men and women for service as commissioned officers of the regular Navy and Marine Corps. For additional information, students should call or write the Navy ROTC Department, Norfolk State University, (757) 823 8895.

10. **Virginia Guaranteed Assistance Program (VGAP)**
    The Virginia Guaranteed Assistance Program is available to Virginia students. This scholarship is renewable for three years; the student must have a 2.5 high school grade point average and be enrolled full-time as a needy, dependent student. The student must also complete at least 12 hours per semester, with at least a 2.0 grade point average to renew the award.

**LOANS**

1. **Federal Direct Loans**
   These loans do not involve private lenders. Students borrow directly from the federal government. They automatically apply when they complete the FASFA.

   The interest rate is calculated as the bond equivalent rate of the 90-day treasury bills auctioned at the final auction before June 1, plus 3.10 percent. The interest rate may not exceed 8.25 percent. The interest rate is specified in the disclosure statement when a loan is disbursed. The variable interest rate is recalculated annually, effective July 1 of each year. An undergraduate student may borrow a maximum of $2,625 for the first year, $3,500 for the second year, and $5,500 for the junior and senior years of undergraduate study. Graduate students are permitted to borrow up to $8,500 a year.

   If a student has a Subsidized Federal Direct Loan (need-based), the federal government pays the interest on the loan while he or she is in school. If a student has an Unsubsidized Federal Direct Loan you will be responsible for the interest during in-school and deferment periods.
2. Carl D. Perkins Loans NDSL (Federal Perkins Loan)
A long term, low interest loan program for needy students who may borrow up to a total of (a) $4,500 for the first two years; (b) $5,000 for the total undergraduate program; (c) $18,000 for graduate/professional students, including undergraduate amount. Students accepting NDSL assistance should be aware of their repayment responsibilities. Repayment of principal begins nine months after the student graduates or leaves school for other reasons. Funding of the Perkins loan is contingent upon past borrowers repaying the loan.

3. Virginia State Student Loan (VSSL)
The General Assembly has allocated funds to the University for loans to eligible students who are Virginia residents and enrolled full-time. Awards may not exceed the cost of tuition and fees per academic semester. Repayment begins six months following graduation, withdrawal, or when the student ceases to carry at least a half time academic work load.

Prior to graduation or withdrawal, each student must make arrangements for repayment of his or her outstanding loan within the maximum repayment period of five years. A minimum monthly repayment of $30.00 is required.

4. Federal PLUS Loans
Annual Loan limits: Cost of attendance minus other aid.

EMPLOYMENT
1. Federal Work-Study Program (FWS):
The College Work-Study Program provides jobs for students who must earn a part of their educational expenses. Priority is given students enrolled on at least a half-time basis. Students will be expected to perform the work that is agreed upon when accepting the FWS award. Students may not earn more than the amount in their award letter, and can work a maximum of 20 hours per week while classes are in session, and not more than 40 hours per week during other periods of time. The Office of Financial Aid will notify work-study recipients of their agency of employment by the start of the academic year or semester. It is the student’s responsibility to ensure that a properly completed work-study time record sheet is submitted to the Financial Aid Office by noon of the last working day of each month unless otherwise directed.

2. Norfolk State Work-Study Program (NSWP):
The Norfolk State Work-Study Program provides jobs for students who must earn a part of their educational expenses. Need becomes a criterion for eligibility if the student is receiving funds from federal or state resources. Students must be enrolled at least on a half-time basis; however, priority is given students enrolled full-time. Students will be expected to perform the work that is agreed upon when accepting the NSWP award. Students may not earn more than the amount in their award letter, and can work a maximum of 20 hours per week while classes are in session, and not more than 40 hours per week during other periods of time. The Office of Financial Aid will notify work-study recipients of their agency of employment by the start of the academic year or semester. It is the student’s responsibility to ensure that a properly completed work-study time record sheet is submitted to the Financial Aid Office by noon of the last working day of each month unless otherwise directed.

OTHER SOURCES
1. Social Security Benefits
Students eligible to receive social security benefits should contact their local Social Security Office for more information.

2. Veterans Benefits
Students may apply for educational benefits through the VA Vocational Rehabilitation Program. Dependents of some disabled or deceased veterans may qualify for educational benefits. For more information contact the Veterans Affairs Office on the campus.

3. State Vocational Rehabilitation
Disabled or handicapped persons may qualify for educational assistance through the Virginia Department of Vocational Rehabilitation. These persons are required by the Department to apply for financial assistance through Norfolk State University.

4. Active Duty Personnel
Active duty military personnel may qualify for either VA Assistance or the Tuition Aid Program of the Armed Forces which provide partial payment of tuition costs. For information about the VA Assistance, contact the Veterans Affairs Office on campus. For information about the Armed Forces Tuition Aid Program, contact your Educational Services Office.

5. Virginia War Orphans Education Program
The Virginia War Orphans Education Program provides educational assistance for children, or surviving children of certain veterans or service personnel. To be eligible for assistance under this program, an applicant must meet the following basic eligibility requirements:

a) The applicant must be no less than sixteen (16) years of age, or no more than twenty-five (25) years of age.

b) One of the applicant’s parents must have served in the armed forces of the United States; and must be permanent and totally disabled due to an injury or disease incurred in a time of war or other period of armed conflict; or

c) One of the applicant’s parents must have died as a result of injury or disease incurred in a time of war or other period of armed conflict; or

d) One of the applicant’s parents must be listed as a prisoner of war or missing in action

e) The applicant’s parent, on which eligibility is based, must have been a resident of the Commonwealth of Virginia at the time of entry into active military duty; or

f) The applicant’s parent, on whom eligibility is based, must have been a resident of the Commonwealth of Virginia for at least 10 consecutive years immediately prior to the date of application.

g) The applicant must provide written verification attesting to his or her acceptance as a student in either a state-supported secondary or post secondary educational institution.
Eligible individuals are entitled to a maximum of forty eight (48) months of tuition free education at state-supported educational or training institutions. Individuals entitled to this benefit may utilize it to pursue any vocational, technical, undergraduate, or graduate program of instruction. Generally, programs listed in the academic catalogs of state supported institutions are acceptable provided they have a clearly defined educational objective, i.e., certificate, diploma or degree.

Requests for applications should be directed to the Director, Division of War Veterans’ Claims, Commonwealth of Virginia, 210 Franklin Road, S.W., Roanoke, VA 24011. If possible, applications should be submitted at least four (4) months before the expected date of matriculation.

6. Part-Time Employment:
The University keeps in close contact with local business concerns through which many students are placed in positions which offer remuneration for work experience.

VETERANS
Veterans enrolling under the Veterans Readjustment Benefits Act of 1966 or under other federal programs may enroll in special college and terminal curricula. Special counseling and guidance are available in the Office of Veterans Affairs.

Since the University receives no funds from the government for tuition and fees for veterans studying under the Readjustment Benefits Act of 1966, students registered under such authorization must make payments according to the schedule of fees.

ADDITIONAL INFORMATION ABOUT FINANCIAL AID PROGRAMS CAN BE SECURED FROM THE FINANCIAL AID OFFICE AT NORFOLK STATE UNIVERSITY, BY VISITING NSU'S WEBSITE AT WWW.NSU.EDU, AND BY CHECKING THE FEDERAL WEBSITE AT WWW.FAFSA.ED.GOV.

STUDENT REFUNDS
Students who present a certified check or money order for an amount in excess of his or her obligation to the University should expect to receive the difference in the form of a University check mailed within seven working days.

Refunds are given ONLY after all University obligations are paid in full. Financial aid awarded but not received by the University is not considered in the refund calculation.

Refunds due as a result of direct overpayment or reduction in course load will be processed upon receipt of a refund request in the Office of Student Financial Services. The refund process begins after the add period ends and requires seven working days.

All refund checks will be mailed. If a local or campus address is not provided, the refund check will be mailed to the permanent address on file with the University.

The financial aid disbursement process occurs each week. Refunds generated as a result of financial aid posting are mailed at the end of each week.

PRO-RATA REFUND POLICY
Tuition charges are adjusted on a pro-rata basis for students who withdraw from NSU during the first nine weeks of the fall and spring semesters and the first three weeks of the summer session.

Students who fail to adhere to the published deadlines when withdrawing from the University or dropping classes will be charged the appropriate tuition charge and receive a failing grade (F). Non-attendance does not constitute an official withdrawal from the University.

Withdrawing from the University or dropping classes below full-time or part-time status may result in a reduction or cancellation of financial aid awards.

See Course Schedule booklet for Pro-Rata Refund Schedule.

BILLINGS
The University sends multiple statements each semester to students who have an outstanding balance or have had activity in their accounts during the statement period. The statement will show the balance brought forward and detail the activity of the period covered.

Questions pertaining to bills or financial aid should be directed to the Office of Student Financial Services, Room 140 H. B. Wilson Hall, (757) 823 8381.

Questions pertaining to financial aid awards should be directed to the Financial Aid Office, Room 131, H. B. Wilson Hall, (757) 823 8381.

DELINQUENT ACCOUNTS
Students who fail to honor payment arrangements or have balances resulting from incomplete or canceled financial aid will be charged a late payment fee of $30. Grades, transcripts, diplomas, certifications, and non-mandatory verifications will be withheld. Payment in full will be required.

Delinquent accounts are referred to collection agencies and/or attorneys and are reported to the credit bureau. The University is permitted under Virginia Law to attach Virginia State income tax refunds and lottery winnings in repayment of any debt, which is owed to the University. In the event an account becomes delinquent, the student is responsible for all reasonable administrative costs, collection fees, and attorneys’ fees incurred in the collection of funds owed to the University.
RESIDENCE HALL FINANCIAL INFORMATION

DAMAGE DEPOSIT
Students who desire to live in the residence facilities will be required to pay a non-refundable residential room deposit of $300. Students living on campus for the first time pay a $200 room deposit, which is used to reserve their room, and a one-time $100 residential damage deposit.

FINANCIAL ARRANGEMENTS
Students must confirm housing arrangements before arrival by completing a Residential Life application and paying the $300 deposit.

Students must make satisfactory payment arrangements before room key is issued.

FINANCIAL OBLIGATIONS AND REGISTRATION
Students are required to fulfill their financial obligations for tuition, fees, room and meals for each semester of enrollment. Prior balances must be paid before students will be allowed to register for classes in subsequent semesters. Payment arrangements for the current semester must be in place to complete the registration process, and prevent the deletion of class schedules. Returning students will not be allowed to obtain a key to residence halls until payment arrangements are in place and financial clearance is given.

All prior balances must be paid before being allowed to register for a future semester.

If Residential Life room and meal charges do not appear on the Registration or Account Statement, contact the Office of Residential Life at (757) 823-8407.

The $100 deposit does not apply to room and board charges or other fees. It is retained in a damage account as long as the student resides in the University's residence halls and there are no damages.

Refunds for room reservation deposits will be made for the following reasons:

1. Space is not available to accommodate the student;
2. The student is called for active duty prior to the first day of class;
3. The student is deceased; or
4. The prospective student is not admitted to the University.

Unclaimed deposits will be reported to the Commonwealth of Virginia Department of Treasury's Division of Unclaimed Property.

SPECIAL NOTICE: Should conditions warrant, the administration reserves the right to adjust fees and charges without advance notice.

STUDENT ACCIDENT INSURANCE PLAN
All full-time undergraduate domestic students (U.S. citizens and permanent residents) and all international students (full and part-time) will be required to have some form of accident insurance in order to attend classes. Students will automatically be enrolled in the accident only portion of the Student Accident and Insurance Plan sponsored by the University.

The annual premium of $100 will be assessed to each qualifying student in two equal installments of $50 each semester.

During the first semester of each academic year, students will have the option of waiving enrollment in the accident insurance plan if they are covered by another insurance company. An Insurance Enrollment Waiver Form is available in the Office of Student Financial Services.

The insurance Enrollment Waiver Form, along with the required documentation, must be returned to the Office of Student Financial Services by the deadline date.

The charge can be waived only during the first semester of enrollment for the academic year.

STUDENT ADDRESS INFORMATION
Students are responsible for advising the University of a change of address or corrections. Students may change address information at the Office of Student Financial Services or the Office of the Registrar.

BOOKSTORE AUTHORIZATION
Students receiving financial aid may be eligible to receive a bookstore authorization to purchase books and supplies.

If awarded grants and Ford Direct Loans exceed the total tuition, fees, room and meal cost, funds may be put on the Spartan Card (debit card) for books and supplies. Students must be registered and have a current Spartan Card.

To obtain a book authorization, student should go to the Office of Student Financial Services in H.B. Wilson Administration Building, Room 140.

BOOKS/SUPPLIES
Books and supplies are not included in the cost of tuition and fees. Students should be prepared for this expense on the first day of class. Textbooks and supplies may be purchased in the University Bookstore located in the Mills E. Godwin (Student Union) Building.
DIVISION OF RESEARCH AND TECHNOLOGY
Adebisi Oladipupo, Vice President for Research and Technology
(757) 823-2144

The mission of the Division of Research and Technology is to be a responsive and responsible customer-centered organization that enables and empowers its client (the Norfolk State University community) to effectively accomplish its business unit goals.

OVERVIEW
The Division of Research and Technology is primarily responsible for the planning, implementation, and utilization of technology for an effective and efficient discharge of the University’s business. The Division is also responsible for acquiring external funding support for sponsored program activities, encouraging and sustaining faculty and staff interests in these endeavors.

The Research and Innovation to Support Empowerment (RISE) project is intricately linked to the Division of Research and Technology in that RISE is underpinned by technology and research. Also, the Division is the primary interface between NSU and the Enterprise and Empowerment Foundation (E2F) that oversees the RISE project.

The Division of Research and Technology consists of the following units: Office of Information Technology (OIT), Enterprise Information Systems (EIS), Office of Sponsored Programs (OSP), Media Services, Telecommunications, and the Educational Technology Services (ETS) group, which is currently under OIT.

COMPUTER SERVICES (OIT and EIS)
(757) 823-8678 – Helpdesk

Computer Services at Norfolk State University are handled by two departments, OIT and EIS. OIT handles primarily all networking issues (infrastructure development, deployment, and maintenance) while EIS handles the administrative computing needs (all Enterprise Resource Planning systems).

EDUCATIONAL TECHNOLOGY SERVICES (ETS)
This unit handles the management of all web-based and web-enabled online courses. It also manages the BlackBoard course management system and trains end-users in its effective utilization. This unit is poised to handle niche areas in distance learning initiatives at Norfolk State University.

SPONSORED PROGRAMS (OSP)
This is the unit with administrative oversight for Norfolk State University grant, contract, and other sponsored program activities.

Sponsored Programs is the primary interface for all departments and units within the University for all local, state, federal, and quasi-governmental funding agencies, corporations and other entities that provide research projects and other sponsored programs. This excludes programs for charitable gifts, endowments, and all other forms of private giving, all of which are managed by the Division of University Advancement.

The mission of Sponsored Programs is to shepherd programs and funds into and through the University and to assist in developing and maintaining the intellectual base required to competitively seek external funding. This office seeks, pursues, solicits and manages funding opportunities for all research and other sponsored program activities university-wide.

MEDIA SERVICES
Media Services is responsible for maintenance and programming of the WNSU-TV Radio, maintaining the Satellite Uplink and Downlink, developing and updating “smart” electronic classrooms on campus, supporting the Department of Mass Communications and Journalism, providing adequate media records of important University events, and supporting the University in its marketing efforts.

TELECOMMUNICATIONS
This unit is responsible for all telecommunication service on campus, including cell phones and desk phones. It also supervises the acquisition and utilization of these devices.

DIVISION OF UNIVERSITY ADVANCEMENT
Paul Shelton, Vice President for University Advancement
(757) 823-8323

The purpose of the Division of University Advancement is to advance the University’s mission by:

- Involving constituents and stakeholders in the life of the University;
- Informing constituents of University achievements, priorities, opportunities and challenges;
- Researching, identifying, cultivating and securing support and financial investments in the University;
- Being good stewards of our relationships and resources; and
- Promoting and enhancing the University’s stature and image.

The above mission is accomplished through the planning and execution of various programs that promote voluntary support for the University and ongoing liaisons with governmental agencies, foundations, business and industry, alumni and others that provide funds and resources to the University. Specific initiatives to actualize the division’s goals are coordinated through the functional areas of alumni relations, development, event planning, marketing services, and news and media relations. The NSU Foundation, Inc. is a separate entity that exists to solicit, receive, invest and administer gift resources for the University.
OFFICE OF PLANNING AND BUDGET
Earlie Horsey, Executive Director
(757) 823-8679

In support of the NSU mission, the Office of Planning and Budget provides unbiased, accurate, concise, timely data, and analysis to the campus community, policy makers, and the general public to assist strategic development and decision making, promote sound fiscal management, facilitate enrollment management activities and present a clear perspective of NSU.

The office houses the functions of Budget, Institutional Research and the Presidential Institute for Administrative Leadership Development.

DIVISION OF ACADEMIC AFFAIRS
Elsie Barnes, Vice President for Academic Affairs
(757) 823-8408

The Division of Academic Affairs at Norfolk State University bears leadership responsibility for the academic focus of the institution. The Division plays a central role in the articulation, development, initiation and continuing support of the educational philosophy of Norfolk State University which is articulated in our mission: "To provide an affordable, high quality education for an ethnically and culturally diverse student population, equipping them with the capability to become productive citizens who continuously contribute to a global and rapidly changing society."

The Division is made up of five schools, two satellite centers, and other academic programs. The schools are the School of Business, the School of Education, the Ethelyn R. Strong School of Social Work, the School of Liberal Arts and the School of Science and Technology. Thirty-three bachelor's degree programs, fifteen master's degree programs, and two doctoral degrees are offered through these schools. Additionally, in keeping with the effort to respond to the exigencies of a rapidly changing technological society, the institution has established five Centers of Excellence: The Center for Applied Social Science Research and Public Service, the Center for Entrepreneurship, the Institute for Service Learning and Literacy, the Bringing Education and Science Together (BEST) Laboratory, and the Center for Materials Research.

Continuing Norfolk State University's tradition of service, the Division of Academic Affairs promotes and encourages community involvement. The Division of Academic Affairs provides a variety of programs and opportunities in which the students, faculty and staff may demonstrate their altruistic spirit.

The goal of student success guides all academic policies and processes. The Division of Academic Affairs is committed to student mastery of subject matter, the acquisition of liberal knowledge and the development of competence in students' career fields. The leadership of the Division of Academic Affairs works in concert with the faculty to ensure that the curriculum supports the university's mission and strategic imperatives.

To that end, the Division has developed a strategic plan that includes the following goals:
1. To ensure faculty competence.
2. To ensure student mastery of subject matter.
3. To ensure an optimum learning environment.
4. To ensure ongoing faculty development.
5. To provide a stimulating learning environment.
6. To ensure a sound learning environment.
7. To encourage faculty and student research, scholarship and grantsmanship.
8. To expand current course offerings.

The implementation plan for these goals, including targeted initiatives, idea descriptions, action steps and resource needs, are outlined in the full body of the Division of Academic Affairs Strategic Plan. A copy of this plan is located in the administrative offices of the Division of Academic Affairs, Suite 460, Harrison B. Wilson Hall (757) 823-8408.

AUDITING COURSES

Students who desire to attend classes but do not plan to receive credit may audit courses. Grades are not recorded for these students, and they must have the permission of the instructor. An audited course is counted as part of a student's total class load, and he or she must pay tuition the same as if receiving credit. To audit a course the student must complete the Course Registration Worksheet and place an "AU" in the "TUITION HOURS" column of the worksheet. The instructor's signature should be placed in the "Comments" column on the same line as the audited course. The auditing student is expected to attend classes regularly but is not required to submit assignments or take examinations. Changing from audit to credit or from credit to audit is permitted only during the scheduled "Add" period. Audited courses may be dropped during the scheduled "Drop" period.

CHANGES IN CLASS SCHEDULE (ADD/DROP)

Changes in class schedules (Add/Drop) may be made only with the written consent of the course instructor and the advisor or department head. Students who have not declared a major may contact ACCESS for advising and schedule changes. Non-matriculating students should contact the Dean's Office in the School of Liberal Arts to process schedule changes. A student must complete the Administrative Change form, obtain the appropriate signatures, and report to the offices of the Registrar and Cashier to complete the transactions. No changes in class schedules may be made after the dates stipulated in the academic calendar for making changes without incurring the penalty of failure, "F", for the course(s) involved.
WITHDRAWAL FROM THE UNIVERSITY

University policy requires a student to complete an Application for Withdrawal when enrollment is terminated before the end of a semester or summer session. The Application for Withdrawal may be obtained from the department head/advisor and must be submitted to the Office of the Registrar no later than two weeks before the last day of classes. The student should discuss the matter with the department head/advisor before processing the Application for Withdrawal. The last day to officially withdraw from all classes is on the last published date for all classes.

If the student is ill or otherwise incapacitated and cannot complete the withdrawal (or drop) process, the student must contact, or have someone else contact, the Office of the Vice President for Student Affairs immediately.

A student who fails to adhere to the published deadlines for withdrawing from (dropping) classes or withdrawing from the University will be charged the appropriate tuition and will receive a failing grade (F).

NOTE: UNDER NO CIRCUMSTANCE DOES NON-ATTENDANCE CONSTITUTE AN OFFICIAL WITHDRAWAL FROM THE UNIVERSITY.

PRO-RATA REFUND POLICY
Tuition and room and board charges are adjusted on a pro-rata basis for students who withdraw during the first nine weeks of the fall and spring semesters, and the first three weeks of the summer session. Tuition charges are adjusted based upon the following schedule:

<table>
<thead>
<tr>
<th>Withdrawal Date</th>
<th>University Retains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Classes</td>
<td>$50 Administrative Fee</td>
</tr>
<tr>
<td>First Week</td>
<td>10% + $50</td>
</tr>
<tr>
<td>Second Week</td>
<td>20% + $50</td>
</tr>
<tr>
<td>Third Week</td>
<td>30% + $50</td>
</tr>
<tr>
<td>Fourth Week</td>
<td>40% + $50</td>
</tr>
<tr>
<td>Fifth Week</td>
<td>50% + $50</td>
</tr>
<tr>
<td>Sixth Week</td>
<td>60% + $50</td>
</tr>
<tr>
<td>Seventh Week</td>
<td>70% + $50</td>
</tr>
<tr>
<td>Eighth Week</td>
<td>80% + $50</td>
</tr>
<tr>
<td>Ninth Week</td>
<td>90% + $50</td>
</tr>
<tr>
<td>Tenth Week</td>
<td>No Refund</td>
</tr>
</tbody>
</table>

Funds must be returned to the federal financial aid program, etc.

Required Order for Allocating Refunds and Repayments
* Federal Family Education Loan Program (FFELP)
* Federal Direct Student Loan Program (FDSLP)
* Federal Perkins Loan Program
* Federal Pell Grant Program
* Federal SEOG Program
* Other Title IV Programs

Withdrawal from the University may result in a reduction or cancellation of financial aid awards. Students receiving financial aid should contact the Financial Aid Office for complete information about their individual situations.

TUITION APPEAL

POLICY STATEMENT: Norfolk State University will promptly refund tuition and/or cancel a financial charge from a student's account provided the student meets the requirements of the University's policy on tuition appeals and submits supporting documentation. Appeals that do not represent a sound basis for reimbursement will be denied.

SUBMITTING AN APPEAL: Appeals are accepted in the Office of the Registrar, Room 110 Harrison B. Wilson Hall, 700 Park Avenue, Norfolk, Virginia 23504. For information on the tuition appeal process or on obtaining an appeal form, please contact the Office of the Registrar at (804) 823-8229.

ADDITIONAL CHARGES
Students enrolled in certain music, physical education, nursing or other such courses may be assessed an additional fee to cover the cost of materials, individual instruction, clothing and equipment required for the course. The amount of the supplementary fee for a specific course is listed in the class schedule booklet.

SENIOR CITIZENS' TUITION AND FEES

Persons 60 years of age or older who are residents of Virginia and whose taxable income is less than $10,000 may enroll in courses for academic credit at a reduced charge.

According to the Code of Virginia (chapter cited as the "Senior Citizens Higher Education Act of 1974"), "Senior Citizen" shall mean any person who, before the beginning of any term, semester or quarter in which such person claims entitlement to the benefits of this chapter, (1) has reached sixty years of age and (2) has had his legal domicile in this state for one year.
“Course” shall mean any course of study offered in any state institution of higher education including the regular curriculum of any department, school, or subdivision of any such institution or any special course given for any purpose, including, but not limited to, adult education.

Nothing in this section shall be construed to exclude any other rules and requirements now or hereafter made applicable for all other persons with respect to residency in this state by a state institution of higher learning.

**READMISSION**

Any former undergraduate who has not attended Norfolk State University for one or more spring or fall terms must complete an undergraduate readmission application form. If the student has taken any college level coursework since attending NSU, he or she must have an official transcript of this work sent directly to the Office of the Registrar. Readmission applications and necessary transcripts must be on file at least two weeks prior to the term for which the students are applying.

Students who re-enter the University after an absence of two regular terms must meet the requirements of the current catalog unless they receive written permission from the dean of the school in which they are enrolled to continue under an earlier catalog. This written permission must be on file in the Office of the Registrar prior to the submission of a graduation application. A student may not receive permission to graduate under a catalog which predates re-enrollment by more than three years.

**FAMILY EDUCATIONAL RIGHTS PRIVACY ACT OF 1974 (THE BUCKLEY AMENDMENT)**

Annually, Norfolk State University informs students of the Family Educational Rights and Privacy Act of 1974, as amended. This Act, with which the institution intends to comply fully, was designated to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with The Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act.

Local policy explains in detail the procedures to be used by the institution for compliance with the provision of the Act. Copies of the policy can be found in the Office of the Registrar.

**THE HONORS PROGRAM**

The Honors Program is designed to provide an enriched and challenging program of study for students who manifest exceptional academic potential, to improve the University's ability to attract such scholars, and to enrich the academic community.

Students may enter the Honors Program upon admission as freshmen having achieved at least a high school grade-point average of 3.0 and a combined score of 900 on the SAT. These students are expected to complete an entire Honors sequence of courses. Sophomores, juniors, or seniors having achieved a 3.5 or above grade-point average for all courses completed in the curriculum may enter the Honors Program.

Students in the NSU Honors Program are eligible for scholarships of $500 per academic year. Students receiving Presidential Scholarships or Board of Visitors Scholarships are required to take Honors Courses.

The NSU Honors Program is not an honor society but a regular facet of the University's academic offerings. Honors Program students are encouraged to participate in honor societies in their respective fields. Honors Program courses are open to all full-time undergraduates, including participants in other special programs such as the Dozoretz National Institute for Minorities in Applied Sciences (DNIMAS) and ROTC.

For additional information, please contact the director of the Honors Program.

**COOPERATIVE EDUCATION/INTERNSHIP PROGRAM**

Cooperative Education at Norfolk State University is part of a nationwide college/university program that integrates academic course work with career-related, paid work experience. Cooperative Education (co-op) provides students with an answer to the question most commonly asked of recruiters of graduating seniors, “WHAT EXPERIENCE HAVE YOU HAD?” Co-op students will have worked in a professional environment and will have performed work assignments in chosen career fields that supplement their academic studies, leading to the educational degree. The cooperative plan of education, which combines theory with practice, offers the ultimate in a completely rounded and integrated educational experience.

Cooperative Education is available to undergraduates and graduate students in most academic areas. Participation in the program is open to students who have completed 30 semester hours, are in good academic standing with the University and have a minimum 2.0 grade point average. Approval of the program director is required.

Participation in the program may earn academic credit for students enrolling in the following courses:

- CED 250 3 cr hrs
- CED 350 3 cr hrs
- CED 450 3 cr hrs

Interested students may request information from the following address:

Norfolk State University  
Career Services  
Cooperative Education Program  
Mills E. Godwin Student Center, Suite 306  
Norfolk, Virginia 23504  
(757) 823-8919
INTERNSHIP/SUMMER POSITIONS

Students participate in full-time work assignments during the summer with no requirement to return for a second work period, although the option to do so may be available. Assignment must be major/career related. Also, an assignment can be paid or unpaid.

RESERVE OFFICERS TRAINING CORPS PROGRAMS

AROTC

The Reserve Officers Training Corps (AROTC) was established at Norfolk State University on July 1, 1948, in the Military Science Department. The purpose of the Military Science Department is to develop selected university-educated men and women for positions as Army officers in the active Army, Army Reserve, and National Guard.

NROTC

The Naval Reserve Officers Training Corps (NROTC) was established at Norfolk State University in July 1982, in the Naval Science Department. The mission of the Naval Science Department is to develop selected university-educated men and women morally, mentally, and physically and to imbue them with the highest ideals of duty, honor, and loyalty in order to commission them as officers who possess a basic professional background. Also, these men and women are motivated towards careers in the Naval service and have the potential for further development in mind and character to assure the highest responsibilities of command, citizenship, and government.

See School of Health Related Professions and Natural Sciences for program details.

OFF-CAMPUS CENTERS

BRAMBLETON COMMUNITY OUTREACH CENTER
(757) 823-8743

The Brambleton Community Outreach Center is a Center devoted to the provision of recreational, social, health and educational needs of communities adjacent to the University’s campus. It is the administrative center for the University’s Community Outreach Program. It utilizes University resources to supplement, improve and increase the effectiveness of services normally provided by political subdivisions and community organizations. The Community Outreach Program is a coordinated effort of the five schools of the University and provides programs and activities for children, adults and senior citizens. Programs include technology training, recreation, family management and counseling, health maintenance programs, educational support, opportunities for volunteer service, internships and community services. The Center houses and is utilized by numerous organizations to meet and provide services.

TRI-CITIES CENTER
4300 George Washington Highway
Portsmouth, Virginia, 23702
(757) 396-6801

The Tri-Cities Center primarily offers graduate level courses in education and urban affairs. Additionally, it offers a number of contract courses to meet community needs. Courses offered at the Center are listed with section number 75.

VIRGINIA BEACH HIGHER EDUCATION CENTER
1881 University Drive
Virginia Beach, Virginia, 23456
(757) 368-4150

The Virginia Beach Higher Education Center, which is operated cooperatively by Norfolk State University and Old Dominion University, primarily offers graduate level courses for Norfolk State University in secondary education, urban affairs, and social work. Junior and senior-level undergraduate courses and a number of continuing education offerings are also available. This Center offers administrative services, including academic counseling and course registration. Courses offered at the ODU/NSU Higher Education Center are listed with section number 85.

The mission of the NSU/VBHEC is to provide educational opportunities and outreach services for traditional and non-traditional students with special emphasis placed upon the adult lifelong learner. Additionally NSU/VBHEC strives to develop and disseminate educational programming, training programs, and selected technological information to its adult constituents outside the traditional credit delivery formats.

NSU/VBHEC is strengthening the skills of the adult learner through educational opportunities in workforce development, leadership, competitive education programs, continuing education and business and community partnerships.

RECLAMATION PROJECT

The Reclamation Project began in the fall of 1999 as an effort to reclaim former Norfolk State University students. Students who have been away from the University for more than five (5) years and who are over the age of 24 qualify for participation in this project. For more information, please contact Dr. Dennis Montgomery, Program Advisor, at (757) 368-4154 (email: dimontgomery@nsu.edu).
The Reclamation Project was created to facilitate the continuing education and subsequent graduation of former Norfolk State University students. Former students who have left the University without a degree and who meet specific eligibility requirements may apply to the program. The program is designed to take full advantage of technology while maintaining the integrity and intellectual rigor of the University. Methodologies for degree completion are varied and include web-based instruction, web enhanced instruction, independent study, video courses, TV courses and courses from institutions that have a consortial or collaborative partnership with Norfolk State University.

The Interdisciplinary Studies Degree Program is the primary academic model for this endeavor. The Bachelor of Science in Interdisciplinary Studies is a multi-disciplinary approach to learning that allows students to create an individualized area of concentration based on their unique needs, experiences and interests. The flexibility of this degree program gives students the opportunity to pursue various fields of study in cross-disciplinary patterns.

All students in the Reclamation Project will be charged the most recent in-state tuition rates plus an additional administrative fee and technology related expenses. Students will be treated as other Norfolk State University students and may apply for financial aid.

The overall management of the Reclamation Project is the responsibility of the Virginia Beach Higher Education Center-Division of Continuing Education. For additional information on the Reclamation Project, contact the reclamation advisor at (757) 368-4154.

RECLAMATION PROJECT READMISSION

In order to be readmitted as a part of the Reclamation Project, former Norfolk State University students:

- Must be 24 years of age or older.
- Must not have been enrolled at NSU within the last five years, and
- Must have taken a minimum of 6 credit hours of academic work at an accredited college or university, earning a grade point average of 2.0 or better for the courses taken (applies if the student's GPA upon leaving the University was less than 2.0).

Prior to readmission, the student's intended major (i.e., degree track) must be approved by the program advisor of the Reclamation Project and the department head for the intended degree.

All applications for readmission, as a part of the Reclamation Project, must be forwarded to the Office of the Reclamation Project.

RECLAMATION FORGIVENESS

1. The Reclamation Forgiveness Policy applies only to students in the Reclamation Project. This policy is different from, and should not be confused with, the forgiveness policy that applies to regular students seeking to be readmitted.
2. Any student readmitted as a part of the Reclamation Project with a GPA less than 2.0 may receive forgiveness (as set forth below) for all courses with a grade of "C-" through "F" earned at Norfolk State University prior to the student's readmission.
3. Representatives of the Office of the Registrar will recalculate the student's GPA for the purpose of forgiveness.
4. All grades earned at the university will be shown on the student's transcript.Forgiven courses will be preceded with a "#" sign.
5. A student with a recalculated GPA, who has not exhausted his/her eligibility, may apply for financial assistance through the Office of Student Financial Services at the NSU main campus. Although students may be granted academic forgiveness, eligibility for financial assistance is not guaranteed.
6. If a student whose grades have been forgiven choose to transfer prior to degree completion, all "forgiven" grades will revert to their prior status and will be reflected as same on the student's transcript.
7. The recalculated GPA may result in the student's losing some semester hours and, in so doing, increase the number of hours remaining that will be needed to graduate.
8. Any student who intends to seek forgiveness must submit the appropriate forms (the Reclamation Readmission Application and the Application for Forgiveness) to the program advisor of the Reclamation Project by August 1 (for the following spring semester) or March 1 (for admission for the following fall semester).
9. Academic forgiveness cannot be granted if a student has earned a post-secondary degree following his/her initial NSU attendance and has applied NSU credits toward that degree.

RECLAMATION READINGMISSION FORMS ARE AVAILABLE IN THE OFFICE OF THE RECLAMATION PROJECT AT THE VIRGINIA BEACH HIGHER EDUCATION CENTER

FUNERAL SERVICE CERTIFICATE PROGRAM

The Funeral Service Certificate Program offered by Norfolk State University's Continuing Education Department in conjunction with the School of Science and Technology is designed to offer the Funeral Service Program in an effort to provide educational opportunities to those interested in funeral service as a career.

Additional information about the program is provided in the Department of Allied Health section of the academic program offerings of the School of Science and Technology.

WORKFORCE DEVELOPMENT AND NON-CREDIT COURSES

Workforce Development and non-credit course offerings at the Virginia Beach Higher Education Center provide a collaborative process through which individuals and organizations optimize their capabilities to be productive and competitive in order to produce products or provide services. For more information, please contact Richard Lodge at (757) 368-4157 (email: rrlodge@nsu.edu).
MILITARY PROGRAMS
Norfolk State University provides comprehensive counseling and advising services to active duty military, their family members, retired and reserve military, and Department of Defense civilian personnel. A current partnership exists with the Navy College Network.

INTERNATIONAL LONGSHOREMEN'S ASSOCIATION
Norfolk State University has entered into an agreement establishing a partnership with the Hampton Roads Shipping Association-International Longshoremen’s Association (ILA). NSU provides educational training, credit, and non-credit academic services to members of the ILA in the Greater Hampton Roads Area. For more information, please contact Gerald Tyler at (757) 368-4156 (email: gtyler@nsu.edu).

CONFERENCES AND SEMINARS
Conferences and training seminars are available in the areas of: leadership, food safety, financial planning, and through the Women’s Enrichment Series. The center is also available to rent for conferences, worship services, seminars, and other community-related events. For more information on upcoming conferences and training seminars and on how to secure the VBHEC for an event, please call (757) 368-4150.

LIBRARY SERVICES AND SPECIAL COLLECTIONS
Lyman Beecher Brooks Library
(757) 823-8873
The Lyman Beecher Brooks Library provides services and resources to meet the informational and scholarly needs of the Norfolk State University community. Library users can access resources via the automated system, which facilitates use of the online catalog. The Reference Research area contains computer workstations that students can use to search for a vast array of information.

The Lyman Beecher Brooks Library is a member of the Virtual Library of Virginia. This cooperative effort of the libraries of colleges and universities in the state of Virginia provides cost effective access to online resources and enhances interlibrary lending. The Library has extensive journal subscriptions, including e-journals and many issues in micro format.

The Library is an open stack facility with space for approximately 2,000 readers and a book capacity of 500,000 volumes.

Harrison B. Wilson Archives
The Harrison B. Wilson Archives is the repository for the historical records of the University, its faculty, alumni, and students. The Archives also has the mission of collecting and preserving the historical records of African-Americans in Virginia and making them available to researchers.

Lois E. Woods Museum
In a 10,000 square foot exhibit area, the Lois E. Woods Museum houses a collection of African arts from 14 countries representing 40 groups and cultures. Included in the museum is a reference library with over 400 books on African art, folklore and history.

Art Library
The Art Library, located in Room 314 of the Earl Hamm Fine Arts Building, houses reference materials applicable to art education and such related fields as business education, elementary and secondary education, health, industrial arts, language arts, mathematics education, music education, physical education and social sciences education as well as graphics and the fine arts.

IMPORTANT INFORMATION REGARDING MATRICULATION
Policies regarding the enrollment of degree seeking (matriculating) students at Norfolk State University are listed below:

All students will follow the curriculum and the degree completion requirements specified in the University Catalog issued for the year of their initial enrollment as degree seeking students.

The University will honor degree completion requirements specific for students in the University Catalog for the year of initial enrollment as long as such enrollment is continuous (summer semesters not included).

A student who does not maintain continuous enrollment (summer semesters not included) will follow the degree completion requirements specified in the University Catalog issued the year of re-enrollment.

Any student under any degree program who has re-enrolled in the University after interruptions of more than two semesters will be required to apply for readmission and meet the requirements of the current catalog.

A student who transfers to another degree program will follow the requirements specified in the University Catalog issued for the year of the transfer into the new degree program.

Students are held individually responsible for reading and complying with the University policies contained in the Catalog.

The Catalog is not an unchangeable contract but, instead, an announcement of present policies only. Implicit in each student’s enrollment is an agreement to comply with University rules, policies, and regulations that the University may modify to exercise properly its educational responsibility.
ACADEMIC POLICIES, REGULATIONS AND GENERAL DEGREE REQUIREMENTS

THE ACADEMIC YEAR

The academic year is divided into two semesters and summer session. The first semester begins in late August and ends before the Christmas holidays; the second semester begins in January and ends in May. The summer session begins one week after the conclusion of the second semester.

There is a short Thanksgiving recess that begins at the end of classes on the Tuesday before Thanksgiving and ends on the Monday immediately after Thanksgiving. There will be approximately three weeks between the end of the first semester and the beginning of the second semester. There is a spring vacation period of one week beginning on Monday of the week following mid-semester examinations. Classes resume the following Monday. Instruction is also suspended on legal holidays, i.e., Labor Day; Lee, Jackson, King Day; and Independence Day.

THE SUMMER SESSION

The annual summer session includes two mini terms; a six week term and a three week term. It offers significant opportunities for entering freshmen and to other students who wish to accelerate their studies and satisfy degree requirements. Various short workshops and institutes on topics of current interest are part of the summer offerings. The maximum load for the summer session is nine semester hours for undergraduates.

UNIT OF INSTRUCTION

The semester hour is the unit of instruction used for computing the amount of work required for graduation. One semester hour is equivalent to one 50-70 minute period of instruction or lecture per week for 15 weeks. Two or three 50-minute periods of laboratory sessions are equal to one period of instruction or lecture.

THE CURRICULUM

Developing, implementing, and updating curricula are the responsibilities of the faculty and academic administrators. The curriculum is the vehicle through which the University seeks to make its most significant impact upon the lives of students. The curricular offerings of each department and major are clearly and accurately described in this catalog.

Major Courses

Courses taken are organized around the major, the subject or area around which students center their studies according to talents, interests, and future plans. Usually, a student has confirmed a choice of a major by the end of the sophomore year, by which time he or she might have taken some beginning courses in the major field. The student will then take advanced courses in the major in the junior and senior years.

The major consists of a minimum of 27 semester hours in a subject or discipline. In addition to courses in the major, the student also gains general knowledge and determines interest in various fields of study in general education courses and electives.

ELECTIVE COURSES

Courses not taken to fulfill general education or major requirements may be chosen as electives to complete the minimum of 120 semester hours required for graduation. In the choice of electives, students should be guided by their prospective work and interest.

EXPLANATION OF COURSE NUMBERING

The three digit number will convey the course level and certain specific information as outlined:

| 100-199 | Freshman Level Courses |
| 200-299 | Sophomore Level Courses |
| 300-399 | Junior Level Courses |
| 400-499 | Senior Level Courses |
| 500-599 | First Year Graduate Courses |
| 600-699 | Graduate Courses |

Seniors who meet the qualifications outlined in the Graduate Catalog may, with the approval of the graduate program director, enroll in 500 level courses.

GUIDE TO COURSE DESCRIPTIONS

207  Three Credits
INTRODUCTION TO WORLD LITERATURE
PREREQUISITES: ENG 101, 102
Close attention to works selected from world literature for their exemplary literary qualities and their bearing upon our cultural heritage.

Explanations
207 - course number
Three Credits - number of credits, which will be earned upon successful completion of the course.
PREREQUISITES: ENG 101, 102. Prerequisites are courses or conditions that must be successfully completed or met prior to enrollment in the course described. Prerequisites separated by a comma indicate a series of prerequisites and all must be completed prior to enrollment in the described course. Parallel enrollment means that concurrent enrollment in the course designated is required.

STUDENT ACADEMIC LOAD/OVERLOAD

The normal course load for a full-time undergraduate student is 15 and no more than 19 semester hours. Students with a 3.00 average or above may carry additional hours ONLY with appropriate approval (academic advisor/department chairpersons). The registrar has been authorized to approve up to 21 semester hours. A course load in excess of 21 semester hours must be approved by the Dean of the School in which the student’s major is housed.

Recommendation for Course Overload Form must be completed and signed by the department head/advisor before submission to the Dean’s Office. The normal course load for a full-time graduate student is 9 and no more than 13 semester hours. The registrar may approve up to 15 semester hours. A course load in excess of 15 semester hours must be approved by the dean of the school.

CLASSIFICATION OF UNDERGRADUATE STUDENTS

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>Students meeting all entrance requirements who have completed 0-29 semester hours.</td>
</tr>
<tr>
<td>Sophomores</td>
<td>Students who have completed 30-59 semester hours.</td>
</tr>
<tr>
<td>Juniors</td>
<td>Students who have completed 60-89 semester hours.</td>
</tr>
<tr>
<td>Seniors</td>
<td>A full-time student is one who is registered for a minimum of 12 credit hours during a given semester.</td>
</tr>
<tr>
<td>Part-Time</td>
<td>A part-time student is one who is registered for fewer than 12 credit hours during a given semester.</td>
</tr>
<tr>
<td>Non-Degree</td>
<td>A non-degree student is one who is not enrolled in a degree program (non-matriculating).</td>
</tr>
</tbody>
</table>

ACADEMIC STANDARDS

Students are expected to study and perform to the best of their abilities. In order to assure that students take maximum advantage of educational opportunities, the University sets academic standards, that students must meet to remain in school.

Students receiving financial aid from federal, state, or institutional funds administered by the Office of Financial Aid must meet the academic standards required of all students as well as the standards required by specific financial aid programs. Continued eligibility for financial aid is contingent upon good academic standing in the University and satisfactory progress toward the completion of a degree.

Academic standards of the University are outlined in the undergraduate and graduate catalogs, student handbook, financial aid publications, and publications of the academic schools and departments of the University. It is each student’s responsibility to know the standards required for remaining in the University and to understand that continued financial aid is dependent upon meeting these standards.

UNDERGRADUATE ACADEMIC STANDARDS

Academic progress toward a degree of a student is determined by the student’s academic standing as measured by the number of semester hours graded, with grades of “A” through “F” and the number of grade points earned. A minimum of 240 grade points and 120 graded semester hours (a 2.0 or “C” average) is required for graduation. All departmental and school requirements must also be met.

Minimum standards for satisfactory progress are:

<table>
<thead>
<tr>
<th>Resident Hours Graded</th>
<th>Minimum Resident GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-29</td>
<td>1.7</td>
</tr>
<tr>
<td>30-59</td>
<td>1.8</td>
</tr>
<tr>
<td>60- and over</td>
<td>2</td>
</tr>
</tbody>
</table>

Failure to achieve the academic standards listed above will result in academic probation, triggering the following academic probation reinstatement process:

<table>
<thead>
<tr>
<th>Warning Status</th>
<th>Academic Reinstatement Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Warning</td>
<td>Upon receipt of First Warning Probation Letter student must schedule an appointment with ACCESS and meet with an ACCESS advisor to:</td>
</tr>
<tr>
<td></td>
<td>• Develop and sign an Academic Performance Contract</td>
</tr>
<tr>
<td></td>
<td>• Review registration schedule for the upcoming semester. See Advisors for schedule revision if pre-registered or completed early registration (Students who did not pre-register for the semester must see advisors to assist with course selection and registration)</td>
</tr>
<tr>
<td></td>
<td>• Enroll in and complete the Study Skills Seminar conducted by the ACCESS Department.</td>
</tr>
<tr>
<td>2nd Warning</td>
<td>Upon receipt of Second Warning Probation Letter Student must:</td>
</tr>
<tr>
<td></td>
<td>• Complete an Academic Performance Contract</td>
</tr>
<tr>
<td></td>
<td>• See advisor to revise course schedule or assist with course selection and registration</td>
</tr>
<tr>
<td></td>
<td>• Enroll in required Study Skills Seminar with the ACCESS Department.</td>
</tr>
<tr>
<td>Suspension</td>
<td>Issuance of Suspension Letter</td>
</tr>
</tbody>
</table>
• Students who do not achieve the required grade point average after two semesters are subject to suspension from the University.

Policy and Procedures for Appealing Academic Suspension
If a student wishes to appeal the decision to suspend, a written letter of appeal must be filed with the vice president for academic affairs. Please note that the vice president for academic affairs reserves the right to confer with the vice president for student affairs, student’s department head/academic advisor, the ACCESS Office, and the registrar prior to making a decision regarding appeal.

Students will not be considered for appeal if they did not comply with the reinstatement requirements.

Re-Admission after Academic Suspension

Restoration of Academic Eligibility/Readmission
Students suspended from the University for academic reasons may apply for re-admission if they:

- take courses (minimum: 6 credit hours) during the university’s summer session and maintain a GPA of 2.0 or better.

- have been absent from NSU for one or more semesters (which may include one summer) and have completed a minimum of 6 credit hours of academic work at another college or university, and has earned a grade-point average of 2.0 or better each semester.

Study Skills Seminar
The Study Skills Seminar is a non-credit, four-week seminar designed for students who are on academic probation. The seminar will introduce and promote development of skills necessary to enhance academic success in college. Emphasis is placed on the development of sound study habits.

COMPLETION OF COURSE REQUIREMENTS

Students are expected to complete all course requirements, including mid-term and final examinations, on the dates and times specified by the institution. Failure to do so may result in a failing grade.

Grades of “C-” and below earned at other institutions will not be credited to satisfy course requirements. Students taking courses through cross registration and students who transfer grades to NSU will only receive credit for grades of “C” or better to satisfy requirements in the major.

CLASS ATTENDANCE POLICY

The University expects students to attend all classes. While unnecessary absences are discouraged, the University recognizes that, on occasion, students may have legitimate reasons for being absent. Thus, a student will be permitted one “unexcused” absence per semester hour credit or the number of times a given class meets per week. Once a student exceeds the number of allowed unexcused absences, an instructor may require an official university excuse. Not more than 20% of class meetings (excused and/or unexcused) may be missed by a student during a given semester. At the discretion of the instructor, a student whose absences exceed 20% of scheduled class meetings for the semester may receive a grade of “F” for the course.

Students have the responsibility to confer with their instructors regarding all absences or intended absences. If sudden departure from the campus (for an emergency or extraordinary reason) prevents a student from communicating with each of his or her instructors, the student is expected to notify the Office of Student Services/Judicial Affairs within 48 hours.

Class excuses are issued for legitimate reasons (medical, funerals—immediate family members only, official university business/activities, etc.) by the Office of Student Services/Judicial Affairs. Official written documentation may be required. Notes from relatives, friends, etc., are not accepted as “official” documentation for absences. The Office of Student Services/Judicial Affairs will determine if an absence is legitimate and if an excuse will be issued.

Students who become ill are encouraged to report to the Student Health Center, located in Spartan Station, for “minor” medical treatment. A current NSU ID card must be presented prior to treatment. Written verification of illness issued by the Health Center should be carried to the Office of Student Services/Judicial Affairs, and an official University excuse should be obtained.

Students residing in on-campus housing facilities are governed by the same policies and procedures as non-residential students insofar as class attendance and class excuses are concerned.

ABSENCE FROM FINAL EXAMINATIONS

If a student misses a final examination because of an emergency, he or she should notify the instructor within 48 hours after the examination was scheduled. Excuses for missing a final examination are issued by the Office of Student Services/Judicial Affairs only with the consent of the instructor. Such excuses are given only in EXTREME EMERGENCIES, and official, written documentation MUST be presented before an excuse is issued.

Failure to follow the procedure outlined for absence from final examinations will result in a grade of “F” for the examination, and a final grade will be computed and given for the course.
LEAVE OF ABSENCE FROM THE UNIVERSITY

A leave-of-absence is granted to full-time students who need to interrupt studies at the end of a semester due to urgent circumstances. Leaves are granted for one or two full semesters, but not less than one full semester, to students who intend to return to the University.

Applications for a leave-of-absence are obtained from and returned to the Office of the Registrar. Students must specify the semester in which they expect to return. A dismissal from the University supersedes a leave-of-absence. A leave of absence is recorded on the student’s official transcript. Students are not eligible for more than two leaves-of-absence.

Students on leave must contact the registrar to receive an appointment to register for the semester of their planned return. Failure to register for the approved return semester will result in withdrawal from the University.

A student wishing to return after the approved return date must apply for readmission.

CONTINUOUS ENROLLMENT

Students who withdraw from all courses after the third week of the semester are considered to have been enrolled for the semester. Degree-seeking students who drop out for one semester, excluding summer sessions, may enroll in the subsequent semester provided they have not attended another college or university since last attending NSU, have not been suspended from NSU, and otherwise are eligible to return. A student who does not attend Norfolk State University for two or more consecutive semesters, excluding summer sessions, must submit an application for readmission. Readmission applications are available in the Office of the Registrar.

OFF-CAMPUS TRIPS

When a class is taken off campus, signatures of approval should be obtained from the department head and school dean prior to the trip. Written requests must include the destination, date and time of departure/return, mode of transportation, itinerary, a list indicating the student travelers, and the names of chaperones. A copy of approved requests should be forwarded to the Office of the Vice President for Academic Affairs and the Office of Student Services/Judicial Affairs. Students should be directed to the Office of Judicial Affairs/Student Services to obtain official class excuses.

The faculty/staff member in charge of any off-campus trip to be taken by an authorized University group (such as athletic teams, student organizations, musical or drama groups, etc.) should submit the same information in the preceding paragraph to the Office of the Vice President for Student Affairs prior to the trip. A copy of the same should also be forwarded to the Office of Student Services/Judicial Affairs so that students may obtain official class excuses.

THE GRADING SYSTEM, GRADE POINTS, AND GRADE POINT AVERAGE

The grade (quality) point system based upon all hours graded at Norfolk State University is used to calculate student scholarship as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>0.70</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*P None
**AU None
I None
W None

*Pass/fail grades are not available to graduate students, except in those courses designated for pass/fail credit.
**Entered by the registrar

The grade point average is obtained by dividing the total number of grade points earned by the total number of semester hours graded. Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester</th>
<th>Grade</th>
<th>Hour</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIE 264</td>
<td>C</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HIE 264L</td>
<td>C+</td>
<td>2</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>HIE 149L</td>
<td>B-</td>
<td>2</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>HFD 340</td>
<td>B+</td>
<td>3</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td>FIA 180</td>
<td>A-</td>
<td>3</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>MUS 301</td>
<td>D-</td>
<td>14</td>
<td>35.1</td>
<td></td>
</tr>
</tbody>
</table>

(35.10 divided by 14 = 2.5071)
REMOVAL OF INCOMPLETE (I) GRADES

The "I" (Incomplete) symbol is used by the instructor when the course requirements have not been met because of illness or some other reason accepted by the instructor. It is the responsibility of the individual receiving the "I" to make arrangements with the instructor for the removal of the "I" grade. The instructor will set a time limit, usually no later than mid-term of the next semester, for the removal of the "I." Students have a time limit of one year to remove the "I" or it will change to "F" (failure). No student will be allowed to graduate with an "I" on the record.

GRADE APPEAL

The instructor has the responsibility for evaluating course work and determining grades; however, the student has the right to appeal a grade that he/she believes to be in error. The appeal process may involve the following steps (the issue may be resolved at any level):

1. The student confers with the instructor involved.
2. The student and instructor (preferably together) confer with the chairperson of the department offering the course.
3. The student and instructor (preferably together) confer with the dean of the school in which the department is housed.
4. When the above steps do not resolve the issue, the student may initiate a formal written appeal through the Vice President for Academic Affairs to the Faculty/Student Grievance Committee for its review and recommendation. Appeals should not be taken lightly by either the student or the instructor.
5. The student is responsible for verifying the accuracy of his/her academic records. Grade appeals should be made immediately after the grade in question is received. No appeals will be considered after one year has elapsed or after graduation, whichever is earlier.

GRADE REPORTS

Grade reports are made available to students each mid semester and at the end of each term. A copy of the grade report is mailed to: (1) the student at the home address of record; (2) the parent or guardian, if requested in writing by the student; student's major department. If no grade report is received, the student should contact the Office of the Registrar immediately.

REPEATING COURSES

A student who has received a final grade of "C-" through "F" in a course may repeat the course. The course to be repeated must be taken at Norfolk State University and taken prior to completion of the degree at Norfolk State University. The normal registration procedure must be followed when registering for repeat courses and the grade earned will be posted to the student's record. The credit and quality points for the highest grade earned (one grade only) will be used to calculate the student's GPA. All courses attempted (the original course attempted and the grade for that course) will remain on the student's permanent record and will appear on the transcript.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

As part of Norfolk State University's Program of flexibility to meet student needs and aspirations, a student may earn up to 60 credit hours through the CLEP General and Subject Examinations.

Any student or prospective student who has not received credit for or is not currently enrolled in a college level course in the particular field covered by the examination may take the test for CLEP credit. CLEP is a nation-wide program of credit-by-examination that offers the opportunity to obtain recognition for college level achievement; personal reading, on-the-job experience or volunteer activities that may have prepared one to earn college credit. Each school determines which CLEP tests it will accept for credit and the amount of credit it will award.

ACADEMIC HONESTY

In keeping with its mission, the University seeks to prepare its students to be knowledgeable, forthright, and honest. It expects and requires academic honesty from all members of the University community. Academic honesty includes adherence to guidelines established by the University for the use of its libraries computers, other facilities.

"Academic or academically related misconduct" includes, but is not limited to, unauthorized collaboration or use of external information during examinations, plagiarizing or representing another's ideas as one's own, furnishing false academic information to the University, falsely obtaining, distributing, using, or receiving test materials; obtaining or gaining unauthorized access to examinations or academic research materials; soliciting or offering unauthorized academic information or materials, improperly altering or inducing another to alter improperly any academic record, or engaging in any conduct which is intended or reasonably likely to confer upon one's self or another an unfair advantage or unfair benefit respecting an academic matter.

Further information regarding academic or academically related misconduct, and disciplinary procedures and sanctions regarding such misconduct, may be obtained by consulting the current edition of the Norfolk State University Student Handbook.

COURSE SUBSTITUTIONS

A course substitution requires approval by the student's advisor, the department head and the school dean. A transfer student, upon selecting a major, must file with the Registrar a course substitution form, approved as above, no later than the end of the first semester in which he/she is enrolled in the University.
Substitution is not to be confused with waiver. Substitution is an option to meeting a requirement, while waiver implies exemption. Waivers are not granted.

Use of Military Science and Naval Science courses as substitutions requires approval of the advisor, the department head and the school dean and is limited to:

General Education Core - 6 hours
MIS and NCS 111, 112, 211, 212 for PED 100, HED 100
HIS 380 for HIS 100, 101, 102, 103

Free Electives - 6 hours
Upper-level (300, 400) MIS and NSC courses may be used provided the student is enrolled in the appropriate Military Science or Naval Science Program when substitutions are requested.

CHANGE OF MAJOR

Students who find it necessary to change majors should confer with the assigned University departmental advisor concerning the proposed change. An entrance interview should be scheduled and conducted with the department head or program director of the major to which the student is changing. The Petition to Change Major Form, available in each academic department, must be completed and signed by the department head of the relinquishing department and presented during the entrance interview. No student may change major without approval of the department from which and to which a transfer is made. A minimum grade of "C" is required in all courses in the major.

MINORS

Norfolk State University provides an opportunity for undergraduate, degree-seeking students to pursue studies in a minor. The minor may be chosen to complement the major, to provide recognition of study in a second academic area, to meet an area of interest by the student, or to increase job opportunities upon graduation. Completion of a minor is optional and is not required for degree completion. Minors are offered in Accounting, Astronomy, Biology, Chemistry, Computer Science, English, Fine Arts, History, Interdisciplinary Studies, Military Science, Mass Communications/Journalism, Music, Physics, Political Science, and Sociology.

Students who wish to pursue a minor must consult with their academic advisor at any time but no later than the time to submit an application for graduation and must declare a minor by completing a Change of Major/Minor Form. In order for the minor to appear on the transcript, the minor must be listed on the application for graduation. The minor will not appear on the diploma. All applicable University, school and departmental (major and minor) policies and procedures must be followed. Appropriate paperwork must be completed in a timely manner and must meet applicable deadlines.

REQUIREMENTS FOR THE ASSOCIATE DEGREE

The University awards the associate degree to those who successfully complete requirements as set forth for the program desired. Candidates for the associate degree must complete an application for graduation through their departments and pay the required fee. At least 20 hours of general education is required of students pursuing an associate degree. At least 25% of the coursework leading to an associate degree must be completed in residence (at Norfolk State University). Associate degree candidates must meet core competencies required of all NSU undergraduates.

The minimum requirements for the associate degree are 60 semester hours with a cumulative grade point average of 2.00. A grade of "C" or better is required in major courses and ENG 101 and ENG 102.

REQUIREMENTS FOR THE BACHELOR'S DEGREE

Requirements for the bachelor's degree are both quantitative and qualitative. The department head and advisor make the initial check for fulfillment of departmental requirements. The Office of the Registrar makes the final check for compliance with University-wide requirements.

To receive the bachelor's degree, a student must:

1. Complete the General Education Core requirements.
2. Have a minimum cumulative grade point average of 2.0.
3. Have a minimum of 120 semester hours of credit
4. Meet all requirements of the curriculum leading to the degree for which he/she is a candidate
5. Have spent a minimum of two semesters in residence at Norfolk State University and have earned a minimum of 30 semester hours of credit during this period, including all of the courses required by the senior year curriculum. Exceptions to this may be made only with PRIOR written approval of the Vice President for Academic Affairs upon recommendation of the Department Head and School Dean. Exceptions may not exceed six semester hours.
6. Meet core competency requirements.

GENERAL EDUCATION AT NORFOLK STATE UNIVERSITY

The general education core at Norfolk State University provides the foundation for the university’s mission to develop in students the knowledge, qualities and attitudes necessary to become productive citizens who contribute to a globally and rapidly changing society. Such citizens are educated persons. They are life-long learners who communicate effectively and appreciate diverse manifestations of different cultures, recognize and exercise their responsibility to contribute to the growth of society, use technology
appropriately to enhance their personal and professional lives, and possess a rational open-mindedness that leads to analytical and critical patterns of thought.

The breadth of knowledge and skills impaired by the general education core complements the depth of knowledge that students acquire in their specialized fields, thus enhancing their ability to contribute to their local, national, and global communities.”

Students entering Norfolk State University who complete the general education core will be able to:

1. Write and speak logically, clearly, and precisely;
2. Read and comprehend written and graphic information;
3. Locate, compile, organize, and document information from print and digital sources;
4. Understand mathematical and technological thought, conceptualize appropriate logic in problem solving;
5. Demonstrate technological proficiency appropriate to their professional and personal needs;
7. Examine, evaluate and appreciate history’s influences on economic, political and social events;
8. Understand and appreciate diverse cultures and perspectives;
9. Examine and understand the role of personal and responsible citizenship in a democratic society; and;
10. Appreciate aesthetics.

**GENERAL EDUCATION REQUIREMENTS FOR THE BACCALAUREATE DEGREE**

Students entering Norfolk State University seeking the baccalaureate degree are required to take forty semester hours from the general education core curriculum consisting of the following subject areas: Digital, Computer and Telecommunications (3); Communications (9); Humanities (6); Social Sciences (6); Mathematics (3); Natural Sciences (7); Health and Physical Education (3); and Cultural Electives (3). Departments may require specific courses for their majors.

### Communications (9 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
</tr>
<tr>
<td>SCM 285</td>
<td>Principles of Speech</td>
</tr>
<tr>
<td>BAD 184</td>
<td>Intro to Data Processing &amp; Business Applications</td>
</tr>
<tr>
<td>CLM 165</td>
<td>Computer Literacy for Musicians</td>
</tr>
<tr>
<td>FIA 180</td>
<td>Computer Literacy for the Arts</td>
</tr>
<tr>
<td>TED 170</td>
<td>Introduction to Technology</td>
</tr>
</tbody>
</table>

### Natural Sciences (7 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100</td>
<td>Biological Science</td>
</tr>
<tr>
<td>BIO 100L</td>
<td>Biological Science Lab</td>
</tr>
<tr>
<td>CHM 100</td>
<td>Chemistry Lab</td>
</tr>
<tr>
<td>CHM 110</td>
<td>Basic Concepts in Chemistry</td>
</tr>
<tr>
<td>PHY 100</td>
<td>Physical Science</td>
</tr>
<tr>
<td>PHY 100L</td>
<td>Physical Science Lab</td>
</tr>
<tr>
<td>SCI 100</td>
<td>Life in the Universe</td>
</tr>
</tbody>
</table>

### Health and Physical Education (3 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 210</td>
<td>Fundamentals of Fitness for Life</td>
</tr>
<tr>
<td>HED 100</td>
<td>Personal and Community Health</td>
</tr>
</tbody>
</table>

### Humanities (6 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 211</td>
<td>Humanities I</td>
</tr>
<tr>
<td>HUM 212</td>
<td>Humanities II</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Literature of the Western World</td>
</tr>
<tr>
<td>FIA 201</td>
<td>Basic Art Appreciation</td>
</tr>
<tr>
<td>MUS 301</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>*ENG 383</td>
<td>African-American Literature</td>
</tr>
<tr>
<td>*FIA 370</td>
<td>African and African-American Art</td>
</tr>
<tr>
<td>*MUS 304</td>
<td>African-American Music</td>
</tr>
</tbody>
</table>

### Mathematics (3 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 103</td>
<td>Contemporary Mathematics</td>
</tr>
</tbody>
</table>

### Social Sciences (6 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 100</td>
<td>History of World Civilization</td>
</tr>
<tr>
<td>HIS 101</td>
<td>History of World Civilization</td>
</tr>
<tr>
<td>HIS 102</td>
<td>United States History to 1877</td>
</tr>
<tr>
<td>HIS 103</td>
<td>United States History Since 1877</td>
</tr>
<tr>
<td>*HIS 336</td>
<td>African-American History to 1865</td>
</tr>
<tr>
<td>*HIS 370</td>
<td>African History and Culture (Part 1)</td>
</tr>
<tr>
<td>*HIS 371</td>
<td>African History and Culture (Part 2)</td>
</tr>
<tr>
<td>*SOC 237</td>
<td>Cultural and Racial Minorities</td>
</tr>
<tr>
<td>*POS 315</td>
<td>Blacks in the American Political Process</td>
</tr>
<tr>
<td>*PSY 340</td>
<td>Psychology of African Americans</td>
</tr>
</tbody>
</table>

### Cultural Elective (3 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Courses marked with an asterisk satisfy the University's cultural elective requirement.</td>
<td></td>
</tr>
</tbody>
</table>

**UNIVERSITY CORE COMPETENCIES**

The administration and faculty of Norfolk State University are committed to providing a high-quality education for students. Among other things, this commitment requires providing documented evidence that students are competent in six areas: writing, technology, oral communication, quantitative reasoning, scientific reasoning, and critical thinking. As a result, with advance notice, students will be required to demonstrate competency in one or more of these areas before graduating from the University. For example, all new students entering Norfolk State University in Fall 2001 and thereafter will be required to demonstrate competency in writing before graduating (See Writing Competency Assessment for additional information). Assessment of the remaining competencies is embedded in the related general education core courses. For example, assessment of scientific reasoning is embedded in courses meeting the Natural Sciences core.

**WRITING COMPETENCY ASSESSMENT**

Students who matriculate in Fall 2001 and thereafter will be required to take entry and exit examinations to assess their writing competency. After completing ENG 102, students must register for ENG 299 (no credit, no charge) until they have passed the Exit Examination of Writing Competency. The exit examination is a three-hour writing examination. Students will select a topic and respond to it with an essay of at least 500 words, using an expository form suitable for the topic. A satisfactory essay reflects the author’s awareness of purpose and audience in its form, organization, content (development), and usage and style (syntax, vocabulary, grammatical and mechanical correctness). Students are required to take the exit writing examination before completing
90 semester hours. This will allow time for students who do not meet the minimum passing standard to develop a course of action for improvement to pass the examination before graduation.

**STUDENT LEARNING OUTCOMES ASSESSMENT REQUIREMENT**

As part of Norfolk State University’s mission and commitment to provide the environment and resources needed for success, students may be required to participate in a number of assessment activities at various points throughout their matriculation. The activities may include entry or exit examinations, surveys, focus groups and exit interviews, portfolio reviews, and evaluations of competence or mastery of specific skills. The assessment activities are designed to measure student outcomes in general education and in the major prior to graduation. The primary purpose of the assessment activities is to determine the extent to which the university’s academic programs and services maintain a high level of quality and meet the needs of the students. Group results will be reported. Individual student results will never be reported and will remain confidential. Information from the assessment activities will be used by faculty and administrators to improve programs and services.

**DUAL DEGREE POLICY**

Dual degrees are awarded to students who concurrently fulfill the requirements for two majors and two degrees. A dual degree is earned when the student completes University and departmental requirements in both majors. Students must complete the minimum requirement for institutional credits and meet the graduation requirement for grade point average (GPA).

A minimum of 25% (30 additional semester credit hours) above the minimum hour requirement of the major requiring the most credits is required to obtain a dual degree. All coursework for the second degree must be predefined and pre-approved by the department housing the second degree. The student will receive two diplomas and both degrees will appear on the student’s permanent academic record.

**SECOND BACCALAUREATE DEGREE**

A student desiring to earn a second baccalaureate degree must complete application procedures with the Office of Admissions as with the first degree. Applicable credits from the previous degree may be applied (treated as transfer work) to the second degree; however, a minimum of 30 new resident credits will be required for the second degree. The usual departmental and University requirements must be met as with the first matriculation.

**GRADUATION POLICY**

Commencement exercises are held two times each year in May and December. Candidates must complete all requirements no later than the desired graduation date.

The Office of the Registrar processes all applications for graduation. Any student expecting to complete academic requirements at the end of a semester must complete and file an application for graduation through the academic department head's office by the designated due date for the applicable semester. It is the responsibility of the department head to submit the necessary forms and documentation to the Registrar’s Office in compliance with established deadlines. A graduation application fee will be assessed in accordance with the University Fee Schedule.

The registrar will acknowledge in writing the receipt of all applications. Deficiencies and/or discrepancies must be resolved by department heads within prescribed guidelines. Failure to do so will subject the candidate to a future graduation status.

Each candidate/applicant is assessed a commencement fee in accordance with the fee schedule established for the desired graduation date to help defray certain related expenses, i.e., academic attire, announcements, diploma, etc.

**COMMENCEMENT PARTICIPATION**

Candidates for graduation must complete all degree requirements and satisfy all financial obligations in order to participate in commencement ceremonies. Academic and financial clearances must be obtained before academic attire is issued to the student. Participation in the commencement ceremonies does not mean the student has been awarded a degree. The degree is awarded in the semester when all degree requirements and conditions have been met, including the completion of all required paperwork.

The roster of candidates listed in the Commencement Program is a compilation of those eligible to participate. It should not be construed either as a complete or official list of those who will receive a university degree. Due to printing deadlines, names of some degree candidates may not appear. Honors distinctions are based on the candidate's academic record at the time of publication.

Diplomas will be mailed approximately eight weeks after Commencement to students who have completed requirements, completed an Application for Graduation and have no University encumbrances.

**RECOGNITION FOR EXCELLENCE IN SCHOLARSHIP**

Dean’s List and an Honor Roll are compiled at the end of each fall and spring term and apply only to full-time (12-hour minimum) students. Eligibility for the Dean’s List requires a minimum 3.50 term GPA with no “I” (incomplete) or missing grades and no grade less than a “C.” Eligibility for the Honor Roll requires a term GPA of 3.00 - 3.49 with no “I” or missing grades.
HONORS AT GRADUATION

The following honors categories for baccalaureate graduates are reflected in the printed Commencement Program and on official records (transcripts) produced by the University:

Summa Cum Laude: cumulative resident GPA 3.7500 - 4.0000.
Magna Cum Laude: cumulative resident GPA 3.500 - 3.7499
Cum Laude: cumulative resident GPA 3.0000 - 3.4999

CRITERIA FOR PARSONS VICE PRESIDENTIAL AND PARSONS PRESIDENTIAL SCHOLARSHIP DIPLOMAS

In order to graduate as a PARSONS VICE-PRESIDENTIAL SCHOLAR (a designation that will appear on the student’s diploma), a student must meet the following criteria:

• Active participation in the NSU Honors Program (see page 32).
• Successful completion of at least 15 credit hours of Honors courses, including at least one of the Honors seminars (GST 345H/346H or GST 445H/446H), with a grade of C or above for each Honors course and a GPA of at least 3.0 for all Honors courses.
• A cumulative GPA of 3.0 or above for all work completed at Norfolk State University.

Transfer Honors credits from an accredited college or university with an honors program of its own may be substituted for no more than 9 hours of the above 15. No substitution credit can be accepted for the Honors Seminar requirement.

Classes designated exclusively for DNIMAS or CMR scholars within the NSU curriculum may be substituted for up to 9 credit hours of the above, excluding the Honors Seminar requirement for which there is no substitution.

Because the Honors seminars (GST 345H/346H and GST 445H/446H) may only be taken by juniors and seniors, students who have matriculated for an Associate Degree only cannot graduate as Parsons Vice-Presidential Scholars.

In order to graduate as a PARSONS PRESIDENTIAL SCHOLAR (a designation that will appear on the student’s diploma), students must meet the following criteria:

• Successful completion of at least 30 credit hours of Honors courses, including at least one of the Honors seminars (GST 345H/346H or GST 445H/446H) and the community service course (SPE 497H), with a grade of C or above for each Honors course and a GPA of at least 3.0 for all Honors courses. Students are strongly encouraged to take two or more of the aforementioned Honors seminars; however, the minimum of one will be mandatory. The community service course is also mandatory for all students.
• A cumulative GPA of 3.0 or above for all work completed at Norfolk State University.

Transfer Honors credits or DNIMAS/CMR credits may be substituted for up to 15 hours of the 30-hour total, but this does not include the Honors Seminar or SPE 497H requirements for which no substitutions can be made.

INTER-INSTITUTIONAL EXCHANGE PROGRAM WITH OLD DOMINION UNIVERSITY

Norfolk State University students have the opportunity to take courses at Old Dominion University through a student exchange program agreed to by the two institutions.

The registrar at each institution will register a student for courses at the other institution if the student presents a form properly signed by the appropriate university officials. The student exchange will be honored both in regular sessions and in the summer session. The Exchange Program applies to both graduate and undergraduate students. For degree purposes, credits earned by students will be considered as resident credits at the home institution. Courses taken at ODU under this Program will be considered the same as Norfolk State University courses; all other courses taken at ODU are subject to Transfer Credit Policy limitations. Registration under this Program is limited to students with cumulative grade point averages of 2.00 or better; the approval of the school’s dean is required.

Regular bus service between campuses is provided during the regular session but is not available for evening classes or the summer session.

TIDEWATER CONSORTIUM EXCHANGE PROGRAM CROSS REGISTRATION

Norfolk State University students may also take undergraduate courses at any of the following Tidewater institutions: Christopher Newport University (Newport News), Hampton University (Hampton), Regent University, Tidewater Community College (all campuses), and Virginia Wesleyan College.

The following regulations apply to cross registration:

• Cross registration is limited to declared majors with cumulative grade point averages of 2.00 or better.
• Cross registration is limited to 30 semester hours.
• Cross registration is limited to courses not available to students at the home institution during the current semester.

For further information, contact the Office of the Registrar.
OFFICE OF THE REGISTRAR
(757) 823-8229

The Registrar is the official custodian of academic records and is responsible for the process of enrolling students in courses, assessing tuition charges and related fees, and collecting and maintaining academic information in accordance with University policy. The Registrar certifies students for graduation and is the keeper of the University seal. The Registrar is responsible for calculating and recording student grades and notifying students of their enrollment status, including academic probation and suspension.

REGISTRATION

The first step in the registration process is admission to the University. In order to attend classes at Norfolk State University, all students must complete the registration process. A schedule booklet outlining registration policies and procedures, schedule of classes, final examination schedules, and other information pertaining to registration for a given semester or summer school is available in the Office of the Registrar and is issued to each student prior to the scheduled registration period. Registration dates are included in the University calendar shown in this catalog. Students are responsible for complying with all of the policies and procedures governing registration, changing of class schedules, paying tuition, and fulfilling other requirements outlined in this catalog, the current schedule booklet, and other official publications. Each student must obtain the signature of the department head or the academic advisor on the Course Registration Worksheet, indicating approval of the student’s schedule of courses. A student is not enrolled or registered until all necessary fees are paid.

EARLY REGISTRATION

Currently enrolled students are encouraged to register in advance (pre register) for the following spring or fall semester. The procedures for pre registration for an ensuing semester are published in the Registration Information and Schedule of Classes booklet available in the Office of the Registrar. The dates and times for registration are included in the Academic Calendar.

LATE REGISTRATION

A late registration fee of $75 will be assessed against any student who fails to complete registration within the specified period for regular registration. The last dates for late registration, adding classes, and changing class schedules are listed in the Academic Calendar. Exceptions must be approved by the Vice President for Academic Affairs.

Additional information about academic policies and procedures related to registration, matriculation, withdrawal, degree completion and graduation is provided in the Academic Policies section of the catalog.

TRANSCRIPT OF RECORD

A transcript is a history of the student’s permanent academic record. Transcripts are issued only upon the written request of the student or his or her authorized agents and should be requested at least 7 days prior to the date needed.

Students may request transcripts of work completed at the University by completing a transcript Request Form in person on the first floor of Wilson Hall, Room 110, or by mailing the request to: Registrar’s Office, Room 110 Harrison B. Wilson Hall, 700 Park Avenue, Norfolk, Virginia 23504. The fee for each transcript is $3.00 and may be paid in person at the Cashier’s office, first floor of Wilson Hall or mailed with the written request. Students should allow at least 3 to 7 business days for processing.

Transcripts are released only when a student's account is paid in full and the student's loans are current.

RELEASE OF STUDENT INFORMATION

Student records are not available without the student's written consent.

I. Exceptions: school officials, including teachers within the educational institution or local educational agencies that have a legitimate educational interest.

The following information has been declared "Directory Information" and may be released by the University without prior consent of the student: name, address, date and place of birth, major field of study, participation in official activities, weight and height of athletic team members, dates of attendance, degree, honors and awards received, and previous educational agency or institution attended.

II. “Directory Information” will not be released for commercial purposes. A student may contact the Office of the Registrar in writing, to request that "Directory Information" not be released.

Access to personal records and files is guaranteed to every student and subject only to regulations as to time, place, and supervision. Members of the faculty with administrative assignments may have access for internal educational purposes as well as for routinely necessary administrative and statistical purposes.

Properly identified officials from federal, state, and local governmental agencies may be given the following information: name and address of parent or guardian if student is a minor and any information required under legal compulsion.

Unless under legal compulsion, personal access to a student's file should be denied to any person making an inquiry.

Disciplinary proceedings will not be made available to any person or agency unrelated to the University.
Upon graduation or withdrawal from the institution, the records and files of former students shall continue to be subject to the provisions of this code.

III. Documents that Constitute a Permanent Record:
   A. Admissions Application
   B. High School Transcript
   C. SAT/ACT Scores
   D. Domicile Application (if appropriate)
   E. Advanced Placement Credit (if appropriate)
   F. Grade Changes (if appropriate)
   G. Transfer Evaluation Credits (if appropriate)
   H. Graduation Application
   I. Degree Request (if appropriate)
   J. History of Student

IV. Retention and Disposition of Records

According to Records Retention and Disposition Schedule, General Schedule No. III records are retained 5 years from date of last action, and then destroyed.

ACADEMIC RESOURCES AND SERVICES

OFFICE OF THE FIRST YEAR EXPERIENCE
757-823-8507

The first year of college is the foundation upon which the entire academic experience is built. Norfolk State University views the first year of college as an essential time to help students build a solid foundation for life-long academic, personal, and career success. For this reason, the Office of the First Year Experience was established to assist students in making the transition to college, to work as advocates for first-year students, to provide academic support services to first-year students, to work with faculty to increase student retention and persistence to graduation, and to serve as a resource to all University units in serving the needs of first-year students.

The Office of The First Year Experience oversees the various activities and programs currently existing to support students; designs, recommends, and coordinates existing and new programs or initiatives focusing on the first-year experiences of new and transfer students: ensures cohesiveness in academic support services impacting new and transfer students; and assesses student outcomes as a result of first-year curricular and co-curricular programs and services.

The Office of The First Year Experience strives to:

- Assist students in making the transition to college
- Address the needs of first-time freshmen and transfer students
- Work with faculty to increase student persistence to graduation
- Work with faculty to ensure students achieve general education goals
- Serve as a resource to faculty advisors

New Student Orientation and Freshman Seminar
757-823-8912

New Student Orientation

New students (entering freshmen and transfer students) are invited to the campus for New Student Orientation during the summer or prior to the beginning of the second semester. All students attending these sessions register for the next semester classes and participate in activities that familiarize the students with the University’s facilities, policies, procedures, services and programs.

Freshman Seminar

Freshman seminar (FRS 100) is a course required for all new students (entering freshmen and first time transfer students who have not taken an orientation course at the transferring institution) enrolled in the University for the first time. It is a requirement for graduation. The course meets one hour per week for one semester and carries no hours of credit. The course will be evaluated as Pass/Fail.

Academy for Collegiate Excellence and Student Success (ACCESS)
757-823-8507

The Academy for Collegiate Excellence and Student Success (ACCESS) Program is a multi-faceted comprehensive program designed to facilitate and improve student success, retention and graduation rates. Emphasis is on intrusive academic advising which involves selecting courses, strengthening basic skills, reinforcing classroom instruction, and enhancing overall student academic, personal, and career development.

ACCESS serves as an advocate for students and provides academic support services to all students. As advocates for students, ACCESS collaborates with all units in an effort to increase student retention and to produce academically prepared professionals who are ready to contribute to their communities. For additional information, please contact ACCESS at 757-823-8507 or visit www.nsu.edu/access/.
Comprehensive Language Learning Center
The Comprehensive Language Learning Center, located in Room 134 of J. Hugo Madison Hall, is a state-of-the-art, interactive laboratory providing tutorial, computer-assisted, audio, and video services for students and teachers of writing and the foreign languages.

Child Development Laboratory
The Child Development Laboratory is part of Early Childhood Education in the School of Education. The laboratory provides a training and observation facility for class assignments, research, student teaching, and field work.

It provides a readiness curriculum for ages 2.6 to 5 years. Hours of operation are 8:00 a.m. to 5:00 p.m.

Educational Media and Television Center
The primary aims of the Educational Media and Television Center are (1) to provide educational media and television services for the instructional use of faculty and students; (2) to assist them in developing a systematic approach to the selection, utilization and evaluation of educational media and television for instruction; (3) to assist faculty and students under certain conditions in developing minimum competence in the operation and care of audio-visual and television equipment and facilities; and (4) to assist them in increasing their understanding of the role and value of educational technology in the teaching and learning process.

Mathematics Testing Center
The mission of the Mathematics Testing Center is:
1. to monitor computer pretests for the MTH 101 Elementary Algebra Lab Component;
2. to evaluate and record results of pretest mastery for MTH 101 faculty;
3. to diagnose deficiencies of students enrolled in MTH 101;
4. to provide tutorial assistance for all pre-calculus courses.

Mathematics Media Center
This center contains workstations and audio visual materials to support classroom assignments and activities.

Multicultural Learning Resource Center
The Multicultural Learning Resource Center has a twofold purpose: (1) to identify, locate and/or provide materials and instructional media appropriate for use in developing teaching competence in multiple disciplines, with students whose abilities, socioeconomic status and cultural heritage differ, and (2) to encourage client competence in media selection and utilization.

Planetarium
The Norfolk State Planetarium is primarily a sky theater and laboratory, which may serve as a dramatic and fascinating facility for teaching concepts of Earth space science.

The Planetarium provides public shows for the University, the community, and the general public as a community service. Interested community groups are invited to make reservations for a prepared show or they may request planetarium personnel to create a "tailor-made" program on a topic of special interest.

Teacher Education Resource Center (TERECE)
The Teacher Education Resource Center is committed to providing high-quality service to teacher education candidates. TERECE increases the capacity of teacher candidates/interns to meet the requirements of methods courses. The primary goal is to link students with teacher resources. Education materials are available for loan, including assessment instruments, curricula, audio visuals, reference books, computer software and assistive technology.

The School of Liberal Arts Social Science Center for Applied Research and Public Policy
The Center for Applied Research and Special Projects is a computer-based social science research laboratory. Research and special projects include, but are not limited to, voting behavior studies; urban and neighborhood development studies; transportation studies; health population and policy studies; international development studies; and nonprofit organizations and government agencies restructuring studies. The Center provides opportunities for students as well as faculty to gain expertise. The Center for Applied Research and Special Projects is nationally recognized as one of the most technologically advanced research centers in the country.

Communication Sciences and Disorders Center
Special services in speech, language, and hearing therapy are provided for students who have unusual difficulties in oral communication. These services are coordinated by a staff of highly trained speech pathologists and audiologists. There are no charges for these services. Students must be referred to the Speech Communication Laboratory by a member of the faculty. This is the only requirement for acceptance to the Center. Students, however, must assume the responsibility for meeting therapy appointments once they have been accepted. Dismissal from therapy is determined by the Speech Center staff.

THE OFFICE OF GRADUATE STUDIES
(757) 823-8015

The Office of Graduate Studies administers the University's twenty (20) graduate programs in the Schools of Education, Liberal Arts, Social Work, and Science and Technology. The Office is responsible to the Vice-President for Academic Affairs for the provision of fundamentally sound program development to meet the demands of a dynamic society. The Director of Graduate Studies serves as Chair of the Graduate Council and initiates activities and policies designed to maintain the currency of the graduate programs.

THE GRADUATE COUNCIL
The Graduate Council is responsible for the planning, development, and recommendation of policies, regulations, and procedures for all graduate programs at the University. Its aim is to ensure the satisfactory coordination of graduate studies and the
maintenance of high quality graduate instruction. The Council, therefore, determines the following: (1) criteria for the selection of
graduate faculty; (2) instructional loads for the graduate faculty; (3) requirements for admission to graduate study at the University;
(4) mechanisms for the evaluation of effectiveness of graduate programs; (5) regulations governing the number of undergraduate
hours which graduate students can apply towards a graduate degree and the admission of undergraduate students to graduate
courses; (6) the number of transferable graduate credits that a student is allowed to accumulate and (7) other matters regarding
procedures, policies, and regulations as they are presented to the Council for consideration.

Membership on the Graduate Council is restricted to representatives from those schools housing graduate programs, those schools
which have been granted approval by the State Council of Higher Education in Virginia to implement graduate programs, the Faculty
Senate, the Vice President for Academic Affairs, the library, one graduate student, and a representative of the Centers of Higher
Education.

DEGREES GRANTED
Norfolk State University offers advanced degrees in the following areas:

1. Applied Sociology (Master of Arts) - Jointly with Old Dominion University
   (Old Dominion University serves as the Institution of Record)
2. Media and Communications - Master of Arts
   A. Interpersonal Communication Sequence
   B. Mass Communications Sequence
   C. Journalism Sequence
3. Community Psychology – Master of Arts
4. Clinical Psychology – Doctor of Clinical Psychology (Virginia Consortium Program in Clinical Psychology with Eastern Virginia
   Medical School serving as the institution of record) PSY.D.
5. Secondary Education – Master of Arts in Teaching (MAT)
6. Early Childhood Education – Master of Arts in Teaching
7. Materials Science - Master of Science
8. Music - Master of Music (MMUS)
9. Pre-Elementary Education - Master of Arts
10. Severe Disabilities - Master of Arts
12. Urban Affairs - Master of Arts
13. Urban Education - Master of Arts
14. Visual Studies (Jointly with Old Dominion University) - Master of Arts - Master of Fine Arts (MFA)
   (Norfolk State serves as the Institution of Record for the Visual Studies Program)
15. Criminal Justice - Master of Arts
16. Computer Science - Master of Science

Additional information about graduate studies at NSU is provided in the Graduate Studies Catalog.
SCHOOL OF BUSINESS
H. Martin Shane, Dean
(757) 823-8920

NORFOLK STATE UNIVERSITY MISSION STATEMENT

To provide an affordable, high-quality education for an ethnically and culturally diverse student population, equipping them with the capability to become productive citizens who continuously contribute to a global and rapidly changing society.

THE SCHOOL OF BUSINESS MISSION STATEMENT

The mission of the School of Business at Norfolk State University is to provide a high-quality, management education to a diverse student population. This is accomplished primarily through teaching and the development of instructional and other processes which ensure that students are equipped to be productive citizens in a global society.

ACCREDITATION

The School of Business is accredited by AACSB International -- The Association to Advance Collegiate Schools of Business. Founded in 1916, AACSB International is recognized as the sole accrediting agency for baccalaureate, master's, and Ph.D. degree programs in business administration and accounting by the U.S. Department of Education and by the Council on Post Secondary Accreditation.

ORGANIZATION OF THE SCHOOL

The Norfolk State University School of Business has five departments:

1. Accounting
2. Management and Marketing
3. Finance and Entrepreneurship
4. Management Information Systems
5. Tourism and Hospitality Management

PROGRAMS OF STUDY

The Bachelor of Science (B.S.) degree is offered in Accounting, Business Education and Tourism and Hospitality Management. The Bachelor of Science (B.S.) in General Business has concentrations in Entrepreneurship, Finance, Management Information Systems, Management and Marketing.

ADMISSION REQUIREMENTS

A. Business Majors

The School of Business has a lower division (freshman, sophomore) and an upper division (junior, senior). Admission requirements for lower division students are:

1. Completion of two units of high school mathematics (including one unit of algebra) and two units of science.
2. A cumulative grade point average of "C" (2.00) or better in high school or college work.
3. Indication of readiness to enroll in English 101, adequate reading skills, and eligibility to enroll in college mathematics as evidenced by scores on college placement examinations.

Admission to the upper division requires the completion of all courses in the lower division (freshman, sophomore years) with a minimum cumulative grade point average of 2.00. Non matriculating students may not take courses in the School of Business without consent of the department head and dean.

Students transferring courses to Norfolk State University from colleges and universities accredited by AACSB International may be granted advanced standing.

Transfer credits from community colleges and other schools not accredited by AACSB International will be accepted for those approved courses equivalent to those specified for the freshman and sophomore years in the major program selected in the School of Business. Exceptions to this policy may be established by the Dean of the School of Business and the Department Head. At least 50 percent of business course credits must be earned at NSU.

B. Minor in Business

A non-business student is required to take SIX courses (18 Hours) to earn a minor in Business. This will include FIVE required courses (15 hours) and ONE elective course (3 hours).

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAD 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>MGT 365</td>
<td>Organizational Behavior &amp; Theory</td>
<td>3</td>
</tr>
<tr>
<td>MKG 366</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MSY 375</td>
<td>MIS and E-Commerce</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses (Choose one)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSC 370</td>
<td>Total Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>ENT 387</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>FNC 360</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
</tbody>
</table>
COMMON BUSINESS KNOWLEDGE

The following courses are to be taken by each student in a baccalaureate program in the School of Business to meet the Common Business Knowledge requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ASM 330</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BAD 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>DSC 270</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>DSC 376</td>
<td>Statistics &amp; Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>DSC 476</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>ECN 211</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECN 212</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>ENT 387</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 131</td>
<td>Pre-calculus for Non-Science Majors</td>
<td>3</td>
</tr>
<tr>
<td>MTH 132</td>
<td>Calculus for Non-Science Majors</td>
<td>3</td>
</tr>
<tr>
<td>MTH 133</td>
<td>Calculus for Non-Science Majors</td>
<td>3</td>
</tr>
<tr>
<td>MTH 232</td>
<td>Calculus for Non-Science Majors</td>
<td>3</td>
</tr>
<tr>
<td>MTH 332</td>
<td>Calculus for Non-Science Majors</td>
<td>3</td>
</tr>
<tr>
<td>FNC 281</td>
<td>Legal Environment for Business</td>
<td>3</td>
</tr>
<tr>
<td>FNC 360</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BAD 450</td>
<td>Business Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MGT 365</td>
<td>Organizational Behavior and Theory</td>
<td>3</td>
</tr>
<tr>
<td>MGT 476</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MKG 366</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MSY 284</td>
<td>Advanced Microcomputing</td>
<td>3</td>
</tr>
<tr>
<td>MSY 375</td>
<td>Management Information Systems &amp; E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>55 cr hrs</td>
</tr>
</tbody>
</table>

CURRICULUM REGULATIONS

- All freshman and sophomore-level (lower division) courses in the curriculum must be completed before enrolling in junior and senior-level (upper division) courses. Upon completion of the lower division courses, a student whose grade point average is at least 2.0 may apply to the Department for admission to upper division.
- A letter grade of "C" or higher must be earned in all courses offered in the School of Business. In addition, a letter grade of at least "C" must be earned in the following non-business courses:
  - ENG 101 Communication Skills I
  - ENG 102 Communication Skills II
  - SCM 285 Principles of Speech
  - MTH 131 Pre-calculus for Non-Science Majors
  - MTH 132 Calculus for Non-Science Majors

TRANSFER STUDENTS

Credits transferred to Norfolk State University from other AACSB-International-accredited colleges or universities may be accepted as substitutes for equivalent courses in the accounting curriculum at Norfolk State University, without restriction. Credits transferred to Norfolk State University from colleges or universities not accredited by the AACSB-International may be accepted as substitutes only for those courses determined to be equivalent to lower division courses in the accounting curriculum at Norfolk State University. Credits transferred to Norfolk State University from the Virginia Community College System (VCCS) will be accepted as substitutes for equivalent courses in the accounting curriculum at Norfolk State University, according to the Norfolk State University/Virginia Community College System Transfer Guide. Exceptions to this policy could result from testing or other validation procedures established by the Dean of the School of Business and the Department Head.

ATTENDANCE POLICY

All students must attend class in accordance with the University attendance policy stated in the student handbook. Failure to do so may result in dismissal from class or a grade of "F."

COURSE LOAD

In order to ensure that students have the best chance of successfully pursuing their studies, the maximum permissible course load for all majors will depend on current cumulative grade point average. The following course load limitations will apply.

<table>
<thead>
<tr>
<th>CUMULATIVE GPA</th>
<th>MAXIMUM HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 2.0</td>
<td>12</td>
</tr>
<tr>
<td>2.0 - 2.49</td>
<td>15</td>
</tr>
<tr>
<td>2.5 and above</td>
<td>18</td>
</tr>
</tbody>
</table>

SCHOLARSHIPS

The School of Business awards a limited number of scholarships each year to students who show high promise and/or demonstrate a need for financial assistance. Special scholarship programs in the School of Business include the American Institute of Certified Public Accountants (AICPA) Scholarship Program, Philip Morris, Bank of America, Norfolk Southern, Disney, and El-Fayoumy Scholarships. Students interested in applying for scholarships may contact the Chair of the Scholarships Committee for the School of Business.

STUDENT ORGANIZATIONS

Various student organizations exist in the School of Business and are designed (1) to develop competent, assertive business leadership; (2) to create an interest and understanding of the many career opportunities in business, industry, and government; and (3) to encourage improvement in scholarship and service and promote school loyalty. A listing of student organizations includes the following:
SCHOOL OF BUSINESS ADVISORY COUNCIL

The School of Business Advisory Council operates as an external group to review policies, procedures, and programs in the School of Business. In addition, the Advisory Council through its Corporate Associates Program (CAP) is the major fund-raising component in the School of Business.

CAREER PLANNING AND PLACEMENT

The School of Business offers career-development seminars and services to aid students in making a successful transition from school to work. Career-development seminars, conducted by the Placement Office, aid students in developing career-planning and job-search abilities. In addition, numerous employers from business, industry, and government visit the University to interview students seeking employment. The School of Business sends a resume book with the resumes of graduating seniors to selected Fortune 500 Corporations twice a year.

CENTER FOR ENTREPRENEURSHIP

Melinda Harris, Acting Director
(757) 823-2655

The Center provides leadership, programs, and resources that enable the University to add value to businesses served while immersing students in the entrepreneurial experience. Through multidisciplinary teams, the Center extends knowledge and technical assistance that act to strengthen and expand the number and quality of minority- and women-owned, growth-oriented, and technology-driven businesses.

Students are strongly encouraged to participate in the activities, programs, and initiatives of the Center. The Center creates varied opportunities for students to participate through membership on consulting teams and internships. Experiential learning complements academic preparation by deepening and enriching students' understanding of entrepreneurship and ownership. This experience, and the insights gained, serve to build confidence and stimulate the entrepreneurial spirit.

All majors are welcome. The faculty members aligned with the Center bring a wealth of corporate and entrepreneurial experience, and they actively serve as mentors and coaches to students. In many cases, students engaged by the Center earn while they learn. The goals of the Center are to:

• Design and deliver educational programs (workshops, seminars, internships) and technical assistance to individuals and organizations in order to expand entrepreneurial expertise.
• Engage in applied research that contributes knowledge and encourages business formation and growth among minorities and women.
• Create an environment that immerses NSU students in the entrepreneurial experience.
• Propose recommendations to policy makers to develop and shape effective programs and policies for supporting growth-oriented, technology-based ventures.
DEPARTMENT OF ACCOUNTING
Allan D. Unseth, Department Head
(757) 823-8217

The primary objective of the Department of Accounting is to prepare students to become successful. This is achieved by making available a learning environment in which students are encouraged to develop both technical and interpersonal skills. The Department prepares students for careers in public accounting, industry or the governmental sector. The faculty encourages a commitment to life-long learning and strives to develop technical competence, information technology proficiency, critical thinking, teamwork and communication.

PROGRAM OF STUDY

The Bachelor of Science degree in Accounting requires a minimum of 122 hours of undergraduate work. The courses required of all accounting majors are as follows:

ACCOUNTING CURRICULUM
(Bachelor of Science in Accounting)

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>ACC 301 Intermediate Accounting I</td>
<td>3 cr hrs</td>
</tr>
<tr>
<td>BAD 175 Introduction to Business</td>
<td>ACC 302 Intermediate Accounting II</td>
<td></td>
</tr>
<tr>
<td>xxx xxx Science Elective</td>
<td>ACC 315 Federal Income Tax I</td>
<td></td>
</tr>
<tr>
<td>xxx xxx Science Laboratory Elective</td>
<td>ACC 413 Cost Accounting</td>
<td></td>
</tr>
<tr>
<td>BIO 100 Biological Science</td>
<td>ASM 330 Business Communications</td>
<td></td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>DSC 376 Statistics and Quantitative Methods</td>
<td></td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>ENT 387 Introduction to Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>HED 100 Personal and Community Health</td>
<td>FNC 360 Corporate Finance</td>
<td></td>
</tr>
<tr>
<td>MTH 113 Pre-calculus for Non-Science Majors</td>
<td>MGT 365 Organizational Behavior and Theory</td>
<td></td>
</tr>
<tr>
<td>MTH 132 Calculus for Non-Science Majors</td>
<td>MKG 366 Principles of Marketing</td>
<td></td>
</tr>
<tr>
<td>MSY 284 Advanced Microcomputing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PED 100 Fitness for Life or Modified PED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL 30 cr hrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Second Year                         |                                                 | TOTAL 31 cr hrs                    |
| ACC 201 Principles of Accounting I  | ACC 330 Accounting Systems                      |                                    |
| ACC 202 Principles of Accounting II| ACC 411 Intermediate Accounting III             |                                    |
| DSC 270 Business Statistics         | ACC 414 Auditing                                |                                    |
| ECN 211 Principles of Economics I   | BAD 450 Business Seminar                        |                                    |
| ECN 212 Principles of Economics II  | DSC 476 Operations Management                   |                                    |
| FNC 281 Legal Environment           | MGT 478 Strategic Management                    |                                    |
| LOG 210 Logic: Critical Thinking    | MSY 375 Management Information Systems &        |                                    |
| SCM 285 Principles of Speech        | E-Commerce                                      |                                    |
| xxx xxx Humanities                  | SOC 325 Society, Business, and Internationalism|                                    |
| xxx xxx Global/Cultural & Language Elective |                                 |                                    |
| TOTAL 30 cr hrs                     |                                                 |                                    |

| Fourth Year                         |                                                 | TOTAL 31 cr hrs                    |
| ACC 201                             | ACC 301 Accounting Systems                      |                                    |
| ACC 202                             | ACC 411 Intermediate Accounting III             |                                    |
| DSC 270 Business Statistics         | ACC 414 Auditing                                |                                    |
| ECN 211 Principles of Economics I   | BAD 450 Business Seminar                        |                                    |
| ECN 212 Principles of Economics II  | DSC 476 Operations Management                   |                                    |
| FNC 281 Legal Environment           | MGT 478 Strategic Management                    |                                    |
| LOG 210 Logic: Critical Thinking    | MSY 375 Management Information Systems &        |                                    |
| SCM 285 Principles of Speech        | E-Commerce                                      |                                    |
| xxx xxx Global/Cultural & Language Elective |                                 |                                    |
| TOTAL 31 cr hrs                     |                                                 |                                    |

SUMMARY OF GRADUATION REQUIREMENTS

- General Education Requirements: 40
- Common Business Core: 55
- Major Requirements: 21
- Liberal Arts Supplement: 6
- TOTAL: 122 cr hrs

Minor in Accounting

A minor in Accounting requires the completion of the following courses:

<table>
<thead>
<tr>
<th>Accounting Courses</th>
<th>Hours</th>
</tr>
</thead>
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All courses at the 300 and 400 levels must be preceded by listed prerequisites. To receive a minor, the students must achieve a minimum grade of "C" in all accounting courses taken. Also, a minimum of six hours in upper-level courses in the minor requirement must be taken at Norfolk State University.

Certifications

Many graduates want to obtain a professional certification. The Certified Public Accountant (CPA) certificate is the best known of these. Effective July 1, 2006, students taking the CPA examination in Virginia will have to meet the 150-hour requirement. However, most states already require students to meet the 150-hour requirement. Students should discuss with their advisors the options that the Department of Accounting has for meeting this requirement.

Graduates of the program may also take the Certified Management Accountant (CMA) examination or the Certified Internal Auditor (CIA) examination. These examinations do not require 150 hours of college credit.

Dual-Degree Program

There are two dual degree programs. A student will be able to pursue degrees in accounting and general business (with a concentration in management information systems or finance). Each program has a 30-semester hour curriculum for the 5th year. The student would receive two diplomas, and both degrees will appear on the student’s permanent academic record. Please see a faculty advisor or the department head for more information.
This department’s curricula consist of two career-oriented sequences, either of which leads to a Bachelor of Science in General Business: Entrepreneurship and Finance. The objectives of the department curricula are as follows:

1. To provide students majoring in Finance with a thorough knowledge of the concepts, theories, and principles needed to develop and implement successfully financial management systems.
2. To provide students with a broad background of management concepts, theories, and principles which can be used effectively in entrepreneurial and corporate entrepreneurial environments.
3. To help students understand and appreciate the different aspects of business, including being an entrepreneur.
4. To help students prepare for graduate programs.

ENTREPRENEURSHIP CURRICULUM
(Bachelor of Science in General Business)

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SUMMARY OF GRADUATION REQUIREMENTS
General Education Requirements 40
Common Business Core 55
Major Requirements 21
Non-Business Supplement 6
TOTAL 122 cr hrs

FINANCE CURRICULUM
(Bachelor of Science in General Business)

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<td>EN 211</td>
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<td>MTH 131</td>
<td>MTH 285</td>
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<td>MSY 284</td>
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</table>

TOTAL 30 cr hrs
The Department of Management and Marketing offers two concentrations, that lead to the Bachelor of: Management and Marketing.

The mission of the Department is to provide students with knowledge that will enable them to become productive managers and entrepreneurs. To accomplish this mission, the Department developed effective curricula in Management and Marketing; provide students with the state of the art body of knowledge in these areas; and develop and maintain faculty who are committed to excellence in teaching, research, and service to the University and the business community.

The objectives of these curricula are as follows:

1. To provide students with necessary skills that will enable them to function successfully in all types of organizations.
2. To provide students with a state-of-the-art body of knowledge in Total Quality Information Technology and in its application to all organizational functions.
3. To enable students to better understand the relationship between information technology and decision-making models in their respective functional areas.
4. To assist students in preparing for graduate studies in the areas of quality management, human resource management, and marketing.
5. To provide students with insight, guidance, training and sensitivity to the multicultural and global nature of the industry workforce and the public served.

**MANAGEMENT CURRICULUM**
*(Bachelor of Science in General Business)*

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<thead>
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<tr>
<td>FRS 100 Freshman Seminar</td>
<td>0 ASM 330 Business Communications</td>
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<td>3 DSC 370 Total Quality Management</td>
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<td>xxx xxx Science Elective</td>
<td>6 DSC 376 Statistics and Quantitative Methods</td>
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<td>1 ENT 387 Intro. to Entrepreneurship</td>
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<tr>
<td>ENG 101 Communication Skills I</td>
<td>3 FNC 360 Corporate Finance</td>
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<td>ENG 102 Communication Skills II</td>
<td>3 MGT 365 Organizational Behavior and Theory</td>
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<td>HED 100 Personal and Community Health</td>
<td>2 MKG 366 Principles of Marketing</td>
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<td>MTH 131 Pre-calculus for Non-Science Majors</td>
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<td>MTH 132 Calculus for Non-Science Majors</td>
<td>3 MSY 375 Management Information System &amp;</td>
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<tr>
<td>MSY 284 Advanced Microcomputing</td>
<td>3 E-Commerce</td>
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<td>PED 100 or PED 101/102</td>
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<td>ACC 201 Principles of Accounting I</td>
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<td>3 MGT 410 Leadership and Diversity in Management</td>
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<td>ECON 21 Principles of Economics II</td>
<td>3 MGT 415 International Management</td>
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<td>FNC 281 Legal Environment</td>
<td>3 MGT xxx Organizational Change and Development</td>
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<td>LOG 210 Logic: Critical Thinking</td>
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<td>SOC 285 Principles of Speech</td>
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<td>xxx xxx Humanities</td>
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<table>
<thead>
<tr>
<th>SUMMARY OF GRADUATION REQUIREMENTS</th>
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<tbody>
<tr>
<td>General Education Requirements</td>
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<tr>
<td>Major Requirements</td>
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<tr>
<td>Non-Business Supplement</td>
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## MARKETING CURRICULUM
(Bachelor of Science in General Business)

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<td>DSC 376 Statistics and Quantitative Methods 3</td>
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<td>xxx xxx Science Elective</td>
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<tr>
<td>xxx xxx Science Laboratory Elective</td>
<td>FNC 360 Corporate Finance 3</td>
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<td>ENG 101 Communication Skills I</td>
<td>MGT 365 Organizational Behavior and Theory 3</td>
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<td>ENG 102 Communication Skills II</td>
<td>MKG 366 Principles of Marketing 3</td>
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<tr>
<td>HED 100 Personal and Community Health</td>
<td>MKG 367 Customer Identification and Analysis 3</td>
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<td>MTH 131 Pre-calculus for Non-Science Majors</td>
<td>MKG 411 Salesmanship 3</td>
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<td>MSY 375 Management Information Systems &amp; E-Commerce 3</td>
</tr>
<tr>
<td>MSY 284 Advanced Microcomputing</td>
<td>FNC 281 Legal Environment 3</td>
</tr>
<tr>
<td>PED 100 Fitness for Life or PED 101/102</td>
<td>LOG 210 Logic: Critical Thinking 3</td>
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<tr>
<td>or Modified PED</td>
<td>SCM 285 Principles of Speech 3</td>
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## Fourth Year

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<td>LOG 210 Logic: Critical Thinking 3</td>
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## SUMMARY OF GRADUATION REQUIREMENTS

| General Education Requirements | 40 |
| Common Business Core | 55 |
| Major Requirements | 21 |
| Non-Business Supplement | 6 |
| TOTAL | 122 cr hrs |

### TOURISM AND HOSPITALITY MANAGEMENT
Lawrence E. Epplein, Interim Department Head
(757) 823-2490

Tourism and hospitality is a global industry consisting of more than 300,000 hotels and 8 million restaurants and employing 60 million people worldwide. The Bachelor of Science in Tourism and Hospitality Management offers a multidisciplinary approach to applying business principles to the industry. The program requires course work from various departments within the School of Business, as well as from other areas within the University.

The mission of the Tourism and Hospitality Management Department is to prepare students, through the use of theory-based instruction and practical experience, to assume leadership roles in a challenging and changing global hospitality environment.

Following completion of the general education core and business courses, students take advanced courses that detail the nature and functioning of the tourism and hospitality industry, including its unique management, marketing, legal, financial and human resource aspects.

Objectives of the department’s curriculum are as follows:

1. To prepare students for an entry-level management position in the tourism and hospitality industry.
2. To prepare students to apply sound business principles to all aspects of the tourism and hospitality industry, including hotel/lodging, restaurant and food service, and travel-related services.
3. To provide students with insight, guidance, training and sensitivity to the multi-cultural and global nature of the industry workforce and public served.
4. To instill in students the service nature of the tourism and hospitality industry with a focus on the internal customer (the employee) as the key to affecting external customer loyalty.
### TOURISM AND HOSPITALITY MANAGEMENT CURRICULUM  
(Bachelor of Science in Tourism and Hospitality Management)

<table>
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<td>HRM 115</td>
<td>Introduction to Hospitality</td>
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<td>HRM 120</td>
<td>Sanitation Principles</td>
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<td>Introduction to Business</td>
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<td>Contemporary Mathematics</td>
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<td>Computers in Hospitality</td>
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<td>HRM 230</td>
<td>Hospitality Accounting I</td>
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<td>Fundamentals of Fitness for Life</td>
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<td>Principles of Speech</td>
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<td>HRM 440</td>
<td>Hospitality Sales and Marketing</td>
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<td>Human Resource Management</td>
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<td>Hospitality Law</td>
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<td>Senior Project</td>
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<tr>
<td>TOTAL</td>
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<td>30 cr hrs</td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

- General Education Requirements: 40 credits
- Tourism and Hospitality Management Core: 56 credits
- Tourism and Hospitality Management Electives: 21 credits
- Non-Major Supplement: 3 credits
- TOTAL: 120 credits

**Tourism and Hospitality Management Electives**

Students must choose 7 courses (21 credit hours) from the following 3-credit courses:

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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>HRM 150</td>
<td>Tourism Principles</td>
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<tr>
<td>HRM 211</td>
<td>Housekeeping</td>
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<tr>
<td>HRM 359/359L</td>
<td>Commercial Foods/Lab</td>
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<td>HRM 240</td>
<td>Introduction to Gaming</td>
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<tr>
<td>HRM 242</td>
<td>The Travel Agency</td>
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<td>HRM 280</td>
<td>Dining Room and Beverage Management</td>
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<td>HRM 300</td>
<td>Hospitality Purchasing</td>
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<tr>
<td>HRM 342</td>
<td>The Recreation Industry</td>
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<td>HRM 351</td>
<td>Principles of Event Planning and Management</td>
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<td>HRM 361</td>
<td>Training for the Hospitality Organization</td>
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<td>HRM 381</td>
<td>Facilities Layout and Design</td>
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<td>HRM 400</td>
<td>Restaurant Management</td>
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<td>HRM 401</td>
<td>Club and Resort Management</td>
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<td>HRM 402</td>
<td>Management By Menu</td>
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<td>HRM 403</td>
<td>Catering Management</td>
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<td>Restaurant Entrepreneurship</td>
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<td>Hospitality Property Management</td>
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<td>HRM 494</td>
<td>Hospitality Franchising</td>
<td></td>
</tr>
</tbody>
</table>

DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS
Moncef Belhadjali, Department Head  
(757) 823-8996

The Department of Management Information Systems (MIS) provides educational opportunities for students desiring to prepare for careers as computer support specialists, systems analysts, computer consultants, information specialists as well as for teacher licensure in business education. Throughout the MIS curriculum, E-Commerce skills are taught. Studies in MIS lead to the Bachelor of Science degree in General Business. A Bachelor of Science also is offered in Business Education.

This department exists to provide an intellectual climate and educational environment where students may find a sense of identification, belonging, responsibility, and achievement that will prepare them for roles of leadership and for professional careers in business, government, and education.

The objectives of the Management Information Systems curricula are as follows:

- To provide learning experiences in the areas of specialization that will prepare students to meet the demands of the information age.
- To provide a learning environment that will enhance the mastery of subject matter and specific skills within the major content areas.
- To increase students’ awareness and use of information technology for the performance of tasks related to organizational functions.
- To teach E-Commerce skills.
- To provide opportunities for students to develop cognitive and communication skills that will enhance their capacity to develop analytical, problem-solving, and decision-making skills.
- To provide opportunities and skills for students to be competitive in a chosen career and/or professional school with a commitment to the profession.

### MANAGEMENT INFORMATION SYSTEMS CURRICULUM

**Bachelor of Science in General Business**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>ASM 330 Business Communications 3</td>
</tr>
<tr>
<td>BAD 175 Introduction to Business</td>
<td>DSC 376 Statistics and Quantitative Methods 3</td>
</tr>
<tr>
<td>xxx xxx Science Elective</td>
<td>ENT 387 Introduction to Entrepreneurship 3</td>
</tr>
<tr>
<td>xxx xxx Science Laboratory Elective</td>
<td>FNC 360 Corporate Finance 3</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>MGT 365 Organizational Behavior and Theory 3</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>MKG 366 Principles of Marketing 3</td>
</tr>
<tr>
<td>HED 100 Personal and Community Health</td>
<td>MSY 374 Programming in Visual Basic 3</td>
</tr>
<tr>
<td>MTH 131 Pre-calculus for Non-Science Majors</td>
<td>MSY 375 Management Information Systems 3</td>
</tr>
<tr>
<td>MTH 132 Calculus for Non-Science Majors</td>
<td>&amp; E-Commerce 3</td>
</tr>
<tr>
<td>MSY 284 Advanced Microcomputing</td>
<td>MSY 390 Business Database Management 3</td>
</tr>
<tr>
<td>PED 100 PED 101/102</td>
<td>SOC 325 Society, Business, &amp; Internationalism 3</td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td>TOTAL 30 cr hrs</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31 cr hrs</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201 Principles of Accounting I</td>
<td>BAD 450 Business Seminar 1</td>
</tr>
<tr>
<td>ACC 202 Principles of Accounting II</td>
<td>DSC 476 Operations Management 3</td>
</tr>
<tr>
<td>DSC 270 Business Statistics</td>
<td>MSY 372 Business Applications in Visual C++ 3</td>
</tr>
<tr>
<td>ECN 211 Principles of Economics I</td>
<td>MSY 410 Information Systems Analysis and Design 3</td>
</tr>
<tr>
<td>ECN 212 Principles of Economics II</td>
<td>MSY 419 Networking 3</td>
</tr>
<tr>
<td>FNC 281 Legal Environment</td>
<td>MSY 499 Senior Project in MIS 3</td>
</tr>
<tr>
<td>LOG 210 Logic: Critical Thinking</td>
<td>MSY 422 Decision Support &amp; Expert Systems 3</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>xxx xxx Business Core Elective 3</td>
</tr>
<tr>
<td>xxx xxx Humanities</td>
<td>xxx xxx Global/Cultural &amp; Language Electives 6</td>
</tr>
<tr>
<td>xxx xxx Global/Cultural &amp; Language Electives</td>
<td><strong>TOTAL 30 cr hrs</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31 cr hrs</strong></td>
</tr>
</tbody>
</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

- General Education Requirements 40
- Common Business Core Requirements 55
- Major Requirements 21
- Non-Business Supplement 6
- **TOTAL 122 cr hrs**

### BUSINESS EDUCATION CURRICULUM

**Bachelor of Science in Business Education**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>ASM 210 Keyboarding III 3</td>
</tr>
<tr>
<td>BAD 175 Introduction to Business</td>
<td>ASM 230 Office Communications 3</td>
</tr>
<tr>
<td>MSY 184 Essentials of Microcomputing</td>
<td>ACC 201 Principles of Accounting I 3</td>
</tr>
<tr>
<td>XXX Natural Science Elective</td>
<td>ACC 202 Principles of Accounting II 3</td>
</tr>
<tr>
<td>XXXL Natural Science Lab Elective</td>
<td>ECN 211 Principles of Economics I 3</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>ECN 212 Principles of Economics II 3</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>FNC 281 Legal Environment of Business 3</td>
</tr>
<tr>
<td>HED 100 Personal and Community Health</td>
<td>MSY 284 Advanced Microcomputing 3</td>
</tr>
<tr>
<td>MTH 131 Pre-calculus for Non-Science Majors</td>
<td>LOG 210 Logic: Critical Thinking 3</td>
</tr>
<tr>
<td>MTH 132 Calculus for Non-Science Majors</td>
<td>SCM 285 Principles of Speech 3</td>
</tr>
<tr>
<td>PED 100 PED 101/102</td>
<td>xxx xxx Humanities 3</td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td><strong>TOTAL 33 cr hrs</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31 cr hrs</strong></td>
</tr>
</tbody>
</table>

To apply to upper division management information systems, students must have completed all freshman- and sophomore-level courses with a cumulative grade point average of 2.0 or higher.
<table>
<thead>
<tr>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 387 Introduction to Entrepreneurship</td>
<td>SED 405 Reading in the Content Area</td>
</tr>
<tr>
<td>ASM 324 Business Systems and Procedures</td>
<td>SED 420 Educational Technology</td>
</tr>
<tr>
<td>MGT 365 Organizational Behavior and Theory</td>
<td>SED 486 Educational Psychology and</td>
</tr>
<tr>
<td>SED 201 Schools and the Teaching Profession</td>
<td>Behavior Management</td>
</tr>
<tr>
<td>xxx xxx Education Elective</td>
<td>ASM 499 Special Seminar in Business Subjects</td>
</tr>
<tr>
<td>SED 380 Foundations of Methods in Secondary Schools</td>
<td>SED 499 Directed Teaching</td>
</tr>
<tr>
<td>MKG 366 Principles of Marketing</td>
<td>SED 499P Professional Seminar</td>
</tr>
<tr>
<td>ASM 330 Business Communications</td>
<td>xxx xxx Global/Cultural &amp; Language Electives</td>
</tr>
<tr>
<td>MSY 374 Programming in Visual Basic</td>
<td>TOTAL 30 cr hrs</td>
</tr>
<tr>
<td>xxx xxx Business Elective</td>
<td></td>
</tr>
<tr>
<td>TOTAL 30 cr hrs</td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Requirements</td>
<td>31</td>
</tr>
<tr>
<td>Common Business Core Requirements</td>
<td>42</td>
</tr>
<tr>
<td>Major Requirements</td>
<td>42</td>
</tr>
<tr>
<td>Liberal Arts Supplement</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>124 cr hrs</td>
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</table>

<table>
<thead>
<tr>
<th>Norfolk State University</th>
<th>2004-2005 University Catalog</th>
</tr>
</thead>
</table>
SCHOOL OF EDUCATION
Jean Braxton, Dean
Donna W. Dabney, Assistant Dean
(757) 823-8701

Theme: “Preparing competent, compassionate, cooperative and committed leaders.”

The School of Education is responsible for providing leadership, coordination, and evaluation of all teacher education programs at the University. Its central purpose is to provide pre-service and in-service educational programs to prospective teachers, in-service teachers, administrators, and others engaged in educational activities in schools and other agencies. Corollary purposes are as follows:

1. to contribute to the knowledge base in the field of educational theory and practice in a multi-cultural, multi-lingual, multi-racial society.
2. to provide leadership in involving public schools, universities, and communities in collaborative educational efforts.
3. to provide service to other agencies engaged in education in such a manner as to promote the realization of equal educational opportunity and equal educational results for all children.

CONCEPTUAL FRAMEWORK

The conceptual framework adopted by Norfolk State University’s professional education programs describes the vision and purpose of the School of Education to prepare educators to work in Pre-K-12 schools. Consistent with the institution’s mission, its focus is to prepare competent, compassionate, cooperative and committed leaders capable of meeting the diverse needs of all learners. Supported by a strong knowledge base, the conceptual framework provides a system for ensuring coherence and a well-articulated professional commitment to knowledge, teaching competence, leadership, and student learning. This is reflected in the curriculum, instruction and clinical experiences provided to develop the knowledge, skills and dispositions that are valued in teachers and other professional school personnel.

ACCREDITATION

All of the teacher education programs sponsored by the School of Education have been approved by the State Department of Education and have been accredited by the National Council for Accreditation of Teacher Education (NCATE). Each program is designed to prepare teachers to meet the teacher certification requirements for the state of Virginia as well as requirements for successful study at the graduate school level.

ORGANIZATION OF SCHOOL

The courses of instruction offered by the School of Education are organized into departments, which sponsor a wide array of specialization possibilities for students. The following departments and centers are as follows:

- Department of Elementary Education
- Department of Special Education
- Department of Health, Physical Education and Exercise Science
- The H. H. Bozeman Integrated Media/Resource Center
- Department of Secondary Education and School Leadership
- The Center for Teaching Excellence

PROGRAMS OFFERED

The School of Education offers undergraduate programs in the following fields:

- Elementary Education
  - B.S., Early Childhood Education
  - B.S., Exercise Science/Physical Education

- Special Education
  - B.S., Earily Childhood Education
  - B.S., Exercise Science/Physical Education

Undergraduate programs leading to the Bachelor of Science degree require a minimum of 120 semester hours of credit. These programs lead to the Virginia Collegiate Professional Teacher Certificate or to a specific educational career.

Students seeking teacher certification must earn degrees in academic areas and complete the 18-semester hour professional education sequence and 12-semester hour student teaching experience in the School of Education.

APPLICATION/ADMISSION TO TEACHER EDUCATION

Admission to Norfolk State University does not imply automatic admission to teacher education programs. Each prospective teacher must apply to the School of Education for admission to the professional education program and must maintain standards prescribed for retention in the program. Freshman and sophomore students admitted to the pre-professional program are required to apply for admission to the professional education program after completion of the sophomore courses (inclusive of 60 credit hours).
CRITERIA FOR ADMISSION TO TEACHER EDUCATION

PROFESSIONAL LEVEL
Applicant must have done the following:

1. completed all prescribed (per curricula) freshman and sophomore courses.
2. earned a grade point average of 2.5 or better in all lower level (freshman and sophomore) courses.
3. earned a grade of "C" or better in all English and math courses.
4. submitted Speech Screening results.
5. exhibited physical and mental health requisite to the responsibilities and duties of the teaching profession.
6. evidenced character and temperament appropriate for the duties and responsibilities for the teaching profession and exhibited a professional interest in teaching.
7. earned a grade of "C" or better in EED 201, SED 201, or SPE 201.
8. passed the PRAXIS I Examination and submit original copy of PRAXIS scores.
9. received departmental recommendation.
10. submitted a portfolio containing items specified in departmental handbook.

APPLICATION PROCEDURES FOR ADMISSION TO TEACHER EDUCATION

1. Application may be made to the School of Education after the second semester of the sophomore year (minimum 60 credit hours). Special forms will be provided by the School of Education in the Center for Professional Development.
2. Applications will be evaluated as "Approved" or "Rejected." Applicants "Rejected" may reapply the next year.
3. The student must receive "Approved" admission to teacher education before registering for upper level professional courses.

RETENTION IN TEACHER EDUCATION

Once admitted to teacher education, the following conditions apply:

1. The student must achieve all of his or her major subject departmental objectives and his or her professional objectives in a quality manner.
2. The student must work closely with his or her assigned advisor and maintain better than a 2.5 grade-point average in the major areas and professional education with no final grade less than "C" in either area.
3. The student must maintain good standing with the University and with the School of Education.

ADMISSION TO DIRECTED TEACHING

The prerequisites for admission to directed teaching are as follows:

1. Admission to teacher education.
2. Satisfactory results from the Pre-professional Skills Test (PRAXIS I).
3. Passing scores on Praxis II or a receipt of registration to take PRAXIS II must be submitted before mid-term of the semester of student teaching. Experience must be submitted with the application to student teach.
4. Completion of observation/participation.
5. Submission of student teaching application.
6. Evidence of above average academic accomplishment in major subject field.
7. Evidence of above average academic accomplishment in professional education, including both general and special courses.
8. An overall average scholastic record of 2.5 or better for all undergraduate work completed.
9. Departmental endorsement (major subject field) (DEPARTMENT HEAD). (See Student Teaching Application).
10. Status as a graduating senior in December or May of the school session in which directed teaching is to be done (DEPARTMENT HEAD/ADVISOR).
11. Evidence of above average achievement in written and oral communications, including all communications requirements for earning a baccalaureate degree from the University.
12. Satisfactory personality and character references (ADVISOR or DEPARTMENT HEAD).
13. Choice of teaching as a primary vocation (STUDENT TEACHING APPLICATION).
14. Completion of required methods courses within the last two semesters prior to making application for admission to directed teaching (ADVISORY REPORT).
15. For transfer students, completion of some coursework at this University, including at least one methodology course, before approval for student teaching (DEPARTMENT HEAD).

TEACHER CERTIFICATION ENDORSEMENT

The following steps are required for students seeking teacher certification endorsement as undergraduates:

Secondary School Certification Endorsement

1. Students must take the General Education Core of 40 semester hours.
2. Students must earn an undergraduate degree in the field in which they plan to teach. The fields are listed below.

- Art/Fine Arts
- Biology
- Business
- Chemistry
- Endorsement in Occupational Child Care, Clothing
- Earth Science
- English
- History and Social Studies
- Mathematics
- Music/Instrumental
- Music/Vocal
- Physical Education/
- Driver Education
- Physics
3. Students must take the following professional education courses (18 semester hours) plus student teaching (12 semester hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SED 201</td>
<td>American Schools and the Teaching Profession</td>
<td>SED 390</td>
<td>Secondary Social Studies Methods</td>
</tr>
<tr>
<td>SED 233</td>
<td>Seminar in Assessment and Evaluation</td>
<td></td>
<td>(for History/Social Science majors)</td>
</tr>
<tr>
<td>SED 380</td>
<td>Foundations of Methods in Secondary Schools</td>
<td>SED 420</td>
<td>Educational Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SED 486</td>
<td>Educational Psychology and Behavior Management</td>
</tr>
<tr>
<td>SED 384</td>
<td>Teaching Methods of Mathematics/Science/Technology</td>
<td></td>
<td>School/Community Relations</td>
</tr>
<tr>
<td></td>
<td>(for mathematics/science majors in place of SED 488)</td>
<td>SED 488</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SED 499</td>
<td>Directed Teaching and Seminar</td>
</tr>
</tbody>
</table>

4. Students must pass the PRAXIS I examination prior to taking the methods courses.

**Elementary Certification Endorsement**

1. Students must take the General Education Core of 40 semester hours.
2. Students must earn a degree in one of the following fields:
   - English
   - History and Social Studies
   - Interdisciplinary Studies
   - Psychology

3. Students must take the following courses in elementary education and professional education (18 semester hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EED 201</td>
<td>American Schools and the Teaching Profession</td>
<td>EED 384</td>
<td>Teaching Reading in the Elementary School</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
<td>EED 450</td>
<td>Diagnostic Reading</td>
</tr>
<tr>
<td>EED 300</td>
<td>Methods and Materials for Teaching Science, Math,</td>
<td>EED 461</td>
<td>Curriculum &amp; Instruction in the Elementary School</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td></td>
<td>Grades (4-6)</td>
</tr>
<tr>
<td>EED 360</td>
<td>Curriculum &amp; Instruction for Primary Grades (Pre-K-3)</td>
<td>EED 499</td>
<td>Directed Teaching (Student Teaching)</td>
</tr>
<tr>
<td>EED 374</td>
<td>Methods of Teaching Social Studies in the Elementary School</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Students must pass the Praxis I examination prior to enrolling in 300- or 400-level EED courses.

*Enrollment requires completion of requirements for admission to teacher education.

**Special Education Certification Endorsement**

1. Students must take the General Education Core of 40 semester hours.
2. Students must earn a degree in a liberal arts major, e.g.,
   - English
   - History and Social Studies
   - Interdisciplinary Studies
   - Psychology

3. Students must take 24 semester hours plus student teaching (12 semester hours) in special education and professional education courses.
4. Students must pass the PRAXIS I examination before student teaching.
5. Students must complete preparation to teach learners with learning disabilities and mental retardation or emotional disturbance.

**Learning Disabilities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 210</td>
<td>American Schools &amp; the Teaching Profession Option (a): Mental Retardation</td>
<td>3</td>
</tr>
<tr>
<td>SPE 490</td>
<td>Assessment of Exceptional Students</td>
<td>3</td>
</tr>
<tr>
<td>SPE 312</td>
<td>Educational and Behavioral Management</td>
<td>3</td>
</tr>
<tr>
<td>SPE 344</td>
<td>Teaching Reading to Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>SPE 345</td>
<td>Characteristics and Medical Aspects of Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPE 372</td>
<td>Collaboration, Inclusion, Transition and Other Curricular Adjustments</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499C</td>
<td>Directed Teaching-Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL** | 21 cr hrs |

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 332</td>
<td>Nature of and Strategies for Teaching Learners with MR</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499A</td>
<td>Directed Teaching-Mental Retardation</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL** | 9 cr hrs |

OR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 334</td>
<td>Nature of and Strategies for Teaching Learners with ED</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499B</td>
<td>Directed Teaching-Emotionally Disturbed</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL** | 9 cr hrs |

**TEACHER CERTIFICATION PROCEDURES**

Bachelor's degree graduates seeking a teaching certificate endorsement must report to the Department of Graduate Studies for approval, counseling, and advisor assignment. (Lists of courses required for each teaching field are found in this catalog under each department.) All applicants for teaching certificates must take the PRAXIS examination and make passing scores required by the Virginia Department of Education, prior to admission to teacher education.
The passing scores are as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>CBT</th>
<th>PPST</th>
<th>CBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>326</td>
<td>178</td>
<td>French: Content Knowledge 169</td>
</tr>
<tr>
<td>Mathematics</td>
<td>323</td>
<td>178</td>
<td>German: Content Knowledge 162</td>
</tr>
<tr>
<td>Writing</td>
<td>324</td>
<td>176</td>
<td>Family and Consumer Services 550</td>
</tr>
<tr>
<td>Art Education</td>
<td>159</td>
<td></td>
<td>Technology Education 610</td>
</tr>
<tr>
<td>Biology: Content Knowledge</td>
<td>155</td>
<td></td>
<td>Mathematics: Content Knowledge 147</td>
</tr>
<tr>
<td>Business Education</td>
<td>590</td>
<td></td>
<td>Music: Content Knowledge 160</td>
</tr>
<tr>
<td>Chemistry: Content Knowledge</td>
<td>153</td>
<td></td>
<td>Physical Education 151</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>143</td>
<td></td>
<td>Social Studies: Content Knowledge 161</td>
</tr>
<tr>
<td>English Language</td>
<td></td>
<td></td>
<td>Spanish: Content Knowledge 161</td>
</tr>
<tr>
<td>Literature and Composition:</td>
<td></td>
<td></td>
<td>Speech/Communication 470</td>
</tr>
<tr>
<td>Content and Knowledge</td>
<td>172</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIVERSITY WIDE COUNCIL ON TEACHER EDUCATION (CTE)

The Council on Teacher Education is an advisory committee for implementing the total University emphasis on quality preparation of prospective teachers. Policies are executed by the School of Education. The Council is composed of representatives from all departments of the University that sponsor teacher preparation programs.

THE CENTER FOR PROFESSIONAL DEVELOPMENT
Margaret Knight, Director
(757) 823-8715

The Center for Professional Development has the responsibility for providing all formal field experiences, observation/participation, directed teaching, and internships for people wishing to enter the education profession. Observation and participation experiences are provided for freshman, sophomore, and junior-level students. Student teaching and internship experiences are provided for senior level and graduate students.

H. H. BOZEMAN INTEGRATED MEDIA/RESOURCE CENTER

The H. H. Bozeman Integrated Media/Resource Center provides supplementary materials and instructional media for the School of Education and for other schools and departments for which the collections are relevant. Two centers comprise the component: The Instructional Media Center and the Multi-Cultural/Instructional Resource Center. The combined collections include resources and equipment appropriate for use from pre school through adult education levels, with emphasis on the training and professional development of the teacher.

DEPARTMENT OF ELEMENTARY EDUCATION
Arletha McSwain, Department Head
(757) 823-2700

The Elementary Education Department provides undergraduate and graduate programs for students seeking preparation to work with young children in the community, agencies, and public school settings.

Elementary Certification Endorsement (PreK-6)

1. Students must take the General Education Core of 40 semester hours.
2. Students must earn a degree in one of the following fields:
   - English
   - Mathematics
   - History
   - Psychology
3. Students must take the following courses in elementary education and professional education for endorsement (36 semester hours):
   - SED 201 American Schools and the Teaching Profession
   - EED 274 The Study of Young Children
   - EED 465 Methods and Materials for Teaching Science, Mathematics and Technology
   - EED 360 Curriculum & Instruction for Primary Grades (PreK-3)
   - EED 374 Methods of Teaching Social Studies in the Elementary School
   - EED 450 Teaching Literacy in the Elementary School
   - EED 490 Diagnostic Reading
   - EED 461 Curriculum & Instruction in the Elementary School Grades (4-6)
   - EED 499 Directed Teaching (Student Teaching)
4. Students must pass the PRAXIS examinations.
   *Enrollment requires completion of requirements for admission to teacher education.
## ELEMENTARY EDUCATION CERTIFICATION ENDORESEMENT GRADES PRE-K-6 CURRICULUM

### B.A. IN PSYCHOLOGY

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>CLS 150</td>
<td>Computer Concepts &amp; Applications</td>
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<td>HIS 103</td>
<td>American History</td>
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<tr>
<td>PSY 210</td>
<td>Introduction to Psychology</td>
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<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
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<tr>
<td>HED 100</td>
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**TOTAL** 32 cr hrs

#### Second Year

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<td>3</td>
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<tr>
<td>ENG 207</td>
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<tr>
<td>MTH 141</td>
<td>Teaching Mathematics in the Elementary Schools</td>
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<tr>
<td>MTH 142</td>
<td>Teaching Mathematics in the Elementary Schools</td>
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</tr>
<tr>
<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
<td>3</td>
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<tr>
<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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<tr>
<td>SOCS 285</td>
<td>Principles of Speech</td>
<td>3</td>
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<tr>
<td>PSY 270</td>
<td>Statistics in Psychology or PSY 370</td>
<td>3</td>
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<tr>
<td>POS 315</td>
<td>Principles of Speech</td>
<td>3</td>
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<tr>
<td>POS 340</td>
<td>Principles of Speech</td>
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<tr>
<td>MUS 301</td>
<td>The American Schools and the Teaching Profession</td>
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<tr>
<td>ENG 207</td>
<td>Literature in the Western World</td>
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<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<td>HUM 210</td>
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<td>SCW 285</td>
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<td>POS 301</td>
<td>Principles of Speech</td>
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<tr>
<td>HIS 335</td>
<td>Principles of Speech</td>
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<tr>
<td>HIS 336</td>
<td>Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
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</tr>
<tr>
<td>ENG 203</td>
<td>Advanced Communication Skills</td>
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<tr>
<td>HUM 210</td>
<td>Humanities</td>
<td>3</td>
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<tr>
<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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<tr>
<td>SOCS 285</td>
<td>Principles of Speech</td>
<td>3</td>
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<tr>
<td>PSY 270</td>
<td>Statistics in Psychology or PSY 370</td>
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<td>POS 315</td>
<td>Principles of Speech</td>
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<td>POS 340</td>
<td>Principles of Speech</td>
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<tr>
<td>EED 201</td>
<td>The American Schools and the Teaching Profession</td>
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</tr>
<tr>
<td>MUS 234</td>
<td>The American Schools and the Teaching Profession</td>
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</tr>
<tr>
<td>MUS 234</td>
<td>The American Schools and the Teaching Profession</td>
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<tr>
<td>MUS 301</td>
<td>The American Schools and the Teaching Profession</td>
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<td>ENG 207</td>
<td>Literature in the Western World</td>
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<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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<tr>
<td>HUM 210</td>
<td>Humanities</td>
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<td>POS 301</td>
<td>Principles of Speech</td>
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<tr>
<td>HIS 335</td>
<td>Principles of Speech</td>
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<tr>
<td>HIS 336</td>
<td>Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
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**TOTAL** 31 cr hrs

#### Fourth Year

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>PSY 211</td>
<td>Basic Principles of Psychology</td>
<td>3</td>
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<tr>
<td>EED 274</td>
<td>Study of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Literature in the Western World</td>
<td>3</td>
</tr>
<tr>
<td>PSY 270</td>
<td>Statistics in Psychology or PSY 370</td>
<td>3</td>
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<tr>
<td>SOCS 285</td>
<td>Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Literature in the Western World</td>
<td>3</td>
</tr>
<tr>
<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
<td>1</td>
</tr>
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<td>HUM 210</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Literature in the Western World</td>
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<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<tr>
<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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</tr>
<tr>
<td>HUM 210</td>
<td>Humanities</td>
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<tr>
<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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<td>HUM 210</td>
<td>Humanities</td>
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<td>SCI 381</td>
<td>Science for Elementary Teachers</td>
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<td>SCI 381L</td>
<td>Science for Elementary Teachers Lab</td>
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<td>HUM 210</td>
<td>Humanities</td>
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</table>

**TOTAL** 27 cr hrs

### Summary of Graduation Requirements

1. **General Education Core**
   - I. Communication Skills
   - II. Social Science
   - III. Mathematics
   - IV. Science
   - V. Science

2. **Secondary Concentration**
   - I. Mathematics
   - II. Social Science
   - III. Science
   - IV. Science

3. **Supporting Courses**
   - I. Science
   - II. Mathematics
   - III. Social Science
   - IV. Science

**TOTAL** 121 cr hrs

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## ELEMENTARY EDUCATION ENDORSEMENT Pre-K-6; MATHEMATICS CURRICULUM

(FOR PERSONS WHO DO NOT HAVE A B.S. OR B.A. DEGREE)

### BACHELOR OF SCIENCE IN INTERDISCIPLINARY STUDIES

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENG 101</td>
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<tr>
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<td>Communication Skills II</td>
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<tr>
<td>MTH 105</td>
<td>Intermediate Algebra</td>
<td>3</td>
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<td>MTH 151</td>
<td>College Algebra</td>
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<td>Biological Science</td>
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<td>CHM 100</td>
<td>Chemistry or PHY 100</td>
<td>3</td>
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<tr>
<td>HIS 102</td>
<td>American History</td>
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<td>SOCS 150</td>
<td>Introduction to Social Science</td>
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<tr>
<td>PED 100</td>
<td>Personal and Community Health</td>
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**TOTAL** 32 cr hrs

#### Second Year

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<td>MTH 142</td>
<td>Teaching Mathematics in the Elementary Schools</td>
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**TOTAL** 33 cr hrs

---

NOTE: STUDENTS MUST PASS PRAXIS I AND APPLY FOR ADMISSION TO TEACHER EDUCATION AT THE END OF 60 HOURS
### SUMMARY OF GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
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<tbody>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
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<tr>
<td></td>
<td>EED 461 Curriculum and Instruction for Elementary School (Grades 4-6)</td>
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<tr>
<td></td>
<td>EED 490 Diagnostic Reading and Prescriptive Reading</td>
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<td>EED 350 Directed Teaching</td>
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<td></td>
<td>EED 461</td>
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<td></td>
<td>EED 462</td>
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<td></td>
<td>EED 470 Methods of Teaching Social Studies in the Elementary School</td>
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<td>TOTAL 123 cr hrs</td>
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**NOTE:** Students must pass PRAXIS I and apply for admission to teacher education at the end of 68 hrs.

**Example:**
- **Eng 306** Literacy Criticism 3
- **Eng 315** Survey of English Literature 3
- **Eng 341** Survey of American Literature 3
- **Eed 350** Directed Teaching 12

**ELEME NTAL EDUCATION ENDORSEMENT PK-6: ENGLISH CURRICULUM (FOR PERSONS WHO DO NOT HAVE A B.S. OR B.A. DEGREE)**

**BACHELOR OF SCIENCE IN INTERDISCIPLINARY STUDIES**

#### First Year

<table>
<thead>
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<th>Course</th>
<th>Title</th>
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<tr>
<td>ENG 101</td>
<td>Communication Skills</td>
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<tr>
<td>ENG 102</td>
<td>Communication Skills</td>
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<tr>
<td>MTH 103</td>
<td>Contemporary Mathematics</td>
<td>3</td>
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<td>MTH 105</td>
<td>Intermediate Algebra</td>
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<td>PHY 100L</td>
<td>Lab or Bio 100L or Chm 100L</td>
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<td>HIS 102</td>
<td>American History</td>
<td>3</td>
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<tr>
<td>SOC 101</td>
<td>Introduction to Social Science</td>
<td>3</td>
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<tr>
<td>CSC 150</td>
<td>Computer Literacy or Cls 165 or Ted 170</td>
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<td>PED 100</td>
<td>Fundamental Fitness for Life</td>
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<td>HED 100</td>
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<td><strong>TOTAL</strong></td>
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#### Second Year

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<tr>
<td>MTH 141</td>
<td>Teaching Mathematics in the Elementary Schools</td>
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<tr>
<td>ENG 203</td>
<td>Advanced Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Literature of the Western World</td>
<td>3</td>
</tr>
<tr>
<td>SCM 285</td>
<td>Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>HUM 210</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>EED 201</td>
<td>The American Schools and the Teaching Profession</td>
<td>3</td>
</tr>
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<td>MTH 142</td>
<td>Teaching Mathematics in the Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>FIA 301</td>
<td>Art Appreciation or Mus 301</td>
<td>3</td>
</tr>
<tr>
<td>POS 315</td>
<td>or Psy 340 or His 335 or His 336 or His 371</td>
<td>3</td>
</tr>
<tr>
<td>EED 274</td>
<td>The Study of Young Children</td>
<td>3</td>
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<td>INT 306</td>
<td>Interdisciplinary Seminar</td>
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**Third Year**

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<td>Research Interdisciplinary Studies</td>
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<td>INT 375</td>
<td>Language and Society</td>
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</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

- **I. General Education Requirements:** 44
- **II. Interdisciplinary Core:** 15
- **III. Secondary Concentration Elementary Education:** 24
- **IV. Supportive Concentration I Liberal Arts Core (LAC):** 16
- **V. Supportive Concentration II - Student Teaching:** 12
- **VI. Supporting Courses:** 13

**Fourth Year**

<table>
<thead>
<tr>
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<td><strong>TOTAL</strong></td>
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**NOTE:** Recommended courses for electives, Psy 280, Psy 322, Psy 215, Psy 288, Int 400, Eng 452, Eng 210, Eed 233, Any Foreign Language or Humanities Course.
## ELEMENTARY EDUCATION ENDORSEMENT PK-6; HISTORY CURRICULUM
### BACHELOR OF SCIENCE IN INTERDISCIPLINARY STUDIES

<table>
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<th><strong>First Year</strong></th>
<th><strong>Second Year</strong></th>
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<tbody>
<tr>
<td><strong>HIS 102</strong> American History</td>
<td><strong>EED 360</strong> Curriculum and Instruction for Primary Education</td>
</tr>
<tr>
<td><strong>ENG 101</strong> Communication Skills</td>
<td><strong>SCI 381</strong> Science for Elementary Teachers</td>
</tr>
<tr>
<td><strong>ENG 102</strong> Communication Skills</td>
<td><strong>ENG 461</strong> Curriculum and Instruction for Elementary Education</td>
</tr>
<tr>
<td><strong>MTH 103</strong> Contemporary Mathematics</td>
<td><strong>SCI 381L</strong> Science for Elementary Teachers Lab</td>
</tr>
<tr>
<td><strong>MTH 105</strong> Intermediate Algebra</td>
<td><strong>EED 361</strong> Methods of Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td><strong>BIO 100</strong> or BIO 110 or PHY 100 or CHM 100</td>
<td><strong>ENG 365</strong> Methods of Teaching Science, Mathematics, and Technology</td>
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<td><strong>BIO 100L</strong> or PHY 100L or CHM 100L or CHM 100L</td>
<td><strong>EED 374</strong> Methods of Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td><strong>PED 100</strong> Fundamental Fitness for Life</td>
<td><strong>HUM 210</strong> Humanities</td>
</tr>
<tr>
<td><strong>HED 100</strong> Personal and Community Health</td>
<td><strong>EED 274</strong> The Study of Young Children</td>
</tr>
<tr>
<td><strong>TOTAL</strong> 32 cr hrs</td>
<td><strong>TOTAL</strong> 30 cr hrs</td>
</tr>
</tbody>
</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

- I. General Education Requirements: 44 cr hrs
- II. Interdisciplinary Studies Core: 15 cr hrs
- III. Secondary Concentration Elementary Education: 24 cr hrs
- IV. Supportive Concentration I: Liberal Arts Core (LAC): 15 cr hrs
- V. Supportive Concentration II: Student Teaching: 12 cr hrs
- VI. Supporting Courses: 13 cr hrs

**TOTAL** 123 cr hrs

*Recommended courses for electives, PSY 280, PSY 322, PSY 215, PSY 288, INT 400, ENG 452, ENG 210, EED 233, ANY FOREIGN LANGUAGE OR HUMANITIES COURSE.

## BACHELOR OF SCIENCE IN EARLY CHILDHOOD DEVELOPMENT
### CHILD CARE (NON-TEACHING) OPTION

<table>
<thead>
<tr>
<th><strong>First Year</strong></th>
<th><strong>Second Year</strong></th>
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<tbody>
<tr>
<td><strong>BIO 100</strong> Biological Science</td>
<td><strong>EED 201</strong> American Schools and the Teaching Profession</td>
</tr>
<tr>
<td><strong>BIO 100L</strong> Biological Science Lab</td>
<td><strong>EED 233</strong> Critical Thinking</td>
</tr>
<tr>
<td><strong>ENG 101</strong> Communication Skills I</td>
<td><strong>ENG 203</strong> Advanced Communication Skills</td>
</tr>
<tr>
<td><strong>ENG 102</strong> Communication Skills II</td>
<td><strong>HED 100</strong> Personal and Community Health</td>
</tr>
<tr>
<td><strong>HIS 100</strong> History of Civilization or HIS 101</td>
<td><strong>HIS 335</strong> African-American History or HIS 336, PSY 340, PSY 345</td>
</tr>
<tr>
<td><strong>HIS 102</strong> U.S. History or HIS 103</td>
<td><strong>HED 100</strong> Personal and Community Health</td>
</tr>
<tr>
<td><strong>MTH 103</strong> Contemporary Mathematics</td>
<td><strong>SCI 381</strong> Science for Elementary Teachers</td>
</tr>
<tr>
<td><strong>MTH 105</strong> Elementary Algebra</td>
<td><strong>SCI 381L</strong> Science for Elementary Teachers Lab</td>
</tr>
<tr>
<td><strong>PED 100</strong> Fundamental Fitness for Life</td>
<td><strong>EED 365</strong> Methods of Teaching Science, Mathematics, and Technology</td>
</tr>
<tr>
<td><strong>PHY 100</strong> Physical Science or CHM 100</td>
<td><strong>SCI 381</strong> Science for Elementary Teachers</td>
</tr>
<tr>
<td><strong>PHY 100L</strong> Physical Science Lab or CHM 100L</td>
<td><strong>SCI 381L</strong> Science for Elementary Teachers Lab</td>
</tr>
<tr>
<td><strong>CSC 150</strong> Computer Literacy</td>
<td><strong>EED 274</strong> The Study of Young Children</td>
</tr>
<tr>
<td><strong>TOTAL</strong> 32 cr hrs</td>
<td><strong>TOTAL</strong> 33 cr hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Third Year</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INT 360</strong> Research Interdisciplinary Studies</td>
<td><strong>PSY 215</strong>, <strong>PSY 288</strong>, <strong>INT 400</strong>, <strong>ENG 452</strong>, <strong>ENG 210</strong>, <strong>EED 233</strong>, ANY FOREIGN LANGUAGE OR HUMANITIES COURSE.</td>
</tr>
<tr>
<td><strong>INT 375</strong> Language and Society</td>
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</tr>
<tr>
<td><strong>TOTAL</strong> 12 cr hrs</td>
<td><strong>TOTAL</strong> 12 cr hrs</td>
</tr>
</tbody>
</table>

Norfolk State University 2004-2005 University Catalog
### Third Year
- **EED 360** Curriculum and Instruction in ECE 3
- **PSY 312** Behavioral Analysis 3
- **HFD 230** Activities for Children 3
- **HFD 232** Creative Activities for Children 3
- **HFD 370** Analyzing the Behavior of Children 3
- **ENG 452** Literature for Children 3
- **INT 350** Trends and Issues of Diverse Populations 3
- **HFD 230** Children’s Theatre 3
- **SWK 211** Interviewing Techniques 3
- **Electives** 7

**TOTAL** 31 cr hrs  

### Fourth Year
- **EED 450** Teaching Literacy in Elem. Schools 3
- **EED 465** Methods Sci/Math/Technology 3
- **INT 350** Trends and Issues of Diverse Populations 3
- **EED 499A** Practicum 3
- **HFD 499B** Practicum 3
- **EED 499E** Practicum 3
- **HFD 460** Organization and Administration of Child Care Programs 3
- **EED 499A** Practicum 3
- **HFD 420** Parent Education 3

**TOTAL** 24 cr hrs

### SUMMARY OF GRADUATION REQUIREMENTS
- **TOTAL** 120 cr hrs

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**DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND EXERCISE SCIENCE**

Delano Tucker, Department Head  
(757) 823-8703

The Department offers professional preparation leading to the Bachelor of Science Degree with the following emphases:

- **Physical Education - Teacher Certification K-12**
- **Health Fitness Instructor**
- **Kinesiotherapy**
- **Exercise Science Nutrition Option**

The certified physical educator is trained to teach physical education in grades K-12. The teacher certification program in physical education also permits an add-on endorsement in health, aquatics, and/or driver education.

The certified health fitness instructor is trained to deliver fitness training in corporate settings, health spas, and in other areas of the sport and fitness industry.

The kinesiotherapist is a health care professional who, under the direction of a physician, treats the effects of disease, injury and congenital disorders through the use of therapeutic exercise, rehabilitation exercise and education.

The Exercise Science Nutrition option blends both exercise science and nutrition and is designed for the student who plans a career focusing on both of these disciplines. It includes the undergraduate academic requirements set forth by the American Dietetic Association for students who are interested in applying for dietetic internships.

**PHYSICAL EDUCATION CURRICULUM**

**(B.S., EXERCISE SCIENCE/PHYSICAL EDUCATION)**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRS 100</strong> Freshman Seminar 0</td>
<td><strong>PED 251</strong> Modern Dance 1</td>
</tr>
<tr>
<td><strong>BIO 110</strong> Biological Science** 3</td>
<td><strong>PED 253</strong> Gymnastics 1</td>
</tr>
<tr>
<td><strong>BIO 110L</strong> Biological Science Lab** 1</td>
<td><strong>PED 261</strong> Team Sports I 1</td>
</tr>
<tr>
<td><strong>CSC 150</strong> Computer Science* 3</td>
<td><strong>PED 262</strong> Team Sports II 1</td>
</tr>
<tr>
<td><strong>ENG 101</strong> Communication Skills I 3</td>
<td><strong>PED 287</strong> Human Anatomy 3</td>
</tr>
<tr>
<td><strong>ENG 102</strong> Communication Skills II 3</td>
<td><strong>PED 287L</strong> Human Anatomy 1</td>
</tr>
<tr>
<td><strong>HED 170</strong> Personal &amp; Community Health 3</td>
<td><strong>PED 288</strong> Human Physiology 3</td>
</tr>
<tr>
<td><strong>HIS 100</strong> or HIS 101 or HIS 102 or HIS 103 3</td>
<td><strong>PED 288L</strong> Human Physiology Lab 1</td>
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<tr>
<td><strong>MTH 103</strong> or MTH 153 3</td>
<td><strong>PSY 215</strong> Human Growth and Development 3</td>
</tr>
<tr>
<td><strong>PED 151</strong> or PED 152 1</td>
<td><strong>SCM 285</strong> Principles of Speech 3</td>
</tr>
<tr>
<td><strong>PED 158</strong> Fundamentals of Physical Education 1</td>
<td><strong>SED 201</strong> Amer. Schools &amp; the Teaching Profession 3</td>
</tr>
<tr>
<td><strong>PED 159</strong> Fundamentals of Physical Education 1</td>
<td><strong>PED 361</strong> Elective 3</td>
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<tr>
<td><strong>PED 250</strong> Introduction to Physical Education 3</td>
<td><strong>TOTAL</strong> 31 cr hrs</td>
</tr>
<tr>
<td><strong>SOC 101</strong> Introduction to Sociology 3</td>
<td><strong>NOTE</strong>: STUDENTS MUST PASS PRAXIS I AND APPLY FOR ADMISSION TO TEACHER EDUCATION AT THE END OF 60 HRS</td>
</tr>
</tbody>
</table>

* or CLM 165, CLS 165, BAD 184, CSC 169, CIT 150, EEN 141, FIA 180, or TED 170  
** Physical Education majors will be advised of Biology General Education requirement.

**Department Requirement - PED 179 or Red Cross Equivalent**

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**Second Year**
- **HUM 210** Humanities 3
- **HUM 211** Humanities 3
- **HED 442** Safety 3
- **PED 134** Advanced Beginning Swimming 1

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**Third Year**
- **PED 271** Individual Sports I 1
- **PED 272** Individual Sports II 1
- **PED 335** Techniques and Skills 1
- **PED 350** Methods of Teaching Physical Education in Elementary Schools 3
- **PED 356** Kinesiology 3
- **PED 357** Organization and administration of Physical Education 3
- **PED 361** Coaching 3
- **PED 362** Officiating 1
- **PED 365** Adapted Physical Education 3
PED 369  Assessment and Evaluation in Physical Education 3
PED 450  Motor Learning 3
PED 477  Physiology of Muscle Exercise 3
HED 368A  Curriculum/Methods in Health Education 3
SED 405  Reading in the Content Areas 3

** TOTAL 32 cr hrs

GED 335  African-American History to 1865** 3
PED 358  Methods & Materials of Secondary Physical Education **** 3
PED 480  Principles of Physical Education 3
PED 499  Seminar 1
SED 420  Educational Technology 3
SED 486  Educational Psychology and Behavior Management 3
SED 499  Student Teaching 12

** TOTAL 27 cr hrs

HEALTH FITNESS INSTRUCTOR CURRICULUM
(B.S., EXERCISE SCIENCE/PHYSICAL EDUCATION)

First Year
FRS 100  Freshman Seminar 3
BIO 110  Biological Science* 4
CSC 150  Computer* 3
ENG 101  Communication Skills I 3
ENG 102  Communication Skills II 3
HED 170  Personal & Community Health 3
HIS 100  History of Civilization*** 3
MTH 103  Contemporary Mathematics 3
PED 133  Beginning Swimming 1
PED 200  Weight Training/Conditioning. 2
PED 280  Introduction to Physical Education 3
SOC 101  Introduction to Social Science 3

** TOTAL 31 cr hrs

* or CLM 165, CLS 165, BAD 184, CSC 169, CIT 150, EEN 141, FIA 180, or TED 170
** Physical Education majors will be advised of Biology General Education requirement.
*** or HIS 101, HIS 102, or HIS 103

Second Year
Elective 3
CHM 215  Chemistry 3
CHM 215L  Chemistry Lab 1
FSN 110  Nutrition 3
HUM 210  Humanities 3
HUM 211  Humanities 3
PED 179  First Aid 2
PED 251  Modern Dance 1
PED 287  Human Anatomy 3
PED 287L  Human Anatomy Lab 1
PED 288  Human Anatomy 3
PED 288L  Human Anatomy Lab 1
PSY 215  Human Growth and Development 3

** TOTAL 30 cr hrs

Third Year
EXS 237  Care & Prevention of Athletic Injuries 3
EXS 363  Clinical Aspects of Aging 2
EXS 390  Stress Management 3
EXS 447L  Physiological Basis of Exercise Rehabilitation Lab 1
HIS 335  History 3
PED 356  Kinesiology 3
PED 357  Organization & Administration of Physical Education 3

** TOTAL 32 cr hrs

** or HIS 336, HIS 370, HIS 371, HIS 377, POS 315, PSY 340, OR SOC 237
**** Enrollment requires completion of requirements for admission to teacher education.

HEALTH EXAMS

First Year
FSN 110  Nutrition 3
EXS 237  Care & Prevention of Athletic Injuries 3
EXS 363  Clinical Aspects of Aging 2
EXS 390  Stress Management 3
EXS 447L  Physiological Basis of Exercise Rehabilitation Lab 1
HIS 335  History 3
PED 356  Kinesiology 3
PED 357  Organization & Administration of Physical Education 3

** TOTAL 30 cr hrs

** or HIS 336, HIS 370, HIS 371, HIS 377, POS 315, PSY 340, OR SOC 237
### EXERCISE SCIENCE CURRICULUM
(B.S., EXERCISE SCIENCE/PHYSICAL EDUCATION)

<table>
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<tr>
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<td>CHM 215 Chemistry</td>
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<tr>
<td>ENG 101 Communication Skills</td>
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<tr>
<td>ENG 102 Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>HED 170 Personal/Community Health</td>
<td>3</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Intro to Social Science</td>
<td>3</td>
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<tr>
<td>PED 133 or PED 134 Swimming</td>
<td>1</td>
</tr>
<tr>
<td>EXS 265 Therapeutic Exercise and Sports</td>
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<tr>
<td>TOTAL</td>
<td>34 cr hrs</td>
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<table>
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<tr>
<td>ENG 102</td>
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<tr>
<td>HED 170</td>
</tr>
<tr>
<td>MTH 153</td>
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<tr>
<td>SOC 101 Intro to Social Science</td>
</tr>
<tr>
<td>PED 133 or PED 134 Swimming</td>
</tr>
<tr>
<td>EXS 265 Therapeutic Exercise and Sports</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
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<tr>
<td>BIO 100 Biological Science</td>
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<td>BIO 100L Biological Science Lab</td>
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<tr>
<td>CHM 215 Chemistry</td>
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<tr>
<td>CHM 215L Chemistry Lab</td>
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<tr>
<td>ENG 101 Communication Skills</td>
</tr>
<tr>
<td>ENG 102 Communication Skills</td>
</tr>
<tr>
<td>HED 170 Personal/Community Health</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
</tr>
<tr>
<td>SOC 101 Intro to Social Science</td>
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<tr>
<td>PED 133 or PED 134 Swimming</td>
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<tr>
<td>EXS 265 Therapeutic Exercise and Sports</td>
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<table>
<thead>
<tr>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
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<tr>
<td>BIO 100L Biological Science Lab</td>
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<tr>
<td>CHM 215 Chemistry</td>
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<tr>
<td>CHM 215L Chemistry Lab</td>
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<tr>
<td>HIS 100 or HIS 102 or HIS 103</td>
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<tr>
<td>ENG 101 Communication Skills</td>
</tr>
<tr>
<td>ENG 102 Communication Skills</td>
</tr>
<tr>
<td>HED 170 Personal/Community Health</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
</tr>
<tr>
<td>SOC 101 Intro to Social Science</td>
</tr>
<tr>
<td>PED 133 or PED 134 Swimming</td>
</tr>
<tr>
<td>EXS 265 Therapeutic Exercise and Sports</td>
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### EXERCISE SCIENCE NUTRITION OPTION CURRICULUM
(B.S., EXERCISE SCIENCE/PHYSICAL EDUCATION)

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<tr>
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<td>3</td>
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<tr>
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<tr>
<td>CSC 150 Computer Concepts</td>
<td>3</td>
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<tr>
<td>ENG 101 Communication Skills</td>
<td>3</td>
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<tr>
<td>ENG 102 Communication Skills</td>
<td>3</td>
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<tr>
<td>EPS 170 Introduction to Exercise Science</td>
<td>3</td>
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<tr>
<td>FSN 101 Introduction to Food Science &amp; Nutrition</td>
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<tr>
<td>FSN 110 Science of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
<td>3</td>
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<tr>
<td>PED 107 Aerobics</td>
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<td>SOC 101 Social Science</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>28 cr hrs</td>
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<table>
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<td>BIO 165 Human Anatomy &amp; Physiology Lab</td>
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<tr>
<td>BIO 166 Human Anatomy &amp; Physiology Lab</td>
</tr>
<tr>
<td>CHM 222 College Chemistry &amp; Lab</td>
</tr>
<tr>
<td>CHM 222L College Chemistry Lab</td>
</tr>
<tr>
<td>EPS 170 Introduction to Exercise Science</td>
</tr>
<tr>
<td>FSN 102 Professional Development and Experiences</td>
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<tr>
<td>FSN 160 Food Cost Control</td>
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<tr>
<td>FSN 312 Chemical Foundations of Nutrition</td>
</tr>
<tr>
<td>HIS 101 History of West Civilization</td>
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<td>TOTAL</td>
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</table>

<table>
<thead>
<tr>
<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td>PHYS 152/152L General Physics &amp; Lab</td>
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<tr>
<td>SCM 285 Principles of Speech</td>
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<table>
<thead>
<tr>
<th>Fourth Year</th>
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</thead>
<tbody>
<tr>
<td>BIO 165 Human Anatomy &amp; Physiology Lab</td>
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<tr>
<td>BIO 166 Human Anatomy &amp; Physiology Lab</td>
</tr>
<tr>
<td>CHM 222 College Chemistry &amp; Lab</td>
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<tr>
<td>CHM 222L College Chemistry Lab</td>
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<td>EPS 170 Introduction to Exercise Science</td>
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<td>FSN 102 Professional Development and Experiences</td>
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<tr>
<td>FSN 160 Food Cost Control</td>
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<tr>
<td>FSN 312 Chemical Foundations of Nutrition</td>
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<td>HIS 101 History of West Civilization</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

| TOTAL CURRICULUM HOURS | 123 cr hrs |
DEPARTMENT OF SECONDARY EDUCATION AND SCHOOL LEADERSHIP
Sean S. Warner, Department Head
(757) 823-8178

The Department of Secondary Education and School Leadership offers a multi-dimensional Urban Education degree program and teacher education to assist in-service and pre-service school practitioners interested in acquiring state endorsements/certifications as well as enhancing their professional development.

Secondary School Certification Endorsement

1. Candidates must take the General Education Core before applying to teacher education (see Office of Student Teaching regarding admission to teacher education).

2. Students must earn an undergraduate degree in the field in which they plan to teach.

<table>
<thead>
<tr>
<th>Art/Fine Arts</th>
<th>Earth Science</th>
<th>Mathematics</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>English</td>
<td>Music / Instrumental</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>Health</td>
<td>Music / Vocal</td>
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</tr>
<tr>
<td>Chemistry</td>
<td>History and Social Studies</td>
<td>Physical Education / Driver Education</td>
<td></td>
</tr>
</tbody>
</table>

3. Prior to admission to teacher education, students must pass the Praxis I examination and successfully complete 200-level professional education courses:

- SED 201 American Schools and the Teaching Profession
- SED 233 Seminar in Assessment and Evaluation

(only for candidates who have not taken PRAXIS 1 examination)

Students who have not met this requirement are not eligible to take 300-level or 400-level professional education (SED) courses in the Teacher Education Program (See admission to teacher education criteria).

| *SED 380 Foundations of Methods in Secondary Schools | 3 | SED 420 Educational Technology | 3 |
| *SED 390 Secondary Social Studies Methods (History and Social Studies Majors only) | 3 | SED 486 Educational Psychology and Behavior | 3 |
| SED 405 Reading in the Content Areas | | SED 488 School/Community Relations | 3 |
| | | SED 499 Directed Teaching | 12 |

Candidates must be accepted to teacher education before taking 300- and 400-level professional education courses (see department or Office of Student Teaching for admissions criteria).

DEPARTMENT OF SPECIAL EDUCATION
Carole Morris, Department Head
(757) 823-8714

The Department of Special Education offers a sequence of courses and experiences designed for persons interested in careers as special educators and related professionals. Program graduates are employed as special class teachers, resource room teachers, regular class teachers, educational programmers and diagnosticians. The curriculum prepares graduates to teach and/or work with exceptional residential schools, hospitals, centers for the handicapped and other institutions. A broad-based course sequence ensures competence in planning and implementing individualized education plans for exceptional persons in the least restrictive environment.

Two undergraduate degree programs are offered that prepare graduates for public school teaching with options in (a) Emotional Disturbance/Learning Disabilities and (b) Learning Disabilities/Mental Retardation. In these teacher certification programs, students earn the B.A. degree in Psychology, or the B.S. degree in Interdisciplinary Studies.

Special Education Teacher Certification Endorsements

1. Students must be a candidate for a degree in a liberal arts major, such as:

| English | Interdisciplinary Studies |
| History and Social Science | Psychology |

2. Student must take the following courses in Special Education and professional education (24 semester hours):
3. Students must pass the PRAXIS examinations.

4. Students must complete preparation to teach learners with learning disabilities and mental retardation or emotional disturbance.

### Learning Disabilities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SPE 210</td>
<td>American Schools &amp; the Teaching</td>
<td>3</td>
</tr>
<tr>
<td>SPE 312</td>
<td>Educational and Behavioral Management</td>
<td>3</td>
</tr>
<tr>
<td>SPE 344</td>
<td>Teaching Reading to Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>SPE 321</td>
<td>Characteristics, Medical and Legal Aspects</td>
<td>3</td>
</tr>
<tr>
<td>SPE 440</td>
<td>Collaboration, Inclusion, Transition and</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499B</td>
<td>Directed Teaching- Learning Disabilities</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL 24 cr hrs**

**AND**

### Option (a): Mental Retardation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 332</td>
<td>Understanding and Teaching Learners with MR</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499C</td>
<td>Directed Teaching-Mental Retardition</td>
<td>6</td>
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</tbody>
</table>

**TOTAL 9 cr hrs**

### Option (b): Emotional Disturbance

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE 334</td>
<td>Understanding and Teaching Learners with ED</td>
<td>3</td>
</tr>
<tr>
<td>SPE 499A</td>
<td>Directed Teaching-Emotionally Disturbed</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL 9 cr hrs**

### LEARNING DISABILITIES/MENTAL RETARDATION CURRICULUM

**B.A. Degree in Psychology**

**B.S. Degree in Interdisciplinary Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100</td>
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</tr>
<tr>
<td>BIO 100</td>
<td>Biological Science</td>
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<td>BIO 100L</td>
<td>Biological Science Lab</td>
<td>1</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
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<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>Personal and Community Health</td>
<td>2</td>
</tr>
<tr>
<td>HIS 102</td>
<td>History to 1877 or HIS 103 U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
<td>1</td>
</tr>
<tr>
<td>PHY 100</td>
<td>Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Social Science or</td>
<td>3</td>
</tr>
<tr>
<td>FIA 201</td>
<td>Art Appreciation or MUS 301</td>
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</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>28 cr hrs</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>CSC 150</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENG 207</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>PSY 210</td>
<td>Introduction to World Literature***</td>
<td>3</td>
</tr>
<tr>
<td>PSY 211</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 228</td>
<td>Basic Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 230</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 280</td>
<td>Educational Psychology**</td>
<td>3</td>
</tr>
<tr>
<td>SCM 285</td>
<td>Abnormal Psychology</td>
<td>3</td>
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<tr>
<td>SPE 210</td>
<td>Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>INT 308</td>
<td>American Schools and the Teaching</td>
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<tr>
<td>PSY 270</td>
<td>Introduction to Interdisciplinary Studies***</td>
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<tr>
<td>PED 365</td>
<td>Statistics in Psychology**</td>
<td>3</td>
</tr>
<tr>
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**FORTH YEAR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIS 370</td>
<td>African History and Culture</td>
<td>3</td>
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<tr>
<td>INT 360</td>
<td>Research in Interdisciplinary Studies***</td>
<td>3</td>
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<tr>
<td>INT 375</td>
<td>Language and Society***</td>
<td>3</td>
</tr>
<tr>
<td>PSY 322</td>
<td>Psychology of Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>PSY 360L</td>
<td>Psychology Lab**</td>
<td>1</td>
</tr>
<tr>
<td>PSY 360</td>
<td>Experimental Psychology**</td>
<td>3</td>
</tr>
<tr>
<td>PSY 492</td>
<td>Psychology Seminar**</td>
<td>3</td>
</tr>
<tr>
<td>SPE 344</td>
<td>Teaching Reading to Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>SPE 440</td>
<td>Collaboration, Inclusion, Transition and</td>
<td>3</td>
</tr>
<tr>
<td>SPP 312</td>
<td>Speech and Language Development</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Elective</td>
<td>31 cr hrs</td>
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**Elective Interdisciplinary Studies**

**TOTAL 30 cr hrs**

*SUMMARY OF GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<td>120 cr hrs</td>
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*Enrollment requires completion of requirements for admission to teacher education.

**Courses for the B.A. in Psychology (Bold)**

***Courses for the B.S. in Interdisciplinary Studies (Italics)
# EMOTIONAL DISTURBANCE/LEARNING DISABILITIES CURRICULUM

## B.A. Degree in Psychology**

## B.S. Degree in Interdisciplinary Studies***

### FIRST YEAR

<table>
<thead>
<tr>
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<td>BIO 100L</td>
<td>Biological Science Lab</td>
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<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>Personal and Community Health</td>
<td>2</td>
</tr>
<tr>
<td>HIS 102</td>
<td>History to 1877 or HIS 103 U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Contemporary Mathematics</td>
<td>3</td>
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<tr>
<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
<td>1</td>
</tr>
<tr>
<td>PHY 100</td>
<td>Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Social Science</td>
<td>3</td>
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<tr>
<td>FIA 201</td>
<td>Art Appreciation or MUS 301 Music App</td>
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<td><strong>TOTAL</strong></td>
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### SECOND YEAR

<table>
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<tr>
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<th>Course Title</th>
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<tr>
<td>CSC 150</td>
<td>Computer Literacy</td>
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</tr>
<tr>
<td>ENG 207</td>
<td><em>Introduction to World Literature</em>**</td>
<td>3</td>
</tr>
<tr>
<td>PSY 210</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 211</td>
<td>Basic Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 228</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>PSY 230</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>PSY 280</td>
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<tr>
<td>SCM 285</td>
<td>Principles of Speech</td>
<td>3</td>
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<tr>
<td>SPE 210</td>
<td>American Schools and the Teaching</td>
<td>3</td>
</tr>
<tr>
<td>INT 308</td>
<td>Introduction to Interdisciplinary Studies***</td>
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<tr>
<td><strong>TOTAL</strong></td>
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### THIRD YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIS 370</td>
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<tr>
<td>INT 360</td>
<td>Research in Interdisciplinary Studies***</td>
<td>3</td>
</tr>
<tr>
<td>INT 375</td>
<td>Language and Society***</td>
<td>3</td>
</tr>
<tr>
<td>PSY 322</td>
<td>Psychology of Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>PSY 360**</td>
<td>Experimental Psychology**</td>
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<tr>
<td>PSY 381</td>
<td>Topics in Psychology</td>
<td>3</td>
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<tr>
<td>SPE 321</td>
<td>Characteristics, Medical and Legal Services</td>
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<tr>
<td>SPE 334</td>
<td>Understanding and Teaching Learners with Emotional Disturbance</td>
<td>3</td>
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<tr>
<td>SPE 344</td>
<td>Teaching Reading to Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>SPE 440</td>
<td>Collaboration, Inclusion, Transition and Other Curricular Adjustments</td>
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<td>SPP 312</td>
<td>Speech and Language Development</td>
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<td><strong>TOTAL</strong></td>
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### FOURTH YEAR

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<thead>
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<tbody>
<tr>
<td>PSY 390</td>
<td>Fundamentals of Learning</td>
<td>3</td>
</tr>
<tr>
<td>INT 322</td>
<td>Approaches to Critical Analysis***</td>
<td>3</td>
</tr>
<tr>
<td>INT 411</td>
<td>Ideas and Their Influences***</td>
<td>3</td>
</tr>
<tr>
<td>PSY 397**</td>
<td>Research in Psychology**</td>
<td>3</td>
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<tr>
<td>PSY 492**</td>
<td>Psychology Seminar***</td>
<td>3</td>
</tr>
<tr>
<td>SPE 312</td>
<td>Educational Psychology and Behavioral Disabilities</td>
<td>3</td>
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<tr>
<td>SPE 336</td>
<td>Understanding and Teaching Students with Learning Disabilities</td>
<td>3</td>
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<tr>
<td>SPE 490</td>
<td>Assessment of Exceptional Students</td>
<td>3</td>
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<tr>
<td>SPE 499**</td>
<td>Directed Teaching-Learning Disabilities</td>
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<tr>
<td>SPE 499A</td>
<td>Directed Teaching-Emotional</td>
<td>6</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>31 cr hrs</strong></td>
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</table>

### SUMMARY OF GRADUATION REQUIREMENTS

**General Education Requirements**
- 43 cr hrs

**Major Requirements**
- 77 cr hrs

**TOTAL**
- 120 cr hrs

---

*Enrollment requires completion of requirements for admission to teacher education.

**Courses for the B.A. in Psychology (Bold)

***Courses for the B.S. in Interdisciplinary Studies (Italics)

---

# PARAPROFESSIONAL EDUCATION CERTIFICATE PROGRAM CURRICULUM

### YEAR ONE

#### 1st Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>EDU 101</td>
<td>Collegiate Communication Literacy Skills</td>
<td>3</td>
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<tr>
<td>SPE 103</td>
<td>Collegiate Quantitative Literacy Skills</td>
<td>3</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Overview of Inclusion Education and Services</td>
<td>3</td>
</tr>
<tr>
<td>SPE 107</td>
<td>Human Relations Skills and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CSC 150</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
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#### 2nd Semester

<table>
<thead>
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<td>Communication Skills</td>
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<tr>
<td>MTH 103</td>
<td>Mathematics in General Education</td>
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</tr>
<tr>
<td>SPE 109</td>
<td>Guiding Classroom Behaviors of Learners</td>
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<tr>
<td>PSY 211</td>
<td>Basic Principles of Psychology</td>
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<tr>
<td>SPE 198**</td>
<td>Practicum for Paraprofessionals</td>
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### YEAR TWO

#### 1st Semester

<table>
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<tr>
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<td>Communication Skills</td>
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<tr>
<td>SPE 111</td>
<td>Learning through Literature</td>
<td>3</td>
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<tr>
<td>SPE 215**</td>
<td>Human Growth and Development</td>
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</tr>
<tr>
<td>SPE 299**</td>
<td>Internship for Paraprofessionals</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
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#### 2nd Semester

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<td>EDU 115</td>
<td>Facilitating Learning Mathematics and</td>
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<tr>
<td>SPE 210**</td>
<td>American Schools and the Teaching</td>
<td>3</td>
</tr>
<tr>
<td>SPE 213</td>
<td>Critical Thinking and Assessment Skills</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>30 cr hrs</strong></td>
</tr>
</tbody>
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*Enrollment requires completion of requirements for admission to teacher education.*
The School of Liberal Arts embraces ten academic departments in the fine and performing arts, humanities, and social sciences. The departments are English and Foreign Languages, Fine Arts, General Studies, History, Interdisciplinary Studies, Mass Communications and Journalism, Music, Political Science, Psychology, and Sociology. The Army ROTC program is located in the School of Liberal Arts as well.

Students in the School of Liberal Arts have access to a wealth of learning experiences. The School offers students an opportunity to understand and appreciate world cultures as reflected in languages and the arts; enhance communication and interpersonal skills; and prepare for careers supported by studies in the liberal, creative, performing, and media arts.

The social sciences deal with the relationships of mankind. Whether from an economic, political, sociological, psychological or historical perspective, the focus, as well as the interest of the social sciences, is on the human condition.

The goals of the School of Liberal Arts are as follows:

1. To provide an intellectually liberating education for students that is conducive to life-long learning.
2. To impart knowledge, strengthen communicative and quantitative abilities, and enhance research and inquiry skills in the various subject matter areas.
3. To develop habits of independent thought and critical thinking.
4. To promote attitudes of understanding, respect, and tolerance for one’s own culture and the cultures of other peoples.
5. To engender in students an appreciation of the moral and ethical components of life.
6. To define educational standards that addresses the changing paradigms and diverse needs of students in a changing global society.
7. To provide a highly qualified pool of graduates for the global work force.
8. To contribute to the social consciousness and cultural enrichment of the community through the provision of programs, exhibits, and workshops in the arts, humanities, and social sciences.

TECHNOLOGICAL PROFICIENCY

The School of Liberal Arts realizes that technological proficiency is an integral component of career preparation and life-long learning. Accordingly, all curricula in the School of Liberal Arts incorporate basic and discipline-appropriate technological instruction.

The SOLA–TEC Center is housed under the School of Liberal Arts. The aim of SOLA-TEC is to infuse technology into every facet of instruction and academic management via modes of delivery and accessibility that are consistent with learning and accountability patterns in contemporary life.

DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES
Annie S. Perkins, Department Head
(757) 823-8891

DEGREE OFFERED

Bachelor of Arts in English

The English/Foreign Languages areas of the Department aim to develop in students an understanding of language development and of the structure and uses of language in its various written and spoken forms. It is the Department's goal to help students in all majors to develop facility in the use of the English language for various purposes and contexts and to respond appreciatively to the beauty and power of language in a variety of forms. The Department offers its majors opportunities for specialization in English/Liberal Arts, Communication Sciences and Disorders, and Spanish Literature to prepare them for graduate study or for careers in teaching, writing, speech-and-hearing therapy, and other professions. Courses in theatre performance and technology, in African-American literature, in creative writing, and in speech communication also help prepare students for a variety of careers.

The Communication Sciences and Disorders program is a pre-professional training program that prepares students for graduate study in speech-language pathology. Those entering this program should note that employment as a speech-language pathologist is usually not possible for those with only a bachelor's degree. An advanced degree (master's or doctorate) in speech-language pathology is required both for state licensure and certification by the American Speech-Language-Hearing Association.

The Foreign Languages program in the Department seeks to develop students’ fundamental skills in French, Spanish, and other languages, as staff resources permit, and to generate interest in foreign cultures. For students concentrating in Spanish literature, the Department offers advanced courses leading to careers and professions enhanced by a mastery of Spanish language and culture.

ENGLISH REQUIREMENTS

Requirements for a major: Thirty-six or more hours are required in discipline-related courses in all of the sequences for the Bachelor of Arts in English. All discipline-related courses must be passed with a grade of C or better.
Requirements for certification to teach in the State of Virginia: A minimum of thirty-six semester hours (including ENG 101, ENG 102, American and British literature, language, and related courses) is required. Students in the English degree curriculum and the Spanish literature concentration may seek certification to teach in middle or high school.

FOREIGN LANGUAGE REQUIREMENTS

General foreign language requirements can be fulfilled upon the successful completion of course work through the 212 (or 213: Scientific French/German) level. Students may satisfy all or part of this requirement by obtaining satisfactory scores on a CLEP examination.

Freshmen and transfer students who wish to enter any language course above the 111 level will take a placement test in order to determine their eligibility to pursue advanced courses. This test will be administered by the foreign languages faculty.

Requirements for a concentration in Spanish literature: An English major may have a concentration in Spanish literature. The concentration consists of 24-39 semester hours beyond the 111/112 level. The Department reserves the right to increase or reduce requirements depending upon the potential of the individual student.

ASSESSMENT REQUIREMENTS FOR MAJORS

All prospective English graduates will be required to take a comprehensive examination prior to graduation. Dates and times of administration will be announced by the Department. All majors will be required to write and defend a senior thesis or complete a senior project appropriate to their concentration.

Additional Recommendation:
All students should consider taking LOG 210: Logic and Critical Thinking.

Note: Descriptions for general education humanities courses (HUM 210 and HUM 211) are listed at the end of the course offerings for music.

ENGLISH DEGREE CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
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<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>ENG 306 Introduction to Literary Criticism</td>
</tr>
<tr>
<td>BIO 100L Biological Science Lab or CHM</td>
<td>ENG 315 Survey of English Literature I</td>
</tr>
<tr>
<td>or PHY 100L</td>
<td>ENG 316 Survey of English Literature II</td>
</tr>
<tr>
<td>CHM 100 Chemistry: Man &amp; Environment</td>
<td>ENG 341 Survey of American Literature I</td>
</tr>
<tr>
<td>or PHY 100</td>
<td>ENG 342 Survey of American Literature II</td>
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<tr>
<td>CSC 150 Computer Concepts and Applications</td>
<td>ENG 383 African-American Literature</td>
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<tr>
<td>ENG 101 Communication Skills I</td>
<td>ENG 410 The History of the English Language</td>
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<tr>
<td>ENG 102 Communication Skills II</td>
<td>ENG 413 Shakespeare</td>
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<td>ENG 114 Techniques of Vocabulary Building</td>
<td>ENG 419 Contemporary American English Grammar</td>
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<tr>
<td>FRN 111 Elementary French I or SPN 111</td>
<td>SOC 101 Introduction to Social Science</td>
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<td>FRN 112 Elementary French II or SPN 112</td>
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</tr>
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<td>FRS 100 Freshman Seminar</td>
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<tr>
<td>HED 100 Personal and Community Health</td>
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</tr>
<tr>
<td>HIS 100 History of Civilization or HIS 101, 102, or 103</td>
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<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
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<tr>
<td>TOTAL 30 cr hrs</td>
<td>TOTAL 30 cr hrs</td>
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<table>
<thead>
<tr>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>Unrestricted Electives</td>
</tr>
<tr>
<td>ENG 412 Chaucer, or ENG 430</td>
</tr>
<tr>
<td>ENG 450 Research Seminar and Senior Thesis</td>
</tr>
<tr>
<td>ENG 454 Young Adult Literature</td>
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<tr>
<td>ENG 456 Women's Studies or ENG 459</td>
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<tr>
<td>ENG 460 Assessment &amp; Evaluation of Writing</td>
</tr>
<tr>
<td>or ENG 449</td>
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<tr>
<td>TOTAL 33 cr hrs</td>
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</table>

SUMMARY OF GRADUATION REQUIREMENTS

| General Education Requirements | 40 |
| Major Requirements | 62 |
| Electives | 18 |
| TOTAL 120 cr hrs | |

TEACHER LICENSURE ENDORSEMENT

Students wishing to pursue a career in teaching must take the following steps:

1. Follow the curriculum for the degree in English.
2. Use the elective hours for professional courses.
3. See the academic advisor in the Department of English and Foreign Languages.
4. See the academic advisor in the Department of Secondary Education and School Leadership.
5. Take the PRAXIS I test and make a passing score in order to be admitted to the teacher education program.
6. Pass the PRAXIS II examination before graduation.
7. Take the following professional education courses (18 semester hours) plus student teaching (12 semester hours):
COMMUNICATION SCIENCES AND DISORDERS CURRICULUM

First Year
- BIO 105 Human Biology w/Lab  4
- CSC 150 Computer Concepts and Use  3
- ENG 101 Communication Skills I  3
- HED 100 Personal and Community Health  2
- HIS 100 History of Civilization (101, 102, or 103)  3
- CHM 100 Chemistry: Man and Environment  3
- CSD 166 Orientation to Communication  1
- ENG 102 Communication Skills II  3
- ENG 114 Techniques of Vocabulary Building  2
- MTH 103 Elementary Algebra  3
- PED 100 Fundamentals of Fitness  3
- SOC 101 Introduction to Social Science  3
- TOTAL 31 cr hrs

Second Year
- CSC 200 Advanced Computer Concepts  3
- CSC 213 Computers and other instrumentation in Com. Sciences and Disorders  1
- CSD 218 Anatomy & Physiology/Speech Mechanism  3
- HUM 210 Humanities  3
- PSY 210 Introduction to Psychology  3
- CSD 211 Phonetics  3
- CSD 212 Speech and Language Development  3
- ENG 207 Introduction to World Literature  3
- HUM 211 Humanities  3
- MTH 250 Elementary Statistics Concepts  3
- TOTAL 31 cr hrs

Third Year
- CSD 311 Methods & Materials in Communication  3
- CSD 312 Phonological/Articulatory & Language Disorders  3
- TOTAL 31 cr hrs

Fourth Year
- CSD 313 Introduction to Audiology and Hearing  3
- ENG 303 Professional & Technical Writing  3
- ENG 341 Survey of American Literature I  3
- ENG 342 Contemporary American English Grammar  3
- CSD 347 Clinical Practicum in Communication  3
- CSD 348 Seminar: Topics in Communication  3
- ENG 363 Introduction to Literary Criticism  3
- CSD 380 Foundations of Methods in Management  3
- ENG 391 Advanced Composition  3
- CSD 411 Disability Studies  3
- CSD 414 Voice and Fluency Disorders  3
- CSD 415 Clinical Practicum in Communication  3
- CSD 416 Habilitation/Rehabilitation of Hearing  3
- CSD 417 Clinical Practicum in Communication  3
- CSD 418 Seminar: Topics in Communication  3
- CSD 419 Contemporary American English Grammar  3
- CSD 420 Educational Technology  3
- CSD 486 Educational Psychology and Behavior  3
- CSD 488 School/Community Relations  3
- CSD 499 Directed Teaching and Seminar  3
- TOTAL 30 cr hrs

SUMMARY OF GRADUATION REQUIREMENTS:
- General Education Requirements 40
- Major Requirements (ENFL) 23
- Concentration requirements (CSD) 42
- Cognate Electives 15
- TOTAL 120 cr hrs

SPANISH LITERATURE CONCENTRATION CURRICULUM

First Year
- BIO 100 Biological Science  3
- BIO 103L Biological Science Lab or CHM or PHY 100L  1
- CHM 100 Chemistry, Man & Environment  3
- CSC 150 Computer Concepts and Applications  3
- ENG 101 Communication Skills I  3
- ENG 102 Communication Skills II  3
- FRS 100 Freshman Seminar  0
- HIS 100 History of Civilization or HIS 101, 102, or 103  3
- MTH 103 Contemporary Mathematics  3
- PED 100 Fundamentals of Fitness for Life  1
- SPN 111 Elementary Spanish I or SPN 211  3
- SPN 112 Elementary Spanish II or SPN 212  3
- TOTAL 30 cr hrs

Second Year
- CSC 200 Advanced Computer Concepts  3
- ENG 207 Introduction to World Literature  3
- ENG 210 Practical English Grammar  3
- ENG 286 Advanced Composition  3
- HED 100 Personal and Community Health  2
- CSD 285 Principles of Speech  3
- SOC 101 Introduction to Social Science  3
- SPN 212 Intermediate Spanish II  3
- SPN 211 Intermediate Spanish I  3
- SPN 220 Spanish Civilization  3
- TOTAL 29 cr hrs

Note: Students seeking middle school and high school endorsement in English must also take HIS 102 or 103 and 3 additional hours of mathematics.
### Third Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 306</td>
<td>Introduction to Literary Criticism</td>
<td>3</td>
</tr>
<tr>
<td>ENG 315</td>
<td>Survey of English Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 316</td>
<td>Survey of English Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 341</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 342</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 383</td>
<td>African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPN 321</td>
<td>Survey of Spanish Literature I</td>
<td>3</td>
</tr>
<tr>
<td>SPN 322</td>
<td>Survey of Spanish Literature II</td>
<td>3</td>
</tr>
<tr>
<td>SPN 340</td>
<td>Drama of the Golden Age</td>
<td>3</td>
</tr>
<tr>
<td>SPN 450</td>
<td>Phonetics or SPN 485</td>
<td>2</td>
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</table>

**TOTAL** 29 cr hrs

### Fourth Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 410</td>
<td>History of the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ENG 419</td>
<td>or ENG 419</td>
<td>3</td>
</tr>
<tr>
<td>ENG 413</td>
<td>Shakespeare</td>
<td>3</td>
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<tr>
<td>HUM 210</td>
<td>Humanities I OR</td>
<td>3</td>
</tr>
<tr>
<td>HUM 211</td>
<td>Humanities II</td>
<td>3</td>
</tr>
<tr>
<td>SPN 320</td>
<td>Latin-American Civilization</td>
<td>3</td>
</tr>
<tr>
<td>SPN 332</td>
<td>Literature of the 19th Century</td>
<td>3</td>
</tr>
<tr>
<td>SPN 333</td>
<td>Literature of the 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>SPN 350</td>
<td>Cervantes</td>
<td>3</td>
</tr>
<tr>
<td>SPN 383</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPN 450</td>
<td>Advanced Grammar &amp; Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPN 490</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL** 33 cr hrs

### SUMMARY OF GRADUATION REQUIREMENTS

- **General Education Requirements**: 40 cr hrs
- **Major Requirements**: 74 cr hrs
- **Electives**: 6 cr hrs
- **TOTAL**: 120 cr hrs

### NOTE

Students seeking a license to teach in the middle school and high school will take the following additional courses and see their advisors in the Department of English and Foreign Languages and in the Department of Secondary Education and School Leadership:

- ENG 454
- SED 201
- SED 210
- SED 405
- SED 420
- SED 421
- SED 486
- SED 488
- SED 499

### REQUIREMENTS FOR A MINOR IN ENGLISH

For an English minor, non-English majors should take 9 credit hours of CORE courses and 9 credit hours of other English courses. The Department recommends that a student seeking an English minor choose ENG 207: Introduction to World Literature in the Humanities category and ENG 383: African-American Literature in the Cultural Elective category under the General Education requirements in the Catalog. The 18 credit hours for the minor in English should be distributed as follows:

- Nine (9) credit hours of CORE courses: Additional nine (9) credit hours of courses:
  - ENG 210: Practical English Grammar or
  - ENG 286: Advanced Composition
  - ENG 341 or 342: Survey of American Literature I or II
  - ENG 306: Introduction to Literary Criticism
  - ENG 341 or 342: Survey of American Literature I or II
  - ENG 306: Introduction to Literary Criticism

### DEPARTMENT OF FINE ARTS

Chinedu Okala, Department Head
(757) 823-8844

The Department of Fine Arts takes its title and general direction from the traditional roles of drawing, painting, and sculpture. However, the goal of recent years has been to eliminate constricting departmental barriers, to increase interrelationship of all creative activities, and to broaden the educational potential. This has placed greater emphasis on a wider spectrum of courses and programs, more varied technology, and a neoteric pedagogy.

### DEGREES OFFERED

Bachelor Of Arts In Fine Arts And Graphic Design

The degree program offers two sequences: Fine Arts and Fine Arts Education.

### ASSESSMENT REQUIREMENTS:

All students majoring in the Department of Fine Arts are required to maintain a professional portfolio that demonstrates their creative development. The portfolio is reviewed at scheduled intervals for advisement purposes. Participation in the “Seniors Gallery Exhibition” is required of all graduates.
### FINE ARTS CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>FIA 240 Sculpture, Carving &amp; Welding</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>FIA 261 Printmaking</td>
</tr>
<tr>
<td>FIA 114 Basic Design</td>
<td>FIA 270 History of Art Survey I</td>
</tr>
<tr>
<td>FIA 115 Basic Design II</td>
<td>FIA 271 History of Art Survey II</td>
</tr>
<tr>
<td>FIA 116 Basic Design III</td>
<td>SCM 285 Principles of Speech</td>
</tr>
<tr>
<td>FIA 120 Drawing</td>
<td>FIA 320 Intermediate Drawing</td>
</tr>
<tr>
<td>FIA 121 Drawing</td>
<td>FIA 370 African-American Art History</td>
</tr>
<tr>
<td>FIA 180 Computer Literacy for the Arts</td>
<td>XXX FIA Elective (300 level FIA or FDM class)</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>XXX or FIA or FDM</td>
</tr>
<tr>
<td>MTH 103 Contemporary Mathematics</td>
<td>XXX Free Elective (200 or 300 level free elective</td>
</tr>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>XXX elective or FIA or FDM</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>XXX FIA Elective (300 level FIA or FDM class)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30 cr hrs</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>XXX Cultural Elective* (limited to one of the selected cultural electives)</td>
</tr>
<tr>
<td>CHM 100 Chemistry or PHY 100</td>
<td>XXX FIA Elective (300 or 400 level FIA or FDM Class)</td>
</tr>
<tr>
<td>CHM 100L Chemistry Lab or PHY 100L</td>
<td>XXX Free Elective (300 or 400 level free elective including FIA or FDM)</td>
</tr>
<tr>
<td>FIA 140 Ceramics</td>
<td>XXX FIA Elective (400 level FIA or FDM class)</td>
</tr>
<tr>
<td>FIA 220 Life Drawing</td>
<td>XXX FIA Elective (400 level FIA or FDM class)</td>
</tr>
<tr>
<td>FIA 234 Painting</td>
<td>XXX Modern Art History</td>
</tr>
<tr>
<td>FIA XXX FIA Elective (100 or 200 level FIA or FDM)</td>
<td>XXX Advanced Studio Problems</td>
</tr>
<tr>
<td>XXX Free Elective (100 or 200 level free elective or FIA or FDM)</td>
<td>XXX Free Elective (300 or 400 level free elective including FIA or FDM)</td>
</tr>
<tr>
<td>HIS 100 History of Civilization</td>
<td>XXX FIA Elective (400 level FIA or FDM class)</td>
</tr>
<tr>
<td>SOC 101 Introduction to Sociology</td>
<td>FIA 495 Portfolio Preparation &amp; Senior Exhibition</td>
</tr>
<tr>
<td>TOTAL</td>
<td>31 cr hrs</td>
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<table>
<thead>
<tr>
<th>SUMMARY OF GRADUATION REQUIREMENTS</th>
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<tbody>
<tr>
<td>General Education Requirements</td>
</tr>
<tr>
<td>Major Requirements</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
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</table>

A non-art minor can be established by choosing carefully with your advisor the 15 – 18 necessary hours of free electives.

### RECOMMENDED ELECTIVES:

**CULTURAL ELECTIVES:**

<table>
<thead>
<tr>
<th>ENG 383</th>
<th>HIS 371</th>
<th>POS 315</th>
<th>SOC 237</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 210</td>
<td>MUS 234</td>
<td>PSY 340</td>
<td></td>
</tr>
</tbody>
</table>

### FINE ART ELECTIVES may be any FIA or FDM 100, 200, 300, or 400 level courses listed in the NSU Student Handbook, the Department of Fine Arts Handbook, or the NSU Semester Schedule Book.)

### FINE ARTS EDUCATION CURRICCULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>BIO 100 Biological Science</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>CHM 100 Chemistry or PHY 100</td>
</tr>
<tr>
<td>FIA 114 Basic Design</td>
<td>CHM 100L Chemistry Lab or PHY 100L</td>
</tr>
<tr>
<td>FIA 115 Basic Design II</td>
<td>FIA 141 Ceramics</td>
</tr>
<tr>
<td>FIA 116 Basic Design III</td>
<td>FIA 180 Computer Literacy for the Arts</td>
</tr>
<tr>
<td>FIA 120 Drawing</td>
<td>FIA 214 Craft Design</td>
</tr>
<tr>
<td>FIA 121 Drawing</td>
<td>FIA 220 Life Drawing</td>
</tr>
<tr>
<td>FIA 140 Ceramics</td>
<td>FIA 240 Sculpture, Carving, &amp; Welding</td>
</tr>
<tr>
<td>FIA 160 Lettering</td>
<td>FIA 281 Printmaking</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>FIA 320 Intermediate Drawing</td>
</tr>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>HIS 102 History of Civilization</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>MTH 103 Contemporary Mathematics</td>
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<tr>
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</tr>
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</table>

| TOTAL                             | 31 cr hrs                        |
### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Cultural Elective*</td>
<td>3</td>
</tr>
<tr>
<td>FIA 234 Painting</td>
<td>3</td>
</tr>
<tr>
<td>FIA 314 Fine Arts &amp; Methods</td>
<td>3</td>
</tr>
<tr>
<td>FIA 270 History of Art Survey I</td>
<td>3</td>
</tr>
<tr>
<td>FIA 271 History of Art Survey II</td>
<td>3</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>SED 201 American Schools &amp; the Teaching Profession</td>
<td>3</td>
</tr>
<tr>
<td>SED 233 Critical Thinking &amp; Assessment Skills</td>
<td>3</td>
</tr>
<tr>
<td>SED 380 Foundations of Methods in Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Introduction to Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30 cr hrs</strong></td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIA 320 Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>FIA 365 Elementary Photography</td>
<td>3</td>
</tr>
<tr>
<td>HUM 210 Humanities</td>
<td>3</td>
</tr>
<tr>
<td>SED 420 Educational Technology I</td>
<td>3</td>
</tr>
<tr>
<td>SED 486 Educational Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SED 488 School/Community Relations</td>
<td>3</td>
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<tr>
<td>SED 499 Directed Teaching</td>
<td>12</td>
</tr>
<tr>
<td>SED 499P Student Teaching Professional Seminar</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30 cr hrs</strong></td>
</tr>
</tbody>
</table>

### Teacher Licensure Endorsement:

Students wishing to pursue a career in teaching art must take the following steps:
1. Follow the curriculum for the degree in Fine Arts.
2. Use elective hours for professional courses.
3. See the academic advisor in their major department.
4. See the academic advisor in the School of Education.
5. Pass the PRAXIS I Examination prior to applying for admission to Teacher Education.
6. Pass the PRAXIS II Examination before graduation.

**NOTE**: Endorsement is for K through 12.

### RECOMMENDED ELECTIVES:

- ENG 383
- FIA 370
- HIS 336
- HIS 371
- PSY 340
- FIA 250
- FIA 470
- HIS 337
- MUS 234
- SED 405
- FIA 251
- HIS 335
- HIS 370
- POS 315
- SOC 237

### MINOR IN FINE ARTS (for students majoring in other departments)

**REQUIREMENTS AND OPTIONS ARE AS FOLLOWS:**

#### REQUIRED COURSES:

- FIA 115 Basic Design II 3
- FIA 120 Basic Drawing I 3
- FIA 260 Introduction to Advertising 3
- FIA 3XX Dept. Elective (FDM or FIA) 3

**TOTAL HOURS NEEDED:** 18

**NOTE**: All department FIA or FDM electives may be chosen from those listed in the Fine Arts Department's Handbook, the NSU Student Catalog or the NSU Schedule of Classes for each semester. The electives should be chosen after a student has consulted with his or her advisor.

FIA 115 Basic Design II, a design development course in color design, is necessary for all students. The FDM designation refers to the fashion classes and the FIA designation refers to all of the other Fine Arts studio and history classes.

### DEPARTMENT OF GENERAL STUDIES

**Department Head:** Associate Dean of Liberal Arts  
(757) 823-8118

The Office of the First Year Experience and The Academy for Collegiate Excellence and Student Success (ACCESS) provide two courses designed to address the needs of undeclared students and students on academic probation. For more information, please phone (757) 823-8507 or see www.nsu.edu.

The Office of New Student Orientation coordinates Freshman Seminar. This seminar is an introduction to university life. For more information, please phone (757) 823-8912.

The Honors Program coordinates the honors seminars. For more information, please phone the director at (757) 823-8208 or email the director at honors@nsu.edu.
DEPARTMENT OF HISTORY
Charles H. Ford, Department Head
(757) 823-8828

The Department of History provides students with a critical intellectual framework for assessing and understanding human affairs. The Department offers a broad spectrum of history and geography courses leading to the Bachelor of Arts degree in history. Curriculum sequences are available in History, History Social Science (Education), and History Military Science (Army and Navy).

The general objectives of the Department are as follows:

1. To enhance students’ intellectual perspective by enriching their liberal education studies.
2. To develop students’ research, critical thinking, analytical, and writing skills.
3. To familiarize students with the traditions of American history and the contributions of African Americans to that history.
4. To introduce students to the heritage of world civilizations and to foster in them an understanding and appreciation of those civilizations.
5. To prepare students to be informed and responsible members of a democratic society.
6. To prepare departmental majors for their professions and careers.

The departmental degree program is designed to prepare students for careers in law, teaching, public relations, journalism, foreign services, business, and other professions.

Assessment
In order to monitor and evaluate students’ academic progress at Norfolk State in accordance with state mandates, the University has developed an assessment program. All History majors are required to participate in this program, as designed and administered by the department.

It is the policy of the History Department that History majors take the required 100-level and 200–level classes (HIS 100, HIS 101, HIS 102, HIS 103, and HIS 205) prior to registering for any upper-level (HIS 300+) classes. In order to take upper-level classes before the completion of the 100-level surveys, students must receive permission from the chair. HIS 205, Introduction to History, should be taken by all History majors and minors after the third semester of admission to the University and/or after the student has taken the basic American history sequence of HIS 102 and HIS 103.

Upon completion of the survey courses, students must take a departmental assessment test, measuring their competency in American and world history. The results of this test will be used for diagnostic purposes to inform students of the progress they have made and to point out those areas in which they are still deficient. If students pass the test, they are relieved of any future requirements to take another assessment test. If students do not pass the test, they may retake it once a semester until it is passed.

Each history major must pass the departmental assessment test. Those students who have not passed the test before enrolling in HIS 497 must pass the assessment examination as a part of the requirements of that course. A student who does not pass the assessment test before the end of HIS 497 will receive an “I” for the course and will not subsequently be given a grade for the course until the test is passed. Because HIS 497 is a required course, as well as the department’s capstone course, students cannot complete any of the History curricula--and therefore cannot graduate--without completing this course.

The assessment test is comprised of three parts:

• Multiple choice questions
• Essay questions drawn from both American and world history
• Map exercises, including identification of countries

For further information, contact the History Department: Phone (757) 823 8828 or e-mail chford@nsu.edu or lgrant@nsu.edu.

HISTORY CURRICULUM

(Note: Students in this curriculum may tailor their electives to include an emphasis on African and African Diaspora Studies. See corresponding certificate program below.)

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100</td>
<td>HUM 210 or FIA 201 or MUS 301.</td>
</tr>
<tr>
<td>BIO 100</td>
<td>Biological Science</td>
</tr>
<tr>
<td>BIO 100L</td>
<td>Biological Science Lab</td>
</tr>
<tr>
<td>CSC 150</td>
<td>HUM 211 or FIA 201 or MUS 301.</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Electives</td>
</tr>
<tr>
<td>ENG 102</td>
<td>HIS 102 History of World Civilizations, Part 1</td>
</tr>
<tr>
<td>FL 111</td>
<td>HIS 103 History of World Civilizations, Part 2</td>
</tr>
<tr>
<td>FL 112</td>
<td>LOG 210 Logic: Critical Thinking</td>
</tr>
<tr>
<td>HED 100</td>
<td>PHY 100 Physical Science</td>
</tr>
<tr>
<td>HIS 102</td>
<td>POS 100 American National Government</td>
</tr>
<tr>
<td>HIS 103</td>
<td>HIS 205 Introduction to History (FO)</td>
</tr>
<tr>
<td>MTH 103</td>
<td>TOTAL 30 cr hrs</td>
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<tr>
<td>PED 100</td>
<td>34 cr hrs</td>
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<tr>
<td>SOC 101</td>
<td>34 cr hrs</td>
</tr>
<tr>
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</table>
### Fourth Year

<table>
<thead>
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<th>Course Title</th>
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<tbody>
<tr>
<td>HIS 4XX</td>
<td>HIS 4XX Non-Western History</td>
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<td>Electives</td>
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<td>ECN 211</td>
<td>Principles of Economics</td>
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<tr>
<td>Elective</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>CSC 200</td>
<td>Advanced Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>GEO 130</td>
<td>Principles of Geography</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203</td>
<td>Advanced Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>ENG 383</td>
<td>African American Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIS 439</td>
<td>United States from 1932 to Present</td>
<td>3</td>
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<td>SCM 285</td>
<td>Principles of Speech</td>
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<tr>
<td>TOTAL</td>
<td>TOTAL 26 cr hrs</td>
<td></td>
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</table>

**Fourth Year Summary of Graduation Requirements**

- **General Education Requirements**: 40
- **Major Requirements**: 63
- **Electives**: 17
- **TOTAL**: 120 cr hrs

(Twenty-one semester hours of History at the 300-400 level are required for a major in the Department, with a minimum of six credit hours of non-Western history.)

### HISTORY AND SOCIAL SCIENCE/EDUCATION CURRICULUM

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>FRS 100</td>
<td>Freshman Seminar</td>
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<tr>
<td>BIO 100</td>
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<td>3</td>
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<tr>
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<td>Communication Skills II</td>
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<tr>
<td>HED 100</td>
<td>Personal and Community Health</td>
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<td>HIS 102</td>
<td>U.S. History to 1865</td>
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<td>U.S. History since 1865</td>
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<td>MTH 103</td>
<td>Contemporary Mathematics</td>
<td>3</td>
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<td>PED 100</td>
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<tr>
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<td>HUM 211</td>
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<tr>
<td>GEO 130</td>
<td>Principles of Geography</td>
<td>3</td>
<td></td>
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<tr>
<td>HIS 100</td>
<td>History of World Civilizations, Part 1</td>
<td>3</td>
<td></td>
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<tr>
<td>HIS 101</td>
<td>History of World Civilizations, Part 2</td>
<td>3</td>
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<tr>
<td>LOG 210</td>
<td>Logic: Critical Thinking</td>
<td>3</td>
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<td>PHY 100</td>
<td>Physical Science</td>
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<tr>
<td>POS 100</td>
<td>American Government</td>
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<tr>
<td>POS 231</td>
<td>American State &amp; Local Government</td>
<td>3</td>
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<tr>
<td>SED 201</td>
<td>American Schools &amp; the Teaching Profession</td>
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<tr>
<td>POS 430</td>
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<tr>
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<td>Electrode 2</td>
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</tr>
<tr>
<td>Electrode 3</td>
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<td>TOTAL</td>
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**Summary of Graduation Requirements**

- **General Education Requirements**: 40
- **Major Requirements**: 63
- **Electives**: 17
- **TOTAL**: 120 cr hrs

### Endorsement Requirements:

The Department requires 36 hours in history including 15 hours in lower level U.S. history, world civilization, and introduction to history courses, as well as 21 hours of advanced history courses (300-400 level) with a minimum of 6 credit hours of non-Western courses. The candidate must also complete 18 hours of professional education courses and 12 hours of student teaching for certification in secondary education.

A minimum grade of "C" is required in all history and geography, political science, economics, professional education, and English 101, 102, and 203 courses. These requirements apply to all areas of endorsement.

*Students must pass the PRAXIS I Test prior to applying for admission to Teacher Education and enrollment in upper level professional education courses. SED 233, while not required, may be taken before taking the PRAXIS Exam.

**Must be taken prior to directed teaching.

To be endorsed as a teacher in social studies, the applicant shall complete 30 hours of education courses and 42 hours of social studies courses, including 18 upper level semester hours in history, 12 semester hours in political science, 6 semester hours in
geography, and 6 semester hours in economics. Within the endorsement, the applicant wishing to teach a course in cultural anthropology and sociology or social psychology must complete a minimum of 6 semester hours in these disciplines.

An applicant seeking a separate endorsement in history must complete 24 semester hours: American history (including Virginia history), European history, world history, and contemporary affairs (State Department of Education Guidelines).

For Early Childhood Certification Endorsement:

Students must fulfill the degree requirements for the History and Social Science Curriculum and take the following courses in Early Childhood Education and professional education (18 semester hours) as well as student teaching (12 semester hours):

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>SED 201</td>
<td>American Schools and the Teaching Profession</td>
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<tr>
<td>SED 233</td>
<td>Seminar in Assessment and Evaluation</td>
</tr>
<tr>
<td>ECE 274</td>
<td>The Study of Young Children</td>
</tr>
<tr>
<td>ECE 460</td>
<td>Curriculum and Instruction in Preschool and Kindergarten</td>
</tr>
<tr>
<td>ECE 461</td>
<td>Curriculum and Instruction in Early Primary</td>
</tr>
<tr>
<td>ECE 484</td>
<td>Teaching Reading in Early Childhood Education</td>
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<tr>
<td>ECE 499</td>
<td>Directed Teaching</td>
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*For Special Education Certification Endorsement:

Students must fulfill the degree requirements for the History and Social Science curriculum and take the prescribed curriculum (24 semester hours) in Special Education and professional education (see Department of Special Education) as well as 12 semester hours of student teaching.

**HISTORY-MILITARY SCIENCE (ARMY) CURRICULUM**

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<th>Third Year</th>
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<td></td>
</tr>
<tr>
<td>FRS 100</td>
<td>Freshman Seminar</td>
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<tr>
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<td>Biological Science</td>
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<td>Biological Science Lab</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
</tr>
<tr>
<td>HIS 102</td>
<td>U. S. History until 1865</td>
</tr>
<tr>
<td>HIS 103</td>
<td>U. S. History Since 1865</td>
</tr>
<tr>
<td>POS 100</td>
<td>American National Government</td>
</tr>
<tr>
<td>MSL 111</td>
<td>Fundamentals of Leadership/Management</td>
</tr>
<tr>
<td>MSL 112</td>
<td>Fundamentals of Leadership/Management</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Contemporary Mathematics</td>
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<tr>
<td>TOTAL 30 cr hrs</td>
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<table>
<thead>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Social Science</td>
</tr>
<tr>
<td>ENG 203</td>
<td>Advanced Communication Skills or</td>
</tr>
<tr>
<td>ENG 286 or ENG 207 or ENG 303</td>
<td>HIS 439</td>
</tr>
<tr>
<td>HIS 100</td>
<td>History of World Civilizations, Part 1</td>
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<tr>
<td>HIS 101</td>
<td>History of World Civilizations, Part 2</td>
</tr>
<tr>
<td>HUM 210</td>
<td>Humanities or FIA 201 or MUS 301</td>
</tr>
<tr>
<td>HUM 211</td>
<td>Humanities or FIA 201 or MUS 301</td>
</tr>
<tr>
<td>LOG 210</td>
<td>Logic: Critical Thinking</td>
</tr>
<tr>
<td>MSL 211</td>
<td>Applied Leadership/Management</td>
</tr>
<tr>
<td>MSL 211D</td>
<td>Drill and Ceremonies or MSL 212D</td>
</tr>
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<td>MSL 212</td>
<td>Applied Leadership/Management</td>
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<td>PHY 100</td>
<td>Physical Science</td>
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<td>POS 100</td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

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<tr>
<th>Requirement</th>
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<td>American National Government</td>
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<tr>
<td>Military Science*</td>
<td>26</td>
</tr>
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For the History Military Science (Army) Sequence, 36 hours in history are required, of which 21 must be at the 300 or 400 level, with a minimum of 6 credit hours of non Western history. Twenty six credit hours in Military Science are required.

*Juniors may receive 4 semester hours credit for summer camp exercises, but these credits will not be a part of scheduling.*
## HISTORY MILITARY SCIENCE (NAVY) CURRICULUM

### First Year

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<td>Biological Science Lab</td>
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<tr>
<td>CSC 150</td>
<td>Computer Concepts &amp; Applications</td>
<td>3</td>
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<td>ENG 101</td>
<td>Communication Skills I</td>
<td>3</td>
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<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
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<tr>
<td>HIS 102</td>
<td>U.S. History to 1965</td>
<td>3</td>
</tr>
<tr>
<td>HIS 103</td>
<td>U.S. History Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIS 205</td>
<td>Introduction to History</td>
<td>3</td>
</tr>
<tr>
<td>NSC 111</td>
<td>Naval Laboratory</td>
<td>1</td>
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<tr>
<td>NSC 112</td>
<td>Naval Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Social Science</td>
<td>3</td>
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### Second Year

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<td>HIS 101</td>
<td>History of World Civilizations, Part 2</td>
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<td>HUM 210</td>
<td>Humanities or FIA 201 or MUS 301</td>
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<td>HUM 211</td>
<td>Humanities or FIA 201 or MUS 301</td>
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<tr>
<td>LOG 210</td>
<td>Logic: Critical Thinking</td>
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<tr>
<td>NSC 201</td>
<td>Naval Ship Systems I (Engineering)</td>
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<td>NSC 202</td>
<td>Naval Ship Systems II (Weapons)</td>
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<td>Advanced Communication Skills or ENG 206 or ENG 303</td>
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<td>PHY 100</td>
<td>Physical Science</td>
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### Third Year

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<td>African-American Literature</td>
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<td>FL 111</td>
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<td>FL 112</td>
<td>Foreign Language</td>
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<td>American Military History</td>
<td>3</td>
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<td>NSC 301</td>
<td>Navigation and Naval Operations I</td>
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<tr>
<td>NSC 302</td>
<td>Navigation and Naval Operations II</td>
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<td>SCI 285</td>
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<td>Principles of Geography</td>
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<td>United States from 1932 to Present</td>
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<td>HIS 497</td>
<td>Introduction to Historical Research</td>
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<td>NSC 401</td>
<td>Leadership and Management I</td>
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<td>NSC 402</td>
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<td>Naval Laboratory VII</td>
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<td>NSC 412</td>
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### MINOR IN HISTORY

For those students in other majors seeking a minor in history, the following program is offered:

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<tbody>
<tr>
<td>HIS 205</td>
<td>Introduction to History</td>
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</tr>
<tr>
<td>HIS 3XX-HIS 4XX</td>
<td>History Electives</td>
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### CERTIFICATE PROGRAM IN AFRICAN AND AFRICAN DIASPORAN STUDIES

This certificate program is designed for those students who are interested in the making of the cultures of persons of African descent. The histories of the Caribbean, Latin America, Africa, and North America are its key elements. Participating faculty will require students to engage in multidisciplinary approaches in studying the formation of racial and ethnic identities, among other topics, in African and African Diasporan cultures. The program will underscore the connection between the formation of those identities and economic developments in their surrounding societies.

**Certificate Program Prerequisites:**

- HIS 335 African American History, Part 1       3
- HIS 336 African American History, Part 2       3
- HIS 370 African History and Culture Pt 1        3

**Required Courses for Certificate Program:**

- HIS 490A Introduction to African and African Diasporan Studies 3
- HIS 490E Major Themes in Contemporary Africa 3

**Certificate Program Electives (Select one from each grouping.)** 15 credits hrs.

- HIS 371 African History and Culture, Part 2, or 3
- HIS 490E Major Themes in Contemporary Africa 3
- HIS 365 Caribbean and Latin American History, or 3
- HIS 448 Slavery in the Atlantic Basin 3

**Total** 120 cr hrs

For the History Military Science (Navy) Sequence, 36 hours in history are required, of which 21 must be at the 300 or 400 level, with a minimum of 6 credit hours of non Western history. Twenty six credit hours in Military Science are required.
DEPARTMENT OF INTERDISCIPLINARY STUDIES
S. Korsi Dogbe, Department Head
(757) 823-8198

A Bachelor of Science degree in Interdisciplinary Studies is obtained through this program. It is designed to provide a strong liberal arts foundation that develops the skills to think critically and holistically. Interdisciplinary Studies is a curriculum approach that applies methodology and language from more than one discipline to examine a central theme, issue, problem, topic or experience. The program has four basic components:

1. The General Education Core Requirements 40
2. Interdisciplinary Major Requirements 39
   - Discipline Core 24
   - Core Supplement 12
   - Technology Supplement 3
3. Areas of Concentration 30
4. Elective 11
   TOTAL 120 cr hrs

**Discipline Core**
(Courses to be completed with grade of “C” or better)

<table>
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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>INT 308</td>
<td>Introduction to Interdisciplinary Studies 3</td>
</tr>
<tr>
<td>INT 322</td>
<td>Approaches to Critical Analysis 3</td>
</tr>
<tr>
<td>INT 360</td>
<td>Research in Interdisciplinary Studies 3</td>
</tr>
<tr>
<td>INT 375</td>
<td>Language and Society 3</td>
</tr>
<tr>
<td>INT 411</td>
<td>Ideas and Influences 3</td>
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<td>INT 412</td>
<td>Contemporary Globalization 3</td>
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<td>INT 470</td>
<td>Advanced Interdisciplinary Studies Seminar 3</td>
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<td>INT 477</td>
<td>Senior Thesis 3</td>
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**Core Supplement** (Twelve credits: Select two disciplines; within each one, choose two courses)

<table>
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<tbody>
<tr>
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</tr>
<tr>
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<td>ENG 383</td>
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<td>ENG 303</td>
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<td>MCM 211</td>
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<td>MCM 315</td>
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<td>Psychology</td>
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<td>SOC 242</td>
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<tr>
<td>SOC 335</td>
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**Technology Supplement**
CSC 200 Advanced Computer Concepts 3

**Concentration I**
15

**Concentration II**
15

**Option:** (Approval of Department Head and School Dean)
Students are encouraged to explore new relationships between established areas of knowledge and to take an active part in designing their personalized curricula. To this end, it is possible for students who meet guidelines established by the Department to satisfy some of the course requirements via transfer credit or extensive coursework taken previously. In all such cases, approval of the Department Head and the School Dean is required.

**INTERDISCIPLINARY STUDIES CURRICULUM**

<table>
<thead>
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<th>Third Year</th>
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<tr>
<td>BIO 100L</td>
<td>INT 375</td>
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<tr>
<td>or PHY 100L</td>
<td>INT 311</td>
</tr>
<tr>
<td>CHM 100</td>
<td>INT 412</td>
</tr>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>2</td>
</tr>
<tr>
<td>HIS 100</td>
<td>INT 470</td>
</tr>
<tr>
<td>MTH 103</td>
<td>INT 477</td>
</tr>
<tr>
<td>PED 100</td>
<td>1</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28 cr hrs</td>
</tr>
</tbody>
</table>

*or CLM 165, CLS 165, CSC 150, CSC 169, CIT 150, EEN 141, FA 180, or TED 170

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCM 285</td>
<td>3</td>
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<tr>
<td>HUM 210</td>
<td>6</td>
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<tr>
<td>INT 308</td>
<td>INT 375</td>
</tr>
<tr>
<td>INT 322</td>
<td>INT 411</td>
</tr>
<tr>
<td>INT 360</td>
<td>INT 412</td>
</tr>
<tr>
<td>TOTAL</td>
<td>33 cr hrs</td>
</tr>
</tbody>
</table>

*Identify concentration area, plan, and begin taking courses

**SUMMARY OF GRADUATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Requirements</td>
<td>40</td>
</tr>
<tr>
<td>Interdisciplinary Core Requirement</td>
<td>39</td>
</tr>
<tr>
<td>Concentration I</td>
<td>15</td>
</tr>
<tr>
<td>Concentration I</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120 cr hrs</td>
</tr>
</tbody>
</table>

**MINOR IN INTERDISCIPLINARY STUDIES**

(18 credit hours can be taken by students who want to minor in Interdisciplinary Studies. Courses must be passed with a grade of “C” or higher.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT 308</td>
<td>3</td>
</tr>
<tr>
<td>INT 322</td>
<td>3</td>
</tr>
<tr>
<td>INT 360</td>
<td>3</td>
</tr>
<tr>
<td>INT 375</td>
<td>3</td>
</tr>
<tr>
<td>INT 411</td>
<td>3</td>
</tr>
<tr>
<td>INT 412</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18 cr hrs</td>
</tr>
</tbody>
</table>

**E-LEARNING**

The Department of Interdisciplinary Studies offers on-line courses. They are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT 308.90</td>
<td>Introduction to Interdisciplinary Studies</td>
</tr>
<tr>
<td>INT 375.90</td>
<td>Language and Society</td>
</tr>
<tr>
<td>INT 411.90</td>
<td>Ideas and Their Influences</td>
</tr>
</tbody>
</table>

**Student Requirements**

1. Students should enroll at Norfolk State University (NSU), or any other college that is a member of the Tidewater consortium, and register for an NSU course.

2. Students must have access to a computer (at home, work, school, etc.), Internet connection, and a web browser (Netscape Communicator 4.7 or higher or Microsoft Explorer 5.5 or higher). For further information on the minimum computer requirements go to e-Learning at the NSU website, click on Student Support, then click on "What are the minimum system requirements?"

3. Upon enrollment, students receive a Norfolk State E-mail account. Students must access their Norfolk State e-mail accounts by doing the following:
   a. Go to the NSU web-site (www.nsu.edu). Click on E-Learning; then click on Student Support; click on e-mail login.
b. Students registered for online classes should use their Blackboard (Bb) login and access Blackboard. Once in Blackboard, the student should transmit e-mail to the class instructor to ensure that they can access the class and that their e-mail is functioning properly.

4. E-Learning courses require students to possess basic computer skills. Students should be comfortable using a computer to word process documents, surf the internet via web browser, send and receive e-mail, and send and receive attachments.

For the most up-to-date information on e-learning courses, instructor e-mail addresses, and qualities that contribute to a successful learning experience, contact the Department of Instructional Technology or the instructor in the Department of Interdisciplinary Studies.

DEPARTMENT OF MASS COMMUNICATIONS AND JOURNALISM
Emmanuel Onyedike, Department Head
(757) 823-8331

The mission of the Department of Mass Communications and Journalism is to advance the academic, professional, and personal development of undergraduate and graduate students, alumni, and media practitioners through select programs of teaching, research, and public service that combine strong liberal arts and science studies with professional preparation for the media. The goal of the department is to produce graduates who meet high standards of performance in gathering, selecting, interpreting, and disseminating information that may determine the agenda of public discussion.

The department offers two undergraduate degree programs leading to the Bachelor of Arts in Journalism and the Bachelor of Science in Mass Communications and a graduate degree program leading to the Master of Arts in Media and Communications.

The curriculum is designed to meet the prescribed requirements of the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC), the State Council of Higher Education in Virginia (SCHEV), the Southern Association of Schools and Colleges (SACS), as well as the general education requirements of Norfolk State University.

ACEJMC standards require students to complete at least 80 hours outside their major, including 65 in liberal arts and sciences.

CURRICULUM REGULATIONS

Mass Communications and Journalism students must earn “C” or better in all departmental courses and in ENG 101, ENG 102 and SCM 285.

TRANSFER CREDIT POLICY

The department will accept no more than 12 hours credit in the major taken at another institution. It will accept credits for all courses outside the major approved by the Office of Admissions and the Registrar’s Office.

GENERAL BROADCAST CURRICULUM

B.S. IN MASS COMMUNICATIONS

| First Year | ENG 207 | Introduction to World Literature or ENG 207H | 3 |
| First Year | FIA 201 | Basic Art Appreciation or MUS 301 | 3 |
| First Year | MCM 261 | Introduction to Media Writing | 3 |
| First Year | HUM 210 | Humanities or HUM 211 | 3 |
| First Year | PSY 210 | Introduction to Psychology | 3 |
| First Year | SCM 285 | Principles of Speech or SCM 285H | 3 |
| First Year | Elective Outside the Major | 3 |
| First Year | TOTAL | 34 cr hrs |

| Second Year | ECN 211 | Principles of Economics or ECN 212 | 3 |
| Second Year | ENG 114 | Techniques of Vocabulary Building | 2 |
| Second Year | HIS 335 | African-American History or HIS 336 or HIS 370 or HIS 371 or ENG 383 or FIA 170 or MUS 234 or POS 315 or PSY 340 or JRN 299 | 3 |
| Second Year | Elective Outside the Major | 3 |
| Second Year | TOTAL | 29 cr hrs |
### MINOR IN MASS COMMUNICATIONS

The following 15 hours are required for one to minor in B.S. Mass Communications (General Broadcast):

<table>
<thead>
<tr>
<th>Core: 9 Hours</th>
<th>Six More Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM 250 TV Production</td>
<td>3</td>
</tr>
<tr>
<td>MCM 261 Introduction to Media Writing</td>
<td>3</td>
</tr>
<tr>
<td>MCM 3XX MCM 330: Elec. Field Prod. &amp; Editing or MCM 362: Broadcast News Writing &amp; Reporting</td>
<td>3</td>
</tr>
<tr>
<td>MCM 351 Intro to Broadcast and Film Criticism or MCM 450 or MCM 485</td>
<td>3</td>
</tr>
<tr>
<td>GEO 130 Principles of Geography</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness or PED 13X or PED 20X or PED 21X</td>
<td>1</td>
</tr>
<tr>
<td>SOC 101 Intro to Social Sciences or SOC 110</td>
<td>3</td>
</tr>
<tr>
<td>CSC 150 Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>POS 100 American National Government</td>
<td>3</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>2</td>
</tr>
<tr>
<td>HIS 102 U.S. History to 1865 or HIS 103 or HIS 100 or HIS 101</td>
<td>3</td>
</tr>
<tr>
<td>JRN 2.00 Basic Writing</td>
<td>3</td>
</tr>
<tr>
<td>MTH103 Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30 cr hrs</strong></td>
</tr>
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</table>

### JOURNALISM CURRICULUM

#### B.A. IN JOURNALISM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>FRS 200 Writing Workshop</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I or ENG 101H</td>
<td>ENG 203 Advanced Writing</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II or ENG 102H</td>
<td>ENG 304 Magazine Production</td>
</tr>
<tr>
<td>MCM 211 Society &amp; Mass Communications</td>
<td>MCM 400 Mass Communication Theory &amp; Research</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness or PED 13X or PED 20X or PED 21X</td>
<td>MCM 410 History of Mass Communication or MCM 460</td>
</tr>
<tr>
<td>SOC 101 Intro to Social Sciences or SOC 110</td>
<td>MCM 420 Law and Mass Communications or MCM 445</td>
</tr>
<tr>
<td>CSC 150 Computer Concepts and Applications</td>
<td>MCM 430 History of Advertising or MCM 470</td>
</tr>
<tr>
<td>POS 100 American National Government</td>
<td>MCM 440 History of Journalism</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>MCM 450 Mass Communication Theory &amp; Research</td>
</tr>
<tr>
<td>HIS 102 U.S. History to 1865 or HIS 103 or HIS 100 or HIS 101</td>
<td>MCM 460 Mass Communication Theory &amp; Research</td>
</tr>
<tr>
<td>JRN 2.20 Basic Writing</td>
<td>MCM 491 Internet/Web page Design</td>
</tr>
<tr>
<td>MTH103 Contemporary Mathematics</td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>30 cr hrs</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>BIO 200 Advanced Computer Concepts</td>
</tr>
<tr>
<td>CHM 100 Chemistry or PHY 100</td>
<td>CHM 200 Advanced Chemistry Lab</td>
</tr>
<tr>
<td>BIO 100L Biological Science Lab or CHM 100L or PHY 100</td>
<td>BIO 210 Physical Science Lab</td>
</tr>
<tr>
<td>JRN 210 Advertising Principles or JRN 221 or JRN 240</td>
<td>JRN 211 Advertising Principles and Practices</td>
</tr>
<tr>
<td>ENG 203 Advanced Communication Skills or ENG 286 or ENG 303</td>
<td>ENG 301 Technical Writing</td>
</tr>
<tr>
<td>JRN 290 Digital Photography or MCM 250 or FIA 365</td>
<td>JRN 300 Media Production</td>
</tr>
<tr>
<td>CSC 200 Advanced Computer Concepts</td>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td>27 cr hrs</td>
</tr>
<tr>
<td>FIA 201 Basic Art Appreciation or MUS 301</td>
<td><strong>SUMMARY OF GRADUATION REQUIREMENTS</strong></td>
</tr>
<tr>
<td>ENG 207 Literature of the Western World</td>
<td>General Education</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech or SCM 285H</td>
<td>Courses in the Major</td>
</tr>
<tr>
<td>HUM 210 Humanities or HUM 211</td>
<td>Required Liberal Arts &amp; Sciences</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>Electives Outside the Major</td>
</tr>
<tr>
<td>34 cr hrs</td>
<td><strong>TOTAL</strong></td>
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</table>

<table>
<thead>
<tr>
<th><strong>SUMMARY OF GRADUATION REQUIREMENTS</strong></th>
<th><strong>TOTAL</strong></th>
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<tbody>
<tr>
<td>General Education</td>
<td>40</td>
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<tr>
<td>Courses in the Major</td>
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</tr>
<tr>
<td>Required Liberal Arts &amp; Sciences</td>
<td>26</td>
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<tr>
<td>Electives Outside the Major</td>
<td>15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>120 cr hrs</td>
</tr>
</tbody>
</table>
MINOR IN JOURNALISM

The following 15 hours are required for one to minor in B.A. Journalism:

Core: 9 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRN 220</td>
<td>Basic Writing</td>
<td>3</td>
</tr>
<tr>
<td>JRN 2XX</td>
<td>Advertising Principles or</td>
<td>3</td>
</tr>
<tr>
<td>JRN 221</td>
<td>News Writing or</td>
<td>3</td>
</tr>
<tr>
<td>JRN 240</td>
<td>Public Relations Principles</td>
<td>3</td>
</tr>
<tr>
<td>JRN 3XX</td>
<td>Copy Editing or JRN 341:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Public Relations Practice</td>
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</table>

Six More Hours

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>JRN 332</td>
<td>Graphics of Communication or</td>
<td>3</td>
</tr>
<tr>
<td>JRN 342</td>
<td>Promotional Writing</td>
<td>3</td>
</tr>
<tr>
<td>MCM 4XX</td>
<td>Internet/Web page Design</td>
<td>3</td>
</tr>
</tbody>
</table>

DEPARTMENT OF MILITARY SCIENCE (ARMY ROTC)

MAJ. Weldon B. Harris, Department Head
(757) 823-8291

The Army ROTC program consists of two programs of instruction. The four-year program is divided into two phases: a two-year Basic phase and a two-year Advanced phase. The Basic phase of the program (MSL 101, 102, 201, 202) is normally pursued by the cadet during his/her freshman and sophomore years of college. Instruction in each phase includes basic military subjects and instruction in leadership and management. The Advanced phase includes on-campus study, off-campus field training exercises, and a 35-day National Advanced Leadership Camp designed to evaluate a cadet's leadership ability and mastery of military skills. Advanced Camp usually occurs between the cadet's junior and senior years and is conducted at Fort Lewis, WA. Nurse cadets also attend a four-week hospital clinic phase at an Army hospital.

The two-year advanced ROTC Program is also extended to students who do not participate in ROTC during their freshman and sophomore years. For students entering this program, a 28-day Leader's Training Course (LTC) after the sophomore year takes the place of the Basic course traditionally required in the four-year program. Students successfully completing LTC are eligible for enrollment in the regular Advanced course for their junior and senior years.

In order to be enrolled formally in Army ROTC, a student must:

1. Be a citizen of the United States.
2. Be physically qualified under standards prescribed by the Department of the Army.
3. Be accepted by the University as a full-time enrolled student.
4. Be over 17 years of age, but must not have reached the 30th birthday upon graduation/commissioning (27th birthday for scholarship students).

PARTICIPATION REQUIREMENTS

Students enrolling in the Basic course during their freshman and sophomore years of college incur no military obligation unless they are ROTC scholarship recipients.

All students attending NSU, either enrolled or not enrolled in ROTC, are eligible to compete for two-year or three-year ROTC scholarships. Under this program, the Army pays for tuition, laboratory fees, and other required fees, except room and board. Additionally, scholarship recipients receive $250-$400 per month for each month of the school year, not to exceed 10 months per year, for the duration of the scholarship. To be eligible, the student must:

1. Be a United States citizen.
2. Be at least 17 years of age by June 30 of the year in which application is made.
3. Be able to complete college with a baccalaureate degree and be under 27 years of age by June 30 of the year eligible for appointment.
4. Pass regular Army physical examination and be medically qualified.
5. Pursue any academic discipline leading to a baccalaureate degree.
6. Advanced ROTC students are entitled to subsistence pay at the rate of $150-$400 per month for each month of the school year, not to exceed 10 months per year. While attending Advanced Summer Camp, the student receives one half of the basic pay of a Second Lieutenant (approximately $1,050). Thus, during the two years that a student is enrolled in the Advanced course, he/she will receive approximately $3,600 in pay and allowances. This includes subsistence pay and summer camp pay.
The Music Department offers two undergraduate degrees and one graduate degree. The Bachelor of Music in Music Education is designed to prepare teachers of music in the elementary and secondary schools. The program includes theoretical and applied music studies, general studies, music history, literature, methodology and practicum with concentration in Voice, Keyboard and Band/Orchestra instruments.

The Program leading to a Bachelor of Music with emphasis in Media is designed to expand the career preparation of students by providing knowledge, skills, and practical experience central to the needs of the music industry as represented by the broadcast and recording media. The program includes course sequences in both Music and Mass Communications.

Eligibility to major in music is determined by the Music faculty on the basis of musical background and experience, results of auditions and tests, and general qualifications to pursue Music as a major field. The Music Department is a member of the National Association of Schools of Music.

**BACHELOR OF MUSIC**

**MUSIC EDUCATION CURRICULUM (Instrumental/Keyboard/Vocal)**

<table>
<thead>
<tr>
<th>First Year</th>
<th>MUS 273 Voice Class (Instrumental &amp; Keyboard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Mathematics in General Education</td>
</tr>
<tr>
<td>MUS 110</td>
<td>Ensembles*</td>
</tr>
<tr>
<td>MUS 111</td>
<td>Ensembles*</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Applied Minor</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Applied Minor</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Performance Class</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Performance Class</td>
</tr>
<tr>
<td>MUS 125</td>
<td>Applied Major</td>
</tr>
<tr>
<td>MUS 126</td>
<td>Applied Major</td>
</tr>
<tr>
<td>MUS 131</td>
<td>Music Literature**</td>
</tr>
<tr>
<td>MUS 132</td>
<td>Music Literature**</td>
</tr>
<tr>
<td>MUS 141</td>
<td>Sight-Singing &amp; Ear Training</td>
</tr>
<tr>
<td>MUS 142</td>
<td>Sight Singing &amp; Ear Training</td>
</tr>
<tr>
<td>MUS 145</td>
<td>Harmony and Keyboard</td>
</tr>
<tr>
<td>MUS 146</td>
<td>Harmony and Keyboard</td>
</tr>
<tr>
<td>MUS 161</td>
<td>String Class (Instrumental)</td>
</tr>
<tr>
<td>Music Elective (Keyboard &amp; Vocal)</td>
<td></td>
</tr>
<tr>
<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>31 cr hrs</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>MUS 351 Advanced Conducting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLM 165</td>
<td>Computer Literacy for Musicians</td>
</tr>
<tr>
<td>HED 100</td>
<td>Personal and Community Health</td>
</tr>
<tr>
<td>MUS 151</td>
<td>Elementary Conducting</td>
</tr>
<tr>
<td>MUS 210</td>
<td>Ensembles*</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Ensembles*</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Applied Minor</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Applied Minor</td>
</tr>
<tr>
<td>MUS 223</td>
<td>Performance Class</td>
</tr>
<tr>
<td>MUS 224</td>
<td>Performance Class</td>
</tr>
<tr>
<td>MUS 225</td>
<td>Applied Major</td>
</tr>
<tr>
<td>MUS 226</td>
<td>Applied Major</td>
</tr>
<tr>
<td>MUS 241</td>
<td>Sight, Singing, &amp; Ear Training</td>
</tr>
<tr>
<td>MUS 242</td>
<td>Sight, Singing, &amp; Ear Training</td>
</tr>
<tr>
<td>MUS 245</td>
<td>Harmony &amp; Keyboard</td>
</tr>
<tr>
<td>MUS 246</td>
<td>Harmony &amp; Keyboard</td>
</tr>
<tr>
<td>MUS 250</td>
<td>Band Instrument Survey</td>
</tr>
<tr>
<td>MUS 261</td>
<td>Woodwind Class (Instrumental)</td>
</tr>
<tr>
<td>MUS 271</td>
<td>Voice Diction (Vocal and Keyboard)</td>
</tr>
<tr>
<td>MUS 361</td>
<td>Woodwind Class (Instrumental)</td>
</tr>
<tr>
<td>MUS 272</td>
<td>Vocal Diction (Vocal)</td>
</tr>
</tbody>
</table>

**Fourth Year**

| MUS 410 | Ensemble* |
| MUS 423 | Performance Class |
| MUS 425 | Applied Major |
| MUS 426 | Applied Major |
| SED 499 | Direct Teaching |
| PHY 154 | Physics of Music |
| SMC 285 | Principles of Speech |
| SED 420 | Educational Technology |
| SOC 110 | Introduction to Sociology |

**TOTAL** 29 cr hrs

**SUMMARY OF GRADUATION REQUIREMENTS**

| General Education Requirements | 42 |
| Teacher Education Courses     | 27 |

**TOTAL** 127 cr hrs

*NOTE: Ensembles*

The minimum ensemble requirement for Music Education majors who play band instruments must be satisfied by (1) four semesters in the University Band, (2) three semesters of other instrumental ensembles such as jazz ensemble or combo; percussion, woodwind or brass ensemble; or University community orchestra.

*Three semesters of Music Literature/History satisfy the Humanities core requirement.*
Regular attendance at rehearsals and at all performances is required. Non music majors may enroll with or without credit.

Though Performance Class does not count in the semester hour load, it counts as one tuition hour in the student's load. **Students will not be permitted to take the Professional Education Core of courses until they have passed the Communication Skills and General Knowledge Components of the National Teacher Examination (N.T.E.).

**Professional Education Core Courses

SED 380  Found. of Methods in Secondary Schools  SED 499  Directed Teaching (Secondary Level/Elementary level)

**BACHELOR OF MUSIC DEGREE WITH EMPHASIS IN MEDIA CURRICULUM**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>HIS 100 History of Western Civilization</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>MCM 250 Television Production or Music 365</td>
</tr>
<tr>
<td>HED 100 Personal and Community Health</td>
<td>MCM 350 Television Directing or</td>
</tr>
<tr>
<td>MTH 103 Contemporary Mathematics</td>
<td>MUS 396 Music Video</td>
</tr>
<tr>
<td>MUS 110 Ensembles*</td>
<td>MUS 234 African American Music</td>
</tr>
<tr>
<td>MUS 111 Ensembles*</td>
<td>MUS 310 Ensembles*</td>
</tr>
<tr>
<td>MUS 112 Performance Workshop</td>
<td>MUS 311 Ensembles*</td>
</tr>
<tr>
<td>MUS 113 Performance Workshop</td>
<td>MUS 312 Performance Workshop</td>
</tr>
<tr>
<td>MUS 121 Applied Minor</td>
<td>MUS 313 Performance Workshop</td>
</tr>
<tr>
<td>MUS 122 Applied Minor</td>
<td>MUS 325 Applied Major</td>
</tr>
<tr>
<td>MUS 125 Applied Major</td>
<td>MUS 326 MUS 327</td>
</tr>
<tr>
<td>MUS 126 Applied Major</td>
<td>MUS 331 Music History</td>
</tr>
<tr>
<td>MUS 131 Music Literature**</td>
<td>MUS 332 Music History</td>
</tr>
<tr>
<td>MUS 132 Music Literature**</td>
<td>MUS 335 Jazz Literature and Criticism</td>
</tr>
<tr>
<td>MUS 141 Sight-Singing &amp; Ear Training</td>
<td>MUS 346 or MUS 247 Composition</td>
</tr>
<tr>
<td>MUS 142 Sight Singing &amp; Ear Training</td>
<td>PHY 154 Physics of Music</td>
</tr>
<tr>
<td>MUS 145 Harmony &amp; Keyboard</td>
<td>SCM 285 Principles of Speech</td>
</tr>
<tr>
<td>MUS 146 Harmony &amp; Keyboard</td>
<td>TOTAL 36 cr hrs</td>
</tr>
<tr>
<td>MUS 151 Elementary Conducting</td>
<td>** 8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
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</table>

TOTAL 33 cr hrs

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>JRN 495 JRN Internship</td>
</tr>
<tr>
<td>BIO 100L Biological Science Lab</td>
<td>or MCM 496 Internship</td>
</tr>
<tr>
<td>CLM 165 Computer Literacy</td>
<td>TOTAL 30 cr hrs</td>
</tr>
<tr>
<td>MCM 211 Society and Mass Communications</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
<tr>
<td>MUS 143 Progressive Harmony</td>
<td>General Education Requirements</td>
</tr>
<tr>
<td>MUS 210 Ensembles*</td>
<td>40</td>
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<tr>
<td>MUS 211 Ensembles*</td>
<td>TOTAL 123 cr hrs</td>
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<tr>
<td>MUS 212 Performance Workshop</td>
<td>HED 100 Personal and Community Health</td>
</tr>
<tr>
<td>MUS 213 Performance Workshop</td>
<td>TOTAL 24 cr hrs</td>
</tr>
<tr>
<td>MUS 221 Applied Minor</td>
<td>8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
<tr>
<td>MUS 222 Applied Minor</td>
<td>** 8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
<tr>
<td>MUS 225 Applied Major</td>
<td>** 8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
<tr>
<td>MUS 226 Applied Major</td>
<td>** 8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>** 8 Semesters of Music Literature/History satisfy the Humanities core requirements</td>
</tr>
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</table>

TOTAL 24 cr hrs

| TOTAL 123 cr hrs |

Three hours of the major requirements (MUS 131 MUS 132) also serve as Humanities in General Education requirements. Three hours of major requirements (MCM 211) also serve as a Social Science in the General Education requirements.

**NOTE: ENSEMBLES**
The minimum ensemble requirements for instrumental students whose major is Bachelor of Music: Emphasis in Media must be met by five consecutive semesters in the University Jazz Ensemble and two semesters of either Symphonic/Concert Band, University Community Orchestra, or small instrumental ensembles. If a student enters this curriculum below the level of proficiency required to enroll in the University Jazz Ensemble, he/she can use no more than two ensemble credits in the Jazz Laboratory Band toward fulfilling ensemble requirements.

The minimum ensemble requirements for vocal students whose major is Bachelor of Music: Emphasis in Media must be met by four consecutive semesters of University Choir or small vocal ensemble and three semesters (during the junior and senior years) of Jazz Ensemble.

Though Performance Workshop does not count in the semester hour load during the first two semesters, it counts as one tuition hour in the student's load.
DEPARTMENT OF POLITICAL SCIENCE  
Rudolph Wilson, Department Head  
(757) 823-8999

The Department of Political Science offers one undergraduate degree program, the Bachelor of Arts in Political Science. The Bachelor of Arts Degree in Political Science is a degree designed to fulfill a wide range of career goals in the field of Political Science. Career areas of interest include, but are not limited to, the following: Pre-Law, Public Administration, Urban Planning, International Affairs, and U.S. Politics and Theory. Contact the department for specific courses related to career areas of interest. The basic objectives of the degree program are as follows:

1. To provide basic training for students planning careers in law, public management, research, teaching, foreign affairs and urban planning.
2. To prepare students to be able to examine critically, evaluate and analyze contemporary issues in politics.
3. To provide a proper frame of reference for non-majors who wish to supplement and broaden their educational experience in Political Science.

POLITICAL SCIENCE CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science (BIO 100, CHM 100, PHY 100 or SCI 100)</td>
<td>CSC 200 Advanced Computer Concepts</td>
</tr>
<tr>
<td>BIO 100L or CHM 100L or PHY 100L</td>
<td>ECN 211 or ECN 212 Principles of Economics</td>
</tr>
<tr>
<td>CSC 150 Computer Concepts &amp; Applications</td>
<td>URP 292 Urban Planning Law</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>POS 250 Introduction to Public Administration</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>POS 332 Introduction to Jurisprudence</td>
</tr>
<tr>
<td>MTH 103 Contemporary Mathematics</td>
<td>POS 333 Methods of Research</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>POS 345 Statistics and Data Processing</td>
</tr>
<tr>
<td>POS 180 Introduction to Political Science</td>
<td>POS 3XX POS 4XX or URP 2XX</td>
</tr>
<tr>
<td>POS 100 American National Government</td>
<td>Cultural Elective</td>
</tr>
<tr>
<td>FRS 100, Freshman Seminar</td>
<td>Elective</td>
</tr>
<tr>
<td>HED 100, Personal and Community Health</td>
<td>Elective</td>
</tr>
<tr>
<td>SCM 285, Principles of Speech</td>
<td>Elective</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong> cr hrs</td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science (BIO 100, CHM 100, PHY 100 OR SCI 100)</td>
<td>POS 337 Constitutional Law (FO)</td>
</tr>
<tr>
<td>ENG 203 Advanced Communication Skills</td>
<td>POS 350 Organizational Theory and Behavior</td>
</tr>
<tr>
<td>ENG 114 Techniques of Vocabulary Building</td>
<td>POS 360 International Politics (FO)</td>
</tr>
<tr>
<td>HIS 100 HIS 101, HIS 102 or HIS 103</td>
<td>POS 431 Modern Political Philosophy</td>
</tr>
<tr>
<td>HUM 210 Humanities</td>
<td>POS 451 Public Personnel Administration</td>
</tr>
<tr>
<td>HUM 211 Humanities</td>
<td>POS 3XX POS 4XX or URP 3XX</td>
</tr>
<tr>
<td>LOG 210 Logic: Critical Thinking</td>
<td>Electives</td>
</tr>
<tr>
<td>POS 231 State and Local Government</td>
<td>Electives</td>
</tr>
<tr>
<td>SOG 101 Introduction to Social Sciences</td>
<td><strong>TOTAL</strong> 27 cr hrs</td>
</tr>
<tr>
<td>URP 192 Introduction to Urban Planning</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
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<td>Elective</td>
<td>General Education Requirements 40</td>
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<td><strong>TOTAL</strong></td>
<td>Major Requirements 62</td>
</tr>
<tr>
<td></td>
<td>Electives 18</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong> 120 cr hrs</td>
</tr>
</tbody>
</table>

MINOR IN POLITICAL SCIENCE

Students may minor in Political Science by completing 18 credit hours in Political Science.

The basic objectives of the minor in Political Science are as follows:

1. To provide the scope of basic training for students who may choose, as an option, careers in law, public management, political research, foreign affairs and urban planning.
2. To prepare students to be able to examine critically, evaluate and analyze contemporary issues in politics.
3. To provide a proper frame of reference for non-majors who wish to supplement and broaden their educational experience in Political Science.

Course Requirements for the Minor in Political Science

POS 100, American National Government 3  
POS 2XX, POS 3XX, POS 4XX, URP 2XX or URP XXX 15  
**TOTAL** 18 cr hrs  

**NOTE:** Students can take up to nine (9) credits that are 100 or 200 level courses; however, students must take a minimum of nine (9) credits at the 300 or 400 level courses (18 credits total).
*ENG 210 (Practical Grammar) and Eng 303 (Professional and Technical Writing) are recommended electives.
*Students interested in careers that require a specific proficiency (such as mastery of a foreign language) are encouraged to take electives consistent with those careers.
*POS 493 Public Administration Internship – This course provides field experience in a public or non-profit agency.
*POS 451: Public Personnel Administration is a prerequisite for POS 493. Please contact the Public Administration Internship Coordinator for additional requirements.

DEPARTMENT OF PSYCHOLOGY
Darlene Colson, Department Head
(757) 823-8573

The Department of Psychology offers the Bachelor of Arts Degree with concentrations in General Psychology, Teacher Certification in Early Childhood Education, and Teacher Certification in Special Education. It plays a significant role in the overall mission of the University by contributing to the development of human resources through instruction in the behavioral sciences. Graduates from the three undergraduate programs offered by this department will be prepared to assume important roles in the community as paraprofessionals, teachers and behavioral science researchers. All programs are designed to prepare students for rigorous graduate training in psychology. The major aims of the Department are as follows:

1. To provide a flexible, relevant, and fundamentally sound curriculum for students majoring in psychology.
2. To thoroughly prepare students to render services initially as paraprofessionals, teachers and behavioral scientists; and eventually as professional psychologists.
3. To provide a thorough behavioral science background for students whose expertise can be utilized in related human service fields of employment.

**GENERAL PSYCHOLOGY CURRICULUM**

<table>
<thead>
<tr>
<th>First Year</th>
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</thead>
<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>3 Free Electives</td>
</tr>
<tr>
<td>BIO 100L Biological Science Lab</td>
<td>1 PSY Electives</td>
</tr>
<tr>
<td>CHM 100 Chemistry or PHY 100</td>
<td>3 Cross Disciplinary Electives</td>
</tr>
<tr>
<td>CSC 150 Computer Concepts &amp; Applications</td>
<td>3 HUM 210 Humanities or MUS 301</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>3 PSY 360 Experimental Psychology and Lab 306L</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>3 Social Science Elective (from General Education Core)</td>
</tr>
<tr>
<td>HED 100 Personal and Community Health</td>
<td>2</td>
</tr>
<tr>
<td>MTH 103 Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>1</td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td>3 PSY Electives</td>
</tr>
<tr>
<td>PSY 211 Basic Principles of Psychology</td>
<td>3 Cross Disciplinary Electives</td>
</tr>
<tr>
<td>FRS 100 Freshman Orientation</td>
<td>0 PSY 492 Psychology Seminar</td>
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<tr>
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<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY Electives</td>
<td>6</td>
</tr>
<tr>
<td>ECN 211 Principles of Economics</td>
<td>3</td>
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<tr>
<td>EN 207 Literature of the Western World</td>
<td>3</td>
</tr>
<tr>
<td>LOG 270 Logic: Critical Thinking</td>
<td>3 General Graduation Requirements</td>
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<tr>
<td>PSY 270 Statistics in Psychology</td>
<td>3 Major Requirements</td>
</tr>
<tr>
<td>PSY 280 Abnormal Psychology</td>
<td>3 PSY Electives</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>3 Cross Disciplinary Electives</td>
</tr>
<tr>
<td>SOC 101 Introduction to Social Science</td>
<td>3 Free Electives</td>
</tr>
<tr>
<td>CSC 200 Advanced Computer Concepts</td>
<td>3 Exit Writing Competency Exam</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30 cr hrs</td>
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<table>
<thead>
<tr>
<th>SUMMARY OF GRADUATION REQUIREMENTS</th>
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<tbody>
<tr>
<td>General Graduation Requirements</td>
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<td>Major Requirements</td>
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<tr>
<td>Cross Disciplinary Electives</td>
</tr>
<tr>
<td>Free Electives</td>
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<tr>
<td>Exit Writing Competency Exam</td>
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**MINOR IN PSYCHOLOGY**

<table>
<thead>
<tr>
<th>Minor Courses</th>
<th>15 cr hrs</th>
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<tbody>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>PSY 211 Basic Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3xx/4xx 300- or 400-Level</td>
<td>6</td>
</tr>
<tr>
<td>PSY 4xx Psychology Course</td>
<td>3</td>
</tr>
<tr>
<td>400 Level Psychology Course</td>
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<td>TOTAL</td>
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### EARLY CHILDHOOD EDUCATION CURRICULUM
(Bachelor of Arts in Psychology)

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<th>First Year</th>
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</thead>
<tbody>
<tr>
<td>FRu 100 Freshman Orientation</td>
<td>EED 360 Curriculum &amp; Instruction for Primary</td>
</tr>
<tr>
<td>BIO 100 Biological Science</td>
<td>PSY 397 Research in Psychology</td>
</tr>
<tr>
<td>BIO 100L Biological Science Lab</td>
<td>PSY 492 Psychology Seminar</td>
</tr>
<tr>
<td>CHEM 100 Chemistry of PHY 100</td>
<td>INT 350 Trends and Issues of Diverse Populations</td>
</tr>
<tr>
<td>CHEM 100L Chemistry Lab or PHY Lab</td>
<td>EED 499 Directed Teaching</td>
</tr>
<tr>
<td>CSC 150 Computer Concepts and Applications</td>
<td>EED 490 Diagnostic Reading</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>EED 470 Methods of Teaching Social Studies in</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td></td>
</tr>
<tr>
<td>PED 100 Personal and Community Health</td>
<td></td>
</tr>
<tr>
<td>MTH 103 Contemporary Math</td>
<td></td>
</tr>
<tr>
<td>MTH 105 Elementary Algebra</td>
<td></td>
</tr>
<tr>
<td>PED 100 Fundamental of Fitness for Life</td>
<td></td>
</tr>
<tr>
<td>HIS 103 American History</td>
<td></td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td></td>
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<tr>
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<td>31 cr hrs</td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 211 Basic Principles of Psychology</td>
<td>PSY 390 Fundamentals of Learning</td>
</tr>
<tr>
<td>EED 201 American Schools and Teaching</td>
<td>PSY 397 Research in Psychology</td>
</tr>
<tr>
<td>ENG 207 Literature of the Western World</td>
<td>PSY 492 Psychology Seminar</td>
</tr>
<tr>
<td>EED 274 The Study of Young Children</td>
<td>INT 350 Trends and Issues of Diverse Populations</td>
</tr>
<tr>
<td>PSY 270 Statistics in Psychology</td>
<td>EED 499 Directed Teaching</td>
</tr>
<tr>
<td>SOC 101 Introduction to Social Science</td>
<td>EED 490 Diagnostic Reading</td>
</tr>
<tr>
<td>ENGR 203 Advanced Communication skills</td>
<td>EED 470 Methods of Teaching Social Studies in</td>
</tr>
<tr>
<td>SCI 285 Principles of Speech</td>
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<tr>
<td>SCI 281 Science for Elementary Teachers</td>
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<td>SCI 281L Science for Elementary Teachers Lab</td>
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<td>HUM 210 Humanities</td>
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<td>TOTAL</td>
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</tbody>
</table>

| TOTAL                                           | 121 cr hrs                                    |

### SPECIAL EDUCATION: EMOTIONAL DISTURBANCE/LEARNING DISABILITIES CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRu 100 Freshman Orientation</td>
<td>PSY 390 Fundamentals of Learning</td>
</tr>
<tr>
<td>BIO 100 Biological Science</td>
<td>PSY 397 Research in Psychology</td>
</tr>
<tr>
<td>BIO 100L Biology Science Lab</td>
<td>PSY 492 Psychology Seminar</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>INT 350 Trends and Issues of Diverse Populations</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>EED 499 Directed Teaching</td>
</tr>
<tr>
<td>PED 100 Personal and Community Health</td>
<td>EED 490 Diagnostic Reading</td>
</tr>
<tr>
<td>MTH 103 Contemporary Math</td>
<td>EED 470 Methods of Teaching Social Studies in</td>
</tr>
<tr>
<td>PED 100 Fundamental of Fitness for Life</td>
<td></td>
</tr>
<tr>
<td>PHY 100 Physical Science</td>
<td></td>
</tr>
<tr>
<td>SOC 101 Introduction to Social Sciences</td>
<td></td>
</tr>
<tr>
<td>FIA 201 Art Appreciation or MUS 301 Music App</td>
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<tr>
<td>TOTAL</td>
<td>31 cr hrs</td>
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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>CSC 150 Computer Literacy</td>
<td>PSY 390 Fundamentals of Learning</td>
</tr>
<tr>
<td>PSY 210 Introduction to Psychology</td>
<td>PSY 397 Research in Psychology</td>
</tr>
<tr>
<td>PSY 211 Basic Principles of Psychology</td>
<td>PSY 492 Psychology Seminar</td>
</tr>
<tr>
<td>PSY 228 Developmental Psychology</td>
<td>INT 350 Trends and Issues of Diverse Populations</td>
</tr>
<tr>
<td>PSY 230 Educational Psychology</td>
<td>EED 499 Directed Teaching</td>
</tr>
<tr>
<td>PSY 280 Abnormal Psychology</td>
<td>EED 490 Diagnostic Reading</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>EED 470 Methods of Teaching Social Studies in the</td>
</tr>
<tr>
<td>SPE 210 American Schools &amp; the Teaching Profession</td>
<td></td>
</tr>
<tr>
<td>PSY 270 Statistics in Psychology</td>
<td></td>
</tr>
<tr>
<td>PED 365 Adapted Physical Education</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>30 cr hrs</td>
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</tbody>
</table>

### Third Year

| HIS 370 African History and Culture              |                                                    |
| PSY 322 Psychology of Exceptional Children      |                                                    |
| PSY 360 Experimental Psychology                  |                                                    |

### SUMMARY OF GRADUATION REQUIREMENTS

- **General Education Requirements**: 43
- **Major Requirements**: 77
- **TOTAL**: 120 cr hrs

---

*Enrollment requires completion of requirements for admission to teacher education.*
SPECIAL EDUCATION:
LEARNING DISABILITIES/MENTAL RETARDATION CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fourth Year</th>
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</thead>
<tbody>
<tr>
<td>CSC 192: Introduction to the Internet</td>
<td>PSY 322: Psychology of Exceptional Children</td>
</tr>
<tr>
<td>BIO 100: Biological Science</td>
<td>PSY 360: Experimental Psychology</td>
</tr>
<tr>
<td>BIO 100L: Biology Lab</td>
<td>PSY 360L: Experimental Psychology Lab</td>
</tr>
<tr>
<td>ENG 101: Communication Skills I</td>
<td>PSY 270: (270) Psychological Statistics</td>
</tr>
<tr>
<td>ENG 102: Communication Skills II</td>
<td>PSY 381: Topics in Psychology</td>
</tr>
<tr>
<td>PSY 210: Introduction to Psychology</td>
<td>PSY 380: Fundamentals of Learning</td>
</tr>
<tr>
<td>PSY 211: Basic Principles of Psychology</td>
<td>SPE 310: Char./Strat. for Teaching the Mentally Disabled</td>
</tr>
<tr>
<td>HED 100: Personal &amp; Community Health</td>
<td>SPE 311: Principles/Practices of Multicultural Education</td>
</tr>
<tr>
<td>HIS 102: U.S. History</td>
<td>SPE 342: Char. Strat. for Teaching the Mentally Disabled</td>
</tr>
<tr>
<td>MTH 103: Contemporary Mathematics</td>
<td>Learning Disabled</td>
</tr>
<tr>
<td>PED 100: Fundamentals of Fitness for Life</td>
<td>SPE 371: Medical Aspects of Disabled Conditions</td>
</tr>
<tr>
<td>PHY 100: Physical Science</td>
<td>TOTAL</td>
</tr>
<tr>
<td>SOC 101: Introduction to Social Sciences</td>
<td>TOTAL</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32 cr hrs</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>33 cr hrs</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Summary of Graduation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 150: Computer Concepts and Applications</td>
<td>PSY 492: Psychology Seminar</td>
</tr>
<tr>
<td>FIA 301: Appreciation</td>
<td>PSY 440: Curricula Adjustment for Exceptional Children</td>
</tr>
<tr>
<td>MUS 301: Music Appreciation</td>
<td>SPE 486: Educational &amp; Behavioral Management</td>
</tr>
<tr>
<td>PSY 228: Developmental Psychology</td>
<td>SPE 490: Assessment of Exceptional Students</td>
</tr>
<tr>
<td>PSY 230: Educational Psychology</td>
<td>SPE 496: Student Teaching Learning Disabled</td>
</tr>
<tr>
<td>PSY 280: Abnormal Psychology</td>
<td>TOTAL</td>
</tr>
<tr>
<td>SCM 285: Principles of Speech</td>
<td>TOTAL</td>
</tr>
<tr>
<td>SPE 201: American Schools &amp; the Teaching Profession</td>
<td>25 cr hrs</td>
</tr>
<tr>
<td>SPE 233: Seminar in Assessment &amp; Evaluation or SED 233</td>
<td><strong>SUMMARY OF GRADUATION REQUIREMENTS</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<tr>
<td><strong>30 cr hrs</strong></td>
<td>General Education Requirements</td>
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<tr>
<td><strong>33 cr hrs</strong></td>
<td>Psychology Requirements</td>
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<tr>
<td><strong>47 cr hrs</strong></td>
<td>Secondary Major Requirements</td>
</tr>
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<td><strong>120 cr hrs</strong></td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th><strong>SPECIAL EDUCATION:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 370: African History &amp; Culture</td>
<td>PSY 270: Logic: Critical Thinking</td>
</tr>
<tr>
<td>PED 365: Adapted Physical Education</td>
<td>PSY 322: Psychology of Exceptional Children</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>PSY 360: Experimental Psychology</td>
</tr>
</tbody>
</table>

**DEPARTMENT OF SOCIOLOGY**

(757) 823-8436

Four major goals direct the function of the Sociology Department: teaching, research and scholarly activities, community service, and development. The Department is committed to the development of programs that facilitate the pursuit of excellence in each student's area of interest. The execution of significant social research by both faculty and students demonstrates a belief in the University as a contributor to new knowledge and better understanding of human behavior. Simultaneously, the Department seeks to serve as an interface between the theoretically oriented university and the pragmatically oriented community. Finally, the Sociology Department is committed to developing its full potential by introducing innovative programs to meet the needs of a dynamic and diverse society. The Department offers a Bachelor of Arts degree in Sociology and master's degrees in Criminal Justice, Sociology* and Urban Affairs.

*Joint Degree Program with Old Dominion University

**SOCIOLOGY CURRICULUM**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100 or BIO 105 or BIO 110 or CHM 100</td>
<td>BIO 100 or BIO 105 or BIO 110 or CHM 100</td>
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<tr>
<td>or PHY 100, Physical Science.</td>
<td>or PHY 100, Physical Science.</td>
</tr>
<tr>
<td>BIO 100L or CHM 100L or PHY 100L</td>
<td>HUM 210 or HUM 211 or ENG 207 or MUS 301 or POS 100 or ECN 211</td>
</tr>
<tr>
<td>HED 100: Personal and Community Health</td>
<td>FIA 301 or Foreign Language</td>
</tr>
<tr>
<td>PED 100: Fundamentals of Fitness for Life</td>
<td>LOG 210: Logic: Critical Thinking</td>
</tr>
<tr>
<td>HIS 100 or HIS 101 or HIS 102 or HIS 103</td>
<td>PSY 210: Introduction to Psychology,</td>
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<tr>
<td>ENG 101: Communication Skills</td>
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<td>ENG 102: Communication Skills</td>
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<td>FRS 100: Freshman Seminar</td>
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<td>MTH 103 or MTH 105</td>
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<tr>
<td>SOC 101: Introduction to the Social Sciences</td>
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<td>SOC 110: Introduction to Sociology</td>
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<td>CSC 150: Computer Concepts and Applications</td>
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<td><strong>TOTAL</strong></td>
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| **TOTAL** | **30 cr hrs** |
### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>ENG 383 or HIS 335 or HIS 336 or HIS 370 or HIS 371 or HIS 377 or PSY 240 or POS 315 or SOC 237</td>
<td>Internship or Approved electives</td>
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<tr>
<td>SOC 338 or SOC 331</td>
<td>Approved Elective</td>
<td>3</td>
</tr>
<tr>
<td>SOC 344</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 355</td>
<td>Elementary Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3XX</td>
<td>Sociology or CJS Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Electives</td>
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<table>
<thead>
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<td>SOC 394</td>
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<td>SOC 462</td>
<td>Complex Organizations</td>
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<tr>
<td>SOC 499</td>
<td>Applied Sociology</td>
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<td>SOC 338</td>
<td>Approved Elective</td>
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</tr>
<tr>
<td>SOC 394</td>
<td>Internship Seminar</td>
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<tr>
<td>HIS 377 or PSY 240 or POS 315</td>
<td>Approved Elective</td>
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<tr>
<td>SOC 237</td>
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<tr>
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<td>Internship Seminar</td>
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<tr>
<td>SOC 338</td>
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<tr>
<td>SOC 331</td>
<td>Approved Elective</td>
<td>3</td>
</tr>
<tr>
<td>SOC 344</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 355</td>
<td>Elementary Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3XX</td>
<td>Sociology or CJS Elective</td>
<td>3</td>
</tr>
<tr>
<td>Free Electives</td>
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<td>2</td>
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### Fourth Year

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>SOC 446</td>
<td>Sociological Theory</td>
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<td><strong>TOTAL</strong></td>
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### MINOR IN SOCIOLOGY

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Organization (Select One Course)</th>
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<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 137</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 228</td>
<td>Demographic Principles</td>
<td>3</td>
</tr>
<tr>
<td>SOC 233</td>
<td>Urban Sociology</td>
<td>3</td>
</tr>
<tr>
<td>CJS 200</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>Research</td>
<td>CJS 4XX</td>
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<tr>
<td>SOC 344</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
SCHOOL OF SCIENCE AND TECHNOLOGY
Sandra J. DeLoatch, Dean
Larry Mattix, Associate Dean
(757) 823-8180

The School of Science and Technology is a dynamic School. It has been, and remains, a major force for change within the University as an innovator and initiator of most of the high demand and high technological programs on campus. It is represented by a wide array of course selections in eight (8) major areas: Computer Science, Engineering, Health Sciences, Mathematics, Natural and Applied Sciences, Nursing, Naval Science, and Technology. Through the initiative of Norfolk State University’s President, the School has also embarked upon a program for excellence in science called the Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS). The Institute accepts only exceptionally prepared minority student. Entrance into the Institute is through special application. The school commits to accountability in providing excellence in instruction through departmental programs which integrate communication, mathematics, science, technology, and professional concerns, while addressing a wide spectrum of individual needs and abilities. The overall mission of the School of Science and Technology is as follows:

1. To develop humanistic and competent professionals who can serve as science and technology specialists and health-care providers.
2. To apply state-of-the-art scientific research and technological know-how to the problems and needs of the region and the nation.
3. To foster scholarship and leadership in the sciences, in technology, in engineering, and in health professions in the community.

ACCREDITATION/APPROVALS

The following programs, sponsored by the School of Science and Technology, have been approved by the State Council of Higher Education for Virginia (SCHEV). They have also been accredited and/or approved by appropriate national accrediting agencies.

1. Computer Science - Computer Science Accreditation Board (CSAB), 184 N. Street, Stamford, CT 06901, (203) 975-1117
2. Chemistry - American Chemical Society (ACS), 1155 Sixteenth Street, N.W., Washington, DC 20036, (202) 872-4589
3. Food Science and Nutrition - Commission on Accreditation/Approval for Dietetics Education of the American Dietetic Association, 216 W. Jackson Blvd, Chicago, IL 60606, (312) 899-0040.
7. Technology - National Association of Industrial Technology (NAIT), 3300 Washtenaw Avenue, Suite220, Ann Arbor, MI 48104, (734) 677-0720

ORGANIZATION OF THE SCHOOL

The courses offered by the School of Science and Technology are organized into departments, which sponsor a wide array of possibilities for students. The following departments are included:

Department of Allied Health
Department of Biology
Department of Chemistry
Department of Computer Science
Department of Engineering

Department of Mathematics
Department of Nursing
Department of Physics
Department of Technology

DEGREES OFFERED

The School of Science and Technology offers programs terminating at the associate, baccalaureate and master degree levels. Students admitted to the School of Science and Technology may choose from fields of study in programs terminating at the associate, baccalaureate and master degree levels. Undergraduate programs leading to the Bachelor of Science degree generally require a minimum of 120 semester hours of credit.

ADMISSION REQUIREMENTS

Admission to Norfolk State University does not imply automatic admission to the following programs:

1. DNIMAS
2. Engineering
3. Health Information Management
4. Medical Technology
5. Nursing
CRITERIA FOR ADMISSION TO HEALTH INFORMATION MANAGEMENT PROFESSIONAL PHASE

1. Complete all prerequisite courses by the end of the semester proceeding the professional phase.
2. Achieve a minimum overall grade point average of 2.0.
3. Achieve a minimum science grade point average of 2.0.
4. Forward to the Admissions Committee an application for admission to the professional phase of the Health Information Management Program.

CRITERIA FOR ADMISSION TO MEDICAL TECHNOLOGY PROFESSIONAL PHASE

1. Students must seek application through the Medical Technology Admissions Committee.
2. Students must complete all prerequisite courses by the end of the semester preceding the Clinical Phase.
3. Students must have a minimum science GPA of 2.0.
4. Students must submit three letters of recommendation from persons familiar with the students’ ability.

CRITERIA FOR ADMISSION TO NURSING: ASSOCIATE OF SCIENCE

1. Students must complete two units of high school or higher mathematics (including one unit of algebra), one unit of biology, and one unit of chemistry with a minimum average of "C" in each course. The biology and chemistry classes must be current within the past ten years.
2. Students must have a cumulative GPA of 2.0 or better in high school or college work.

CRITERIA FOR ADMISSION TO NURSING: LPN - RN

1. Students must meet the same prerequisites as for entrance to the associate degree sequence.
2. Students must be currently licensed in the state of Virginia as a LPN.
3. Completion of validation process or graduation from an articulated LPN program is a requirement.

CRITERIA FOR ADMISSION TO NURSING: BACHELOR OF SCIENCE PROGRAM (RN-COMPLETION)

1. Students must have a minimum GPA of 2.0 in college.
2. Students must be currently licensed as registered nurses.
3. Students must have a grade of "C" or better in all previous nursing and science courses.
4. Students must have the minimum prerequisites of transfer courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics (Math 105)</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy and Physiology</td>
<td>8</td>
</tr>
<tr>
<td>Communication English Composition</td>
<td>6</td>
</tr>
<tr>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth/Development</td>
<td></td>
</tr>
<tr>
<td>or Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>Lower level Nursing Classes</td>
<td>30</td>
</tr>
<tr>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
</tbody>
</table>

CRITERIA FOR ADMISSION TO NURSING: SECOND - DEGREE BACCALAUREATE PROGRAM

1. Completion of undergraduate or higher degree.
2. Admission to NSU by December 1 for Summer Session, and August 1 for January Session.
3. A cumulative GPA of 2.5 in the prior degree and a “C” or 2.0 in the science courses (anatomy and physiology, biology, chemistry, etc.).

CRITERIA FOR ADMISSION TO NURSING: LPN - BSN PROGRAM

1. Completion of 73 semester hours in prerequisite courses.
2. Admission to NSU by December 1 for Summer Session, and August 1 for January Session.
3. A cumulative GPA of 2.5 in college courses and 2.0 in sciences (anatomy and physiology, biological sciences, chemistry and pathophysiology).

GENERAL EDUCATION REQUIREMENTS

Students seeking degrees in any of the disciplines in the School of Science and Technology must complete the General Education requirements of the University.

DEPARTMENT OF ALLIED HEALTH
Mildred K. Fuller, Department Head
(757) 823-2366

The Department of Allied Health offers majors concentrations or certificates in the disciplines of Food Science and Nutrition, Funeral Services, Health Information Management, Health Services Management, and Medical Technology. The purpose of the Department is to prepare students in the preventive, diagnostic, and therapeutic aspects of health care.

The Bachelor of Science degree is offered in Health Information Management, Health Services Management, and Medical Technology. A Certificate of Completion is awarded in Health Services Management.
OBJECTIVES OF DEPARTMENT

1. To provide curricular offerings and clinical training which will allow students to work in areas of health-care administration, health maintenance, disease prevention, diagnosis, treatment, and rehabilitation.
2. To instill a sense of ethical responsibility as health-care workers.
3. To prepare students who will become professionals in the health-care industry.
4. To prepare students for entry-level positions in certain areas in the health-care industry.

FUNERAL SERVICE PROGRAM

Norfolk State University offers an extensive program designed to prepare students for careers in the complex field of mortuary science. Our diversified curriculum addresses the changing needs and demands of contemporary funeral directing, embalming and business management. The Norfolk State University Funeral Service Program is accredited by the following agency:

The American Board of Funeral Service Education
38 Florida Ave.
Portland, ME  04103
(207) 797-7686

AIMS & PURPOSES

The aims and purposes of the Funeral Service Certificate Program are as follows:
1. to inspire each student to achieve proficiency and efficiency in the practical skills of Embalming and Restorative Art.
2. to provide each student a better understanding of the complexities and dynamics of grief, the ability to better anticipate the needs of those bereaved, and to more fully appreciate the role and central value of the funeral service practitioner as a caregiver in the community.
3. to provide educational opportunities in the intensive theory portion of funeral service education, along with practical learning experience, in preparation for state and/or national board examinations, which are required for licensure in funeral service.

GENERAL ADMISSION POLICIES

Norfolk State University fulfills its opportunities for higher education for all people, regardless of their socio-economic status, race, sex, age, religion or national origin by identifying and accepting students with academic promise. Norfolk State University seeks to admit in-state and out-of-state applicants whose education, preparation, aptitude and achievement and motivation combine to indicate a reasonable probability of success in one or more of the University’s schools.

The University makes an effort to maintain a diverse student population because of the benefits that accrue to all students and to the entire educational process. Further, the University reserves the right to base individual admission in any given year upon a variety of factors, including the number of applicants for available space.

ADMISSION REQUIREMENTS

• Completed Application
• Non-Refundable $25 Application Fee
• Official High School Transcript (GED score if applicable)
• Post Secondary Education Transcript (if applicable)
• Two Letters of Recommendation
• 250-word essay explaining why student has chosen Funeral Service as a career
• SAT or ACT scores (if under 21 years of age only)

FUNERAL SERVICE CURRICULUM

The Funeral Service Certificate Program at Norfolk State University offers courses from several content areas: Public Health and Technical, Business Management, Social Sciences and Legal, Regulatory and Ethical areas.

Sixty-two (62) hours are required to complete the program. The areas of concentration and specific requirements are as follows:

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<thead>
<tr>
<th>Public Health &amp; Technical (26 credit hours)</th>
<th>Social Science/Humanities (14 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 100 Chemistry</td>
<td>PSY 381 Topics in Psychology: Death &amp; Dying</td>
</tr>
<tr>
<td>BIO 320 Pathophysiology</td>
<td>SOC 304 Mortality</td>
</tr>
<tr>
<td>BIO 163 Microbiology</td>
<td>FNS 301 Intro to Funeral Services</td>
</tr>
<tr>
<td>BIO 165 Human Anatomy &amp; Physiology</td>
<td>ENG 101 Communication Skills I</td>
</tr>
<tr>
<td>FNS 340 Embalming I for Funeral Service</td>
<td>ENG 102 Communication Skills II</td>
</tr>
<tr>
<td>FNS 345 Embalming II for Funeral Service</td>
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<tr>
<td>FNS 350 Restorative Art I</td>
<td>Legal, Ethical, &amp; Regulatory (4 credit hours)</td>
</tr>
<tr>
<td>FNS 355 Restorative Art II</td>
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</tr>
</tbody>
</table>

Business Management (15 credit hours)

| ACC 201 Principles of Accounting            | General Education (3 credit hours)          |
| FNS 330 Computer Concepts/Applications      |                                             |
| FNS 360 Intro to Management I for Funeral Service | HED/PE Health & PE Elective |
| FNS 365 Intro to Management II for Funeral Service | HSM 300L Funeral Service Review Lab |

FNS 370 Funeral Home Merchandising
ATTENDANCE POLICY

All students must attend class in accordance with the University policy stated in the Student Handbook. Failure to do so may result in dismissal from class or a grade of “F.”

CERTIFICATE COMPLETION

In order to meet requirements for the Certificate in Funeral Service from Norfolk State University, a student must complete the required 62 credit hours of General and Core courses, successfully passing each course with a grade no less than “C minus.”

Currently, in order to become licensed in the Commonwealth of Virginia, the student must meet four criteria:
1. Successfully complete an accredited program of Mortuary Science.
2. Complete an 18-month apprenticeship program at an approved funeral home.
3. Successfully pass the Virginia Funeral Service Examination.
4. Successfully pass the National Board Examination.

The Funeral Service Certificate Program offered at Norfolk State University provides the theoretical and practical application of funeral service education, preparing the student for entry into the profession and for the National Board Examination.

HEALTH INFORMATION MANAGEMENT PROGRAM
Mattie G. Wilson, Program Director
(757) 823-2615

The Health Information Management Program is developed to prepare students to become professionally qualified health information managers. Students completing this program will receive a Bachelor of Science degree in Health Information Management. The program is seeking accreditation from the American Health Information Management Association, 919 North Michigan Avenue, Suite 1400, Chicago, IL 60611 (312) 233-1100 and the Commission on Accreditation of Allied Health Education Programs, American Medical Association, 515 North State Street, Suite 7530, Chicago, IL 60610, and (312) 464-4660.

Admission requirements for the Health Information Management Program are as follows:
1. Complete all prerequisite courses by the end of the semester preceding the professional phase.
2. Achieve a minimum overall grade point average of 2.0.
3. Achieve a minimum science grade point average of 2.0.
4. Forward to the admissions committee an application for admission to the professional phase of the Health Information Management Program.

TECHNICAL STANDARDS

A. General standards
   1. Possess empathy, integrity, interpersonal skills, interest, and motivation.
   2. Possess the emotional well-being required for the full use of intellectual abilities; the exercise of sound judgment; and the development of mature, sensitive, and effective relationships with others.
   3. Possess the capacity to adapt to changing environments, to display flexibility, and to manage under stress.

B. Students in the health information management program must have the following minimum abilities:
   1. Ability to acquire and apply information from classroom instruction, laboratory experience, independent learning and team projects.
   2. Ability to communicate effectively in English in oral and written form with colleagues, clerical employees in health information management departments, and other health professionals as part of the health care team.
   3. Ability to communicate effectively in English in oral and written form with patients, attorneys, workers’ compensation representatives, insurance companies and other third party payers, and other individuals and agencies who need information from patient records or data bases maintained in health information departments.
   4. Ability to use computers and complete computer-based assignments.
   5. Ability to function (consult, negotiate, share) as part of a team.
   6. Ability to delegate.
   7. Ability to read materials used in HIM settings, such as coding manuals, policies and procedures, patient medical records.
   8. Ability to calculate mathematical information, such as hospital statistics, budgets, and productivity information.
   9. Manual dexterity necessary to file medical records and cards, as well as assemble paper medical record forms.
   10. Visual ability and manual dexterity necessary to prepare office layouts and to design forms and computer screens.
   11. Ability to operate equipment, word processors, transcription equipment, electronic movable files, copiers, etc.
   12. Ability to synthesize information regarding health care outcomes for formal, verbal and/or written presentation to health care professionals.
HEALTH INFORMATION MANAGEMENT CURRICULUM

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tr>
<td>FRS 100</td>
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<tr>
<td>BIO 110</td>
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</tr>
<tr>
<td>BIO 165</td>
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<td>HIM 121</td>
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<td>HRP 190</td>
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<tr>
<td>Elective (Social Sciences)</td>
<td>3</td>
</tr>
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**Second Year**

<table>
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</thead>
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<td>BIO 166</td>
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<tr>
<td>BIO 166L</td>
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</tr>
<tr>
<td>BIO 320</td>
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</tr>
<tr>
<td>CHM 110</td>
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</tr>
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<td>CSC 150</td>
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<td>MTH 250*</td>
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<tr>
<td>SCM 285</td>
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<tr>
<td>Elective (Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>Elective (Social Sciences)</td>
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<tr>
<td><strong>TOTAL</strong></td>
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**Third Year**

<table>
<thead>
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<td>HIM 311</td>
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<tr>
<td>HIM 311L</td>
<td>1</td>
</tr>
<tr>
<td>HIM 312</td>
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<td>HIM 315</td>
<td>3</td>
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<td>HIM 340</td>
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**Fourth Year**

<table>
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<td>HIM 420</td>
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<td>HIM 425</td>
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<td>HIM 450</td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

<table>
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*ECN 220, PSY 270, SOC 355
**ENG 38X, FIA 170, MUS 234, HIS 335, HIS 336, HIS 370, HIS 371, HIS 377, HRP 290, SOC 237, PSY 340, POS 315

HEALTH SERVICES MANAGEMENT
Bernice Sawyer-Watson, Program Director
(757) 823-2367

This program in Health Services Management is organized around a core of lower level general education courses, a core of business management courses taken in the intermediate years, and further generic orientation to the unique managerial processes in the health services industry in the form of an internship and on-the-job experimental learning in the last year.

HEALTH SERVICES MANAGEMENT CURRICULUM

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<td>Cultural Elective</td>
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<td>BIO 100</td>
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<td>ENG 101</td>
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<td>ENG 102</td>
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<td>MTH 151</td>
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<td>PED 100</td>
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**Second Year**

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<td>ECN 211</td>
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<tr>
<td>ECN 212</td>
<td>3</td>
</tr>
<tr>
<td>ECN 220</td>
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**Third Year**

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<td>HSM 300L</td>
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<td>HSM 310</td>
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<tr>
<td>FNC 3XX**</td>
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<td>MGT 365</td>
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<td>FNC 360</td>
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<td>HSM 311</td>
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**Fourth Year**

<table>
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<tr>
<td>HIS 454</td>
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<td>Long Term Care Administration</td>
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<td>Labor Relations or Labor Laws &amp; Legislation</td>
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<tr>
<td>MGT 410, MGT 420, MGT 430, MGT 435, MGT 440, MGT 4XX, POS 451</td>
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</tr>
</tbody>
</table>
** MEDICAL TECHNOLOGY **

Mildred K. Fuller, Program Director
(757) 823-2366

The Medical Technology Program is designed to prepare students to meet competencies required to become medical technologist/clinical laboratory scientists. The program includes instruction in the performance of laboratory tests and their interpretation and correlation in determining the absence, presence, and extent of diseases. Students completing this program will be awarded the Bachelor of Science degree in Medical Technology and are eligible to sit for a national certifying examination.

The Medical Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Ave., Suite 670, Chicago, IL 60631, (773) 714-8880.

** REQUIREMENTS **

Upon admission to Norfolk State University, the student may declare Medical Technology as a major. The student, including transfer students, must first complete all courses comprising the pre-professional phase of the curriculum before seeking admission to the professional phase. The student then seeks application to the professional phase of the curriculum through the Medical Technology Admissions Committee. This committee considers each applicant for admission to the clinical phase after he/she has met the following requirements:

1. Completing all prerequisite courses by the end of semester preceding the professional phase of the curriculum.
2. Achieving a minimum science grade point average of 2.0.
3. Achieving a minimum cumulative grade point average of 2.0.
4. Forwarding to the Admissions Committee a minimum of three (3) letters of recommendation from persons familiar with the student's abilities.
5. Completing the admission interview process, which includes a review of the Medical Technology Program's technical standards.

Students holding an associate degree in Clinical Laboratory Science or Medical Laboratory Technology may also seek application to the Medical Technology Program at Norfolk State University.

** ESSENTIAL FUNCTIONS FOR ADMISSION **

At the time of the admissions interview, applicants are given a copy of the Medical Technology Program's technical standards.

Technical standards represent the essential non-academic requirements of the program that students must master to participate successfully in the program and become employable. The following is a list of the technical abilities and skills applicants for admission must possess:

1. Manual Dexterity: Ability to use hand(s) or terminal devices with coordination.
2. Fine Motor: Ability to manipulate small objects with fingertips or adaptive devices.
3. Mobility: Ability to maneuver in the laboratory and around instruments and in patient-care settings.
4. Vision: Ability to distinguish red, yellow, and blue colors; distinguish clear from cloudy, and see through a microscope.
5. Hearing: Ability to adapt with assistive devices (i.e., phone receivers, hearing aid, etc.)
6. Speech: Ability to communicate verbally in English.
7. Writing: Ability to communicate effectively in written English.
8. Reading: Ability to read, understand, and follow directions printed in English.

Applicants are asked to sign the compliance form below to indicate that they believe they have a reasonable chance of meeting these standards. During the interview process, the students will be asked if they have any questions concerning the program's technical standards.

I, ______________________________ (Name) attest that I have read and understand the technical standards of the Medical Technology Program, and I believe that I can and am prepared to meet these requirements.
### MEDICAL TECHNOLOGY CURRICULUM (B.S. DEGREE)

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
<th>Total</th>
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<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>MDT 315 Clinical Hematology I</td>
<td>32 cr hrs</td>
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<tr>
<td>BIO 110 General Biology</td>
<td>MDT 325 Clinical Chemistry I</td>
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</tr>
<tr>
<td>BIO 165 Human Anatomy &amp; Physiology</td>
<td>MDT 373 Clinical Microbiology I</td>
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<td>BIO 165L Human Anatomy &amp; Physiology</td>
<td>MDT 410 Immunology</td>
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<tr>
<td>CHM 221 General Chemistry I</td>
<td>MDT 425 Clinical Chemistry II</td>
<td>5</td>
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<tr>
<td>CHM 221L General Chemistry I Lab</td>
<td>MDT 450 Clinical Hematology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 222 General Chemistry II</td>
<td>MDT 455 Immunohematology</td>
<td>4</td>
</tr>
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<td>CHM 222L General Chemistry II Lab</td>
<td>MDT 473 Clinical Microbiology II</td>
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<tr>
<td>ENG 101 Communication Skills I</td>
<td>MDT 306 Phlebotomy</td>
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<td>ENG 102 Communication Skills II</td>
<td>MDT 307 Serology</td>
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<td>HRP 190 Intro to Health Professions</td>
<td>MDT 308 Urinalysis</td>
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<tr>
<td>MTH 151 College Algebra</td>
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<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
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</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for</td>
<td></td>
<td></td>
</tr>
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<td>Life or PED 1XX</td>
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<table>
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<tr>
<th>Second Year</th>
<th>Fourth Year</th>
<th>Summary of Graduation Requirements</th>
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<tbody>
<tr>
<td>BIO 310 General Microbiology</td>
<td>MDT 395 Hematology/Coagulation Practicum</td>
<td>General Education</td>
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<td>CHM 312 Organic Chemistry</td>
<td>MDT 396 Immunohematology Practicum</td>
<td>Major Requirements</td>
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<td>CHM 312L Organic Chemistry Lab</td>
<td>MDT 475 Medical Technology Seminar</td>
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<td>CSC 150 Computer Literacy</td>
<td>MDT 480 Clinical Laboratory Administration</td>
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<tr>
<td>HIS 100 History of Civilization or HIS 101</td>
<td>MDT 495 Clinical Microbiology Practicum</td>
<td>19 cr hrs</td>
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<td>or any general educ. Social Sciences</td>
<td>MDT 496 Clinical Chemistry Practicum</td>
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<td>HIS 335* African-American History</td>
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<td>MTH 250 Elementary Statistics Concepts</td>
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<tr>
<td>Sociology</td>
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<tr>
<td>MTH 250 Elementary Statistics Concepts</td>
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<td>SCM 285 Principles of Speech</td>
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<td>SOC 101 Introduction to Social Science or any</td>
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<td>General Education Social Sciences</td>
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<tr>
<td>TOTAL</td>
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<td>121 cr hrs</td>
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**Total**: 121 cr hrs

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**SUMMARY OF GRADUATION REQUIREMENTS**

- General Education: 42 cr
- Major Requirements: 79 cr
- Total: 121 cr

---

**DEPARTMENT OF BIOLOGY**

Camellia Moses Okpodu, Department Head
(757) 823-8512

**The Biology Department provides a diversity of career options through four courses of study that lead to a Bachelor of Science Degree in Biology.**

The objectives of the Department are as follows:

1. To prepare students for careers in biology.
2. To provide students with pre-professional training for dentistry, medicine, veterinary medicine, podiatry, osteopathy, optometry, and various allied health options.
3. To provide learning experiences in biology for students majoring in other disciplines.

Students who earn a B.S. degree in any of the three areas also have the option of completing a Biotechnology Certificate Program. The four B.S. option areas are as follows:

- **Option 1** Biology 1, which enables majors to pursue graduate degrees with an option for employment at the bachelors level.
- **Option 2** Biology 2, students will follow Option 1 then seek specific endorsement. (e.g., teachers' licensure)
- **Option 3** Biology 4, Pre professional, which provides a background for students having an interest in medicine, dentistry, veterinary medicine, optometry, pharmacy, osteopathy, and podiatry.

**Biotechnology Certificate**: The curriculum includes 15 credit hours of approved laboratory work in molecular biology/genomics, cell biology, and proteins and proteomics. The program is designed for the continuing education of research technicians with baccalaureate degrees in academic and industrial laboratories, new college graduates who want to enhance their knowledge, and undergraduates who are interested in developing skills in the latest biotechnology techniques.

Students who successfully complete the requirements for either of the four above models will be considered Biology majors. A grade of "C" or better is required in all courses of the major group. The "major group" includes all required science and mathematics courses, and this definition is applicable to all students who enrolled in the Department beginning in the Fall Semester of 1989 and thereafter.
BIOLOGY 1 CURRICULUM

First Year
- BIO 110 General Biology 4
- BIO 160 General Zoology or BIO 161 4
- ENG 101 Communication Skills I 3
- ENG 102 Communication Skills II 3
- HED 100 Personal & Community Health 2
- HIS 100 History of Civilization 3
- MTH 151 College Algebra 3
- MTH 153 College Algebra and Trigonometry 3
- PED 100 Fundamentals of Fitness for Life 1

TOTAL 29 cr hrs

Second Year
- BIO 161 General Botany or BIO 160 4
- BIO 271 Ecology or BIO 350 4
- BIO 310 General Microbiology 4
- CHM 221 General Chemistry I 3
- CHM 222 General Chemistry II 3
- CHM 221L General Chemistry I Lab 1
- CHM 222L General Chemistry II Lab 1
- CSC 200 Advanced Computer Concepts 3
- FIA 301 Art Appreciation or HUM 210 3
- HIS 100 History of Civilization 3
- HIS 101 History of Civilization 3
- MTH 151 College Algebra 3
- MTH 153 College Algebra and Trigonometry 3
- PED 100 Fundamentals of Fitness for Life 1

TOTAL 32 cr hrs

Fourth Year
- SED 201 American Schools and the Teaching Profession 3
- SED 233 Seminar in Assessment and Evaluation 3
- SED 380 Foundations of Methods in Secondary Schools 3

BIOLOGY 2 CURRICULUM

Teacher Licensure Endorsement

Students wishing to pursue a career in teaching must take the following steps:
1. Follow the curriculum for the Bachelor of Science degree in Biology.
2. Use the elective hours for professional courses.
3. See the academic advisor in their major department.
4. See the academic advisor in the Department of Secondary Education and School Leadership in the Bozeman Education Building, Room 200.
5. Take the PRAXIS test and make a passing score. (See the School of Education PRAXIS coordinator, JBB 125.)
6. Take the following professional education courses (18 semester hours) and complete student teaching (12 semester hours).

TOTAL 120 cr hrs

BIOLOGY 3 CURRICULUM (PRE-PROFESSIONAL)

First Year
- BIO 110 General Biology 4
- BIO 160 General Zoology or BIO 161 4
- ENG 101 Communication Skills I 3
- ENG 102 Communication Skills II 3
- HED 100 Personal & Community Health 2
- HIS 100 History of Civilization 3
- MTH 151 College Algebra 3
- MTH 153 College Algebra and Trigonometry 3
- PED 100 Fundamentals of Fitness for Life 1

TOTAL 29 cr hrs

Second Year
- BIO 161 General Botany or BIO 160 4
- BIO 271 Ecology or BIO 350 4
- BIO 310 General Microbiology 4

TOTAL 31 cr hrs

BIOLOGY 4 CURRICULUM (PRE-PROFESSIONAL)

First Year
- BIO 110 General Biology 4
- BIO 160 General Zoology or BIO 161 4
- ENG 101 Communication Skills I 3
- ENG 102 Communication Skills II 3
- HED 100 Personal & Community Health 2
- HIS 100 History of Civilization 3
- MTH 151 College Algebra 3
- MTH 153 College Algebra and Trigonometry 3
- PED 100 Fundamentals of Fitness for Life 1

TOTAL 29 cr hrs

Second Year
- BIO 161 General Botany or BIO 160 4
- BIO 271 Ecology or BIO 350 4
- BIO 310 General Microbiology 4

TOTAL 31 cr hrs
<table>
<thead>
<tr>
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<td>General Physiology</td>
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<td>CHM 321</td>
<td>Organic Chemistry I</td>
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<tr>
<td>CHM 322</td>
<td>Organic Chemistry II</td>
<td>3</td>
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<tr>
<td>CHM 321L</td>
<td>Organic Chemistry I Lab</td>
<td>2</td>
</tr>
<tr>
<td>PHY 152</td>
<td>General Physics</td>
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<td>PHY 153</td>
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<td>PHY 152L</td>
<td>General Physics Lab</td>
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<td>CHM 322L</td>
<td>Organic Chemistry II Lab</td>
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<td>PHY 153L</td>
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<td>BIO 364</td>
<td>Seminar and Colloquium in Biology</td>
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<td>CHM 431</td>
<td>Biochemistry I</td>
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<td>Computer Literacy or</td>
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<tr>
<td>FIA 301</td>
<td>Art Appreciation or HUM 210</td>
<td>3</td>
</tr>
<tr>
<td>MUS 301</td>
<td>or ENG 207</td>
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<tr>
<td>PHY 152</td>
<td>General Physics</td>
<td>3</td>
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<tr>
<td>PHY 153</td>
<td>General Physics</td>
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<tr>
<td>PHY 152L</td>
<td>General Physics Lab</td>
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<tr>
<td>MUS 301</td>
<td>or HUM 210 or ENG 207</td>
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</tr>
<tr>
<td>MTH 184</td>
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**Fourth Year**

<table>
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<tr>
<td>CHM 321</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHM 322</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHM 321L</td>
<td>Organic Chemistry I Lab</td>
</tr>
<tr>
<td>PHY 152</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHY 153</td>
<td>General Physics</td>
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<tr>
<td>PHY 152L</td>
<td>General Physics Lab</td>
</tr>
<tr>
<td>MTH 184</td>
<td>Calculus I</td>
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<tr>
<td>TOTAL</td>
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</tr>
</tbody>
</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

- **General Education Requirements**: 42 credits
- **Major Requirements**: 75 credits
- **Non-restricted Elective**: 3 credits
- **TOTAL**: 120 cr hrs

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**BIOTECHNOLOGY CERTIFICATE PROGRAM**

To be eligible for admission to the Biotechnology certificate program a student must complete the following:

1. Apply for admission to the Biotechnology Program
2. Have completed all pre-requisite course work for courses related in the program
3. Have an overall cumulative grade point average of 2.8 on a 4.0 scale

**COURSE WORK**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 474</td>
<td>MOLECULAR BIOLOGY: Three credit hours. Prerequisite- BIO 351 Principles of Genetics, BIO 310, CHM 222, 222L</td>
<td></td>
</tr>
<tr>
<td>BIO 474L</td>
<td>MOLECULAR BIOLOGY LABORATORY: Two credit hours. Prerequisite- BIO 474</td>
<td></td>
</tr>
<tr>
<td>BIO 499</td>
<td>TISSUE AND CELL CULTURE: Four credit hours. Prerequisite- Consent of Instructor</td>
<td></td>
</tr>
<tr>
<td>BIO 510</td>
<td>EXPERIENCE IN BIOLOGY: Three credit hours. Prerequisite- Bio 110, General Biology</td>
<td></td>
</tr>
<tr>
<td>BIO 520</td>
<td>SPECIAL PROBLEMS IN BIOLOGY: Three credit hours. Prerequisite- Bio 110, general Biology</td>
<td></td>
</tr>
<tr>
<td>CHM 431</td>
<td>BIOCHEMISTRY I: Three credit hours. Prerequisites- CHM 322 and CHM 362</td>
<td></td>
</tr>
<tr>
<td>CHM 431L</td>
<td>BIOCHEMISTRY I LABORATORY: Three credit hours. Prerequisites- CHM 322L or 323L</td>
<td></td>
</tr>
<tr>
<td>CHM 432</td>
<td>BIOCHEMISTRY II: Three credit hours. Prerequisites- CHM 322 and CHM 362</td>
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<tr>
<td>CHM 432L</td>
<td>BIOCHEMISTRY II LABORATORY: Three credit hours. Prerequisites- CHM 322L or 323L</td>
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<tr>
<td>CHM 481</td>
<td>SPECIAL TOPICS IN CHEMISTRY: Three credit hours. Prerequisites- Approval of Chemistry Department</td>
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<tr>
<td>BIO 452</td>
<td>BIOLOGICAL INSTRUMENTAL TECHNIQUES: Two credit hours. Prerequisites- CHM 221, 222 and CHM 221L and 222L</td>
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<td>BIO 400</td>
<td>FORENSIC MOLECULAR BIOLOGY: Four credit hours. Prerequisites- Principles of Genetics and Organic Chemistry</td>
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**DEPARTMENT OF CHEMISTRY**

H. Alan Rowe, Department Head
(757) 823-2285

The Department of Chemistry provides the instruction necessary for the understanding of chemistry for students seeking the B.S. Degree with a major in Chemistry and supports undergraduate programs in other disciplines. The Department also provides research opportunities for students wishing to contribute to knowledge in areas of chemistry.

The Chemistry Department offers several chemistry based curricula choices leading to a B.S. degree in Chemistry: Chemistry, Chemistry with an emphasis in Pre-Medicine (not a degree in Pre-Medicine), Chemistry with an emphasis in Food Science/Nutrition, and the dual degree B.S. in Chemistry-M.S. in Materials Science curriculum. Students wishing to teach chemistry in secondary schools must earn a B.S. degree in the Chemistry curriculum and fulfill the requirements for the teacher Licensure Endorsement offered by the School of Education. The various curricula prepare graduates to continue their education in graduate or professional schools, or to obtain entry-level positions in industry, government, or education.

The objectives of the Department are:

1. To develop in students an appreciation of the scientific method and its use in the solution of chemical problems.
2. To develop the basic training in chemistry designed to meet the needs of students in pre-professional fields and professional fields.
3. To develop in students those qualities and abilities necessary for success in industry and in advanced degree institutions.
4. To offer sufficient specialized training beyond the generally recognized basic courses to enable a graduate with a bachelor's degree to enter directly into a professional career.

The Chemistry and the Chemistry- Pre-Medicine curricula are approved by the American Chemical Society.
### CHEMISTRY CURRICULUM

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>General Chemistry I</td>
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<td>CHM 222</td>
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<td>CHM 221L</td>
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<td>CSC 261</td>
<td>Fortran Programming</td>
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<tr>
<td>ENG 101</td>
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<td>ENG 102</td>
<td>Communication Skills II</td>
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<td>HED 100</td>
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<td>MTH 153</td>
<td>College Algebra &amp; Trigonometry</td>
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<td>MTH 184</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>PED 100</td>
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<td>Math Methods &amp; Logic</td>
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<td>CHM 363L</td>
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<td>CHM 497</td>
<td>Introduction to Research</td>
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<td>MTH 252</td>
<td>Calculus III</td>
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<td>General Physics</td>
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<td>PHY 153</td>
<td>General Physics Lab</td>
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#### Third Year

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### CHEMISTRY PRE-MEDICINE CURRICULUM

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<td>CHM 222L</td>
<td>General Chemistry II</td>
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<td>CHM 221L</td>
<td>General Chemistry I Lab</td>
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<tr>
<td>CHM 222L</td>
<td>General Chemistry II Lab</td>
<td>1</td>
</tr>
<tr>
<td>CSC 150</td>
<td>Computer Literacy or Fortran Programming</td>
<td></td>
</tr>
<tr>
<td>CSC 261</td>
<td>Fortran Programming</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communication Skills II</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>Personal &amp; Community Health</td>
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<td>MTH 153</td>
<td>College Algebra &amp; Trigonometry</td>
<td>3</td>
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<td>MTH 184</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
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<td>Fundamentals of Fitness for Life</td>
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<td>Freshman Seminar</td>
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#### Second Year

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>CHM 321</td>
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<td>CHM 322</td>
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<td>CHM 321L</td>
<td>Organic Chemistry I Lab</td>
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<td>CHM 331</td>
<td>Analytical Chemistry I</td>
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<td>CHM 331L</td>
<td>Analytical Chemistry I Lab</td>
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<td>CSC 160</td>
<td>Visual Basic Programming or CSC 261</td>
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<td>MTH 251</td>
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<td>MTH 252</td>
<td>Calculus III</td>
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<td>PHY 153L</td>
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<td>TOTAL</td>
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### Teacher Licensure Endorsement

Students wishing to pursue a career in teaching must take the following steps:

1. Follow the curriculum for the liberal arts degree in Chemistry.
2. Use the elective hours for professional courses.
3. See the academic advisor in their major department.
4. See the academic advisor in the Department of Secondary Education and School Leadership in the Bozeman Education Building, Room 200.
5. Take the PRAXIS test and make a passing score. (See the School of Education PRAXIS coordinator, JBB 125.)
6. Take the following professional education courses (18 semester hours) plus student teaching (12 semester hours).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SED 201</td>
<td>American Schools and the Teaching Profession</td>
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<tr>
<td>SED 233</td>
<td>Seminar in Assessment and Evaluation</td>
<td></td>
</tr>
<tr>
<td>SED 380</td>
<td>Foundations of Methods in Secondary Schools</td>
<td></td>
</tr>
<tr>
<td>SED 384</td>
<td>Teaching of Mathematics and Sciences in Secondary Schools</td>
<td></td>
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<tr>
<td>SED 486</td>
<td>Educational Psychology and Behavior Management</td>
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</tr>
<tr>
<td>SED 499</td>
<td>Directed Teaching and Seminar</td>
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### CHEMISTRY CURRICULUM

#### Summary of Graduation Requirements

- General Education: 74 cr hrs
- Major Requirements: 4 cr hrs
- Electives: 120 cr hrs

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### CHEMISTRY: FOOD SCIENCE AND NUTRITION CURRICULUM

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>CHM 221L General Chemistry I</td>
<td>CHM 332L Analytical Chemistry II Lab</td>
</tr>
<tr>
<td>CHM 221L General Chemistry Lab I</td>
<td>FSN 320 Food Service Administration</td>
</tr>
<tr>
<td>CHM 222L General Chemistry II</td>
<td>FSN 330 Scientific Food Development</td>
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<td>CHM 222L General Chemistry Lab II</td>
<td>FSN 330L Foods Science Development Lab</td>
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<td>CSC 150 Computer Literacy</td>
<td>FSN 340 Nutrition Education</td>
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<td>PHY 152 General Physics</td>
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<td>FSN 101 Introduction to Dietetics &amp; Food Science</td>
<td>PHY 152L General Physics Lab</td>
</tr>
<tr>
<td>FSN 102 Prof. Experiences Seminar</td>
<td>PHY 153 General Physics</td>
</tr>
<tr>
<td>FSN 110 The Science of Human Nutrition</td>
<td>FSN 426 Nutrition in Disease</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
<td>CHM 313 Organic Chemistry I</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>FSN 356 Advanced Nutrition</td>
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<td>CHM 321L Organic Chemistry Lab</td>
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<td>TOTAL</td>
<td>FSN 450 Professional Seminar</td>
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<tr>
<td>33 cr hrs</td>
<td>FSN 460 Quantity Food Production</td>
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<td>33 cr hrs</td>
<td>FSN 484 Rural Urban Nutrition</td>
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<tr>
<td>33 cr hrs</td>
<td>HIS 101 History of Civilization</td>
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<tr>
<td>33 cr hrs</td>
<td>CHM 331L Analytical Chemistry I Lab</td>
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### SUMMARY OF GRADUATION REQUIREMENTS

| General Education | 40 |
| Major Requirements | 80 |
| Electives | 3 |
| TOTAL | 123 cr hrs |

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<tbody>
<tr>
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<td>CHM 313 Biochemistry</td>
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<td>CHM 313L Biochemistry Lab</td>
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<td>CHM 321L Organic Chemistry I Lab</td>
<td>CHM 332 Analytical Chemistry II</td>
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<td>CHM 322 Organic Chemistry II</td>
<td>FSN 410 Nutrition in Aging</td>
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<td>CHM 323L Synthesis &amp; Analysis in Organic Lab</td>
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<tr>
<td>CHM 331L Analytical Chemistry I</td>
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<td>CHM 331 Analytical Chemistry I Lab</td>
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<td>FSN 160 Food Cost Control</td>
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<td>FSN 312 Chemical Foundations of Nutrition</td>
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<td>TOTAL</td>
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### SUMMARY OF GRADUATION REQUIREMENTS

| General Education | 40 |
| School Requirement | 0 |
| Major Requirements | 84 |
| Elective | 6 |
| TOTAL | 130 cr hrs |
### B.S. IN CHEMISTRY/ M.S. IN MATERIALS SCIENCE CURRICULUM

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<td>CHM 473</td>
<td>Advanced Inorganic Chemistry</td>
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<td>MATS 530</td>
<td>Materials Science</td>
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<td>PHY 356</td>
<td>Heat &amp; Thermodynamics</td>
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<td>PHY 580</td>
<td>Quantum Mechanics for Mat. Science</td>
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#### Second Year

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<td>MTH 252</td>
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**TOTAL** 34 cr hrs

#### Third Year

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<td>Differential Equations</td>
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**TOTAL** 31 cr hrs

#### Fourth Year

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<td>CHM 573</td>
<td>Advanced Inorganic Chemistry</td>
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<td>CHM633</td>
<td>Molecular Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CHM663</td>
<td>Atomic and Molecular Spectroscopy</td>
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<td>PHY 653</td>
<td>Solid State Physics</td>
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<td>PHY 675</td>
<td>Electricity and Magnetism</td>
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<td>MATS 610</td>
<td>Special Topics I</td>
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<tr>
<td>MATS 710</td>
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**GRAND TOTAL** 153 cr hrs

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#### DEPARTMENT OF COMPUTER SCIENCE

Mou-Liang Kung, Department Head  
(757) 823-9454

The Computer Science Program is designed to provide students with fundamental training in the theoretical and practical aspects of computer science. Coupled with the program’s strong mathematics component, this training provides graduates with the necessary background for employment in a wide variety of computing fields or for a smooth entry into graduate level study.

A. Upon graduation, computer science students will be able to demonstrate knowledge and applications of the following:

1. The basic elements of computer theory.  
2. Computer organization and operating systems.  
3. Data communications and networks.  
4. Programming design methods.  
5. Basic elements of the analysis of algorithms.  
6. Ethical decision-making.

B. Upon graduation, computer science students will be able to demonstrate the following skills:

1. Ability to express computer science-related topics orally.  
2. Ability to express computer science-related topics in writing.

C. Upon graduation, computer science students will have experienced the following:

1. Work on multiple teams.
2. Software development.

In addition, the Department provides service courses to assist students of all majors in mastering fundamental computer concepts and a variety of programming languages.

The Department of Computer Science offers the B.S. Degree in Computer Science, which includes the following specialty areas:

- Computer Science (General Program)
- Computer Engineering
- Information Systems

General and engineering options are also available for students enrolled in the DNIMAS Program.

The program addresses a number of career opportunities within the curriculum. The Computer Engineering option is suitable for students who are interested in the design and implementation of hardware. The Information Systems option qualifies students for employment in business environments.

MINOR IN COMPUTER SCIENCE

A Computer Science Minor consists of the following 18 credit hours of required courses:

- CSC 170 Computer Programming I
- CSC 260 Computer Programming II
- CSC 268 Assembly Language Programming
- CSC 295 Java Applications Programming
- CSC 361 Survey of Programming Languages
- CSC 372 Data Structures
- CSC 380 Software Engineering
- CSC 381 Operating Systems
- CSC elective at the 300 or 400 level

GENERAL DEPARTMENT REQUIREMENTS

Computer Science majors must complete 120 credits to complete the B.S. degree. Additionally:

1. Students must meet prerequisites or their equivalents prior to enrolling in more advanced computer science courses.
2. Computer science majors must earn at least a "C" grade in all science, mathematics and computer science courses. In addition, majors with specialty in computer engineering must receive a "C" grade or better in all engineering courses, and majors with specialty in information systems must receive a "C" grade or better in all courses taken in the School of Business.
3. Computer science majors are not permitted to enroll in any course whose content is prerequisite, or assumed knowledge, for a higher level course that a student has already completed.
4. Computer science majors must also pass a comprehensive examination covering the content of the core courses through CSC 372.

The B.S. degree program in Computer Science is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700.

COMPUTER SCIENCE: GENERAL EMPHASIS CURRICULUM

<table>
<thead>
<tr>
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<th>Second Year</th>
<th>Third Year</th>
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<tbody>
<tr>
<td>FRS 100 Freshman Seminar</td>
<td>Laboratory Science Elective (BIO 110, PHY 152, or CHM 221 and the corresponding laboratory)</td>
<td>MTH 351 Probability and Statistics I</td>
</tr>
<tr>
<td>CHM 221, 221L or PHY 152, 152L or BIO 110</td>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
<td>Humanities or Foreign Language</td>
</tr>
<tr>
<td>Chemistry I and Lab, Physics I and Lab or General Biology</td>
<td>MTH 184 Calculus I</td>
<td>CSC 295 Java Applications Programming</td>
</tr>
<tr>
<td>CHM 222, 222L or PHY 153, 153L or BIO 160 or BIO 161 Chemistry II and Lab or Physics II and Lab or General Zoology or General Botany</td>
<td>ENG 101 Communication Skills I</td>
<td>CSC 361 Survey of Programming Languages</td>
</tr>
<tr>
<td>or BIO 161 Chemistry II and Lab or Physics II and Lab or General Zoology or General Botany</td>
<td>ENG 102 Communication Skills II</td>
<td>CSC 372 Data Structures</td>
</tr>
<tr>
<td>MTH 153 College Algebra &amp; Trigonometry</td>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>CSC 380 Software Engineering</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>HED 100 Personal &amp; Community Health</td>
<td>Computer Science Electives 300 level or above</td>
</tr>
<tr>
<td>ENG 101 Communication Skills I</td>
<td>CSC 169 Introduction to Computer Science</td>
<td>Computer Science or Mathematics Electives 300 level or above</td>
</tr>
<tr>
<td>ENG 102 Communication Skills II</td>
<td>CSC 170 Computer Programming I</td>
<td>Social Science Elective</td>
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<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>TOTAL 30 cr hrs</td>
<td>CSC 430 Data Communication</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>Second Year</td>
<td>CSC 464 Operating Systems</td>
</tr>
<tr>
<td>CSC 169 Introduction to Computer Science</td>
<td>EG 303 Technical Writing</td>
<td>CSC 468 Computer Architecture</td>
</tr>
<tr>
<td>CSC 170 Computer Programming I</td>
<td>SCM 285 Principles of Speech</td>
<td>CSC 498 Computer Science Seminar I</td>
</tr>
<tr>
<td>TOTAL 30 cr hrs</td>
<td>SOCIAL SCIENCE ELECTIVE</td>
<td>CSC 499 Computer Science Seminar II</td>
</tr>
<tr>
<td>Laboratory Science Elective (BIO 110, PHY 152, or CHM 221 and the corresponding laboratory)</td>
<td>MTH 251 Calculus II</td>
<td>Total 30 cr hrs</td>
</tr>
<tr>
<td>MTH 327 Discrete Mathematical Structures</td>
<td>MTH 372 Calculus II</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
<tr>
<td>ENG 303 Technical Writing</td>
<td>MTH 303 Calculus II</td>
<td>Major Requirements</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>MTH 303 Calculus II</td>
<td>General Elective</td>
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<tr>
<td>SOCIAL SCIENCE ELECTIVE</td>
<td>MTH 303 Calculus II</td>
<td>TOTAL 120 cr hrs</td>
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<tr>
<td>CSC 260 Computer Programming II</td>
<td>MTH 303 Calculus II</td>
<td>General Education Requirements</td>
</tr>
<tr>
<td>CSC 268 Computer Organization and Assembly Language Programming</td>
<td>MTH 303 Calculus II</td>
<td>42</td>
</tr>
<tr>
<td>CSC 292 Unix and C Programming</td>
<td>MTH 303 Calculus II</td>
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<tr>
<td>TOTAL 30 cr hrs</td>
<td>MTH 303 Calculus II</td>
<td>120</td>
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COMPUTER SCIENCE: COMPUTER ENGINEERING CURRICULUM

First Year
FRS 100 Freshman Seminar 0
MTH 153 College Algebra & Trigonometry 3
ENM 120 Technical Writing 3
ENM 128 Computer Organization and Assembly Language Programming 3
TOTAL 30 cr hrs

Second Year
ENM 220 Introduction to Programming I 3
MTH 251 Calculus II 4
MTH 252 Calculus II 4
SCM 285 Principles of Speech 3
CSC 260 Computer Programming II 3
CSC 268 Computer Organization and Assembly Language Programming 3
TOTAL 31 cr hrs

Third Year
EEN 301/301L Electronics I and Lab 4
MTH 351 Probability and Statistics 3
TOTAL 30 cr hrs

Fourth Year
CSC 380 Software Engineering 3
CSC 372 Unix and C Programming 3
CSC 361 Survey of Programming Language 3
MKG 366 Organizational Behavior and Theory 3
ACC 202 Principles of Accounting II 4
TOTAL 30 cr hrs

COMPUTER SCIENCE: INFORMATION SYSTEMS CURRICULUM

First Year
FRS 100 Freshman Seminar 0
CHM 221 Chemistry I and Lab; Physics I and Lab or General Biology 4
CHM 222 Chemistry I and Lab; Physics I and Lab or General Biology 4
MTH 153 College Algebra & Trigonometry 3
ENM 128 Computer Organization and Assembly Language Programming 3
TOTAL 30 cr hrs

Second Year
ENM 220 Introduction to Programming I 3
ENM 202 Technical Writing 3
PSY 210 Introduction to Psychology 3
CSC 260 Computer Programming II 3
CSC 268 Computer Organization and Assembly Language Programming 3
CSC 292 Unix and C Programming 3
TOTAL 30 cr hrs

Third Year
MTH 351 Probability and Statistics I 3
Humanities or Foreign Language 6
TOTAL 30 cr hrs

Fourth Year
ENM 320 Principles of Marketing 3
MKG 366 Principles of Marketing 3
DSC 270 Total Quality Management 3
TOTAL 30 cr hrs

SUMMARY OF GRADUATION REQUIREMENTS

First Year 30 cr hrs

Second Year 30 cr hrs

Third Year 30 cr hrs

Fourth Year 30 cr hrs

TOTAL 120 cr hrs
The Department of Engineering at Norfolk State University offers B.S. degrees in Electronics and Optical Engineering. The Department also offers M.S. degrees in Electronics and Optical Engineering. The Department of Engineering has an advisory board composed of national leaders from government, university and industry. The advisory board provides vision and insight for all departmental initiatives conducted by the faculty.

The Department of Engineering offers its students a variety of options for obtaining both the B.S. and M.S. degrees in a variety of research specialties. The B.S. and M.S. degree programs in Electronics Engineering will offer students several tracks for their specialties. These will include microelectronics, communications, and computer engineering. The B.S. degree program in optical engineering will allow students exciting opportunities to do research at major research facilities both nationally and internationally for academic credit. Areas of research include quantum optics, nano-technology, and opto-electronics.

In order to provide the best possible undergraduate education, the department embraces the standards established by the Accreditation Board for Engineering and Technology (ABET). Additionally, graduates of the department must:

- Be able to apply knowledge of mathematics, science, and engineering to solve problems in electronics, optical, and network engineering.
- Be able to design and conduct experiments related to engineering, as well as to analyze and interpret data.
- Be able to design a system, component, or process to meet desired needs in engineering.
- Be able to function on multi-disciplinary teams.
- Understand professional and ethical responsibility.
- Be able to communicate effectively.
- Understand the impact of engineering solutions in a global and societal context.

**ELECTRONICS ENGINEERING CURRICULUM**

The curriculum is designed to give students a thorough knowledge of the methods of design, application, and analysis of electronic systems. Although emphasis is placed on the basic fundamentals of Electronics Engineering, modern topics are covered. The goals are to produce graduates capable of performing well in both industry and in graduate school.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>EEN 100 Introduction to Electronics Engineering</td>
<td>EEN 301L Engineering Electronics I Lab</td>
</tr>
<tr>
<td>EEN 101 Engineering Use of Computers</td>
<td>EEN 305 Signals and Systems I</td>
</tr>
<tr>
<td>ENG 101 Communications Skills I</td>
<td>EEN 310 Engineering Electronics II</td>
</tr>
<tr>
<td>ENG 102 Communications Skills II</td>
<td>EEN 310L Engineering Electronics Lab II</td>
</tr>
<tr>
<td>FRS 100 Freshmen Seminar</td>
<td>EEN 333 Digital Integrated Circuits</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>EEN 333L Digital Integrated Circuits Lab</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>EEN 342 Electromagnetic Field Theory</td>
</tr>
<tr>
<td>MTH 251 Calculus II</td>
<td>EEN 351 Communications Engineering</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>EEN 331 Microprocessors</td>
</tr>
<tr>
<td>PHY 250L University Physics Lab</td>
<td>PHY 250 University Physics Lecture</td>
</tr>
<tr>
<td>PHY 251 University Physics Lecture</td>
<td>EEN 331L Microprocessor Lab</td>
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<td>PHY 251L University Physics Lab</td>
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**Second Year**

<table>
<thead>
<tr>
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<th>Cultural Elective</th>
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<table>
<thead>
<tr>
<th>Social Science from core</th>
<th>EEN 401 Engineering Seminar</th>
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<table>
<thead>
<tr>
<th>EEN 201 Electrical Network Theory I</th>
<th>EEN 411 Engineering Economics</th>
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<table>
<thead>
<tr>
<th>EEN 201L Electrical Network I Lab</th>
<th>EEN 471 Control Systems Analysis</th>
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<table>
<thead>
<tr>
<th>EEN 202 Electrical Network Theory II</th>
<th>EEN 498 Senior Project (stage II)</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>EEN 202L Electrical Network II Lab</th>
<th>EEN 499 Senior Project (stage II)</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
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<th>Engineering Elective</th>
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<table>
<thead>
<tr>
<th>EEN 212 Probability and Statistics</th>
<th>Technical Elective</th>
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<tr>
<th>EEN 231 Digital Logic Design</th>
<th>Unrestricted Elective</th>
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<table>
<thead>
<tr>
<th>MTH 252 Calculus III</th>
<th>MTH 300 Linear Algebra</th>
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<table>
<thead>
<tr>
<th>MTH 372 Differential Equations</th>
<th>SUMMARY OF GRADUATION REQUIREMENTS</th>
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<tbody>
<tr>
<td>3</td>
<td>General Education Requirements</td>
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<table>
<thead>
<tr>
<th>SCM 285 Principles of Speech</th>
<th>Major Requirements</th>
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<tr>
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<table>
<thead>
<tr>
<th>TOTAL</th>
<th>Electives</th>
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<tbody>
<tr>
<td>33 cr hrs</td>
<td>12</td>
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</tbody>
</table>

**TOTAL** 128 cr hrs

**Technical elective may be chosen from 300 level courses in math, computer science, chemistry, physics or engineering.**

**OPTICAL ENGINEERING CURRICULUM**

The curriculum is designed to give the student a thorough knowledge of the methods of design, application, and analysis of optical systems. Although emphasis is placed on the basic fundamentals of Optical Engineering, modern topics are covered. The goal is to produce graduates capable of performing well in both industry and in graduate school.
<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEN 141 Engineering Use of Computers</td>
<td>Humanities from the Core 3</td>
</tr>
<tr>
<td>ENQ 101 Communications Skills I</td>
<td>Engineering Elective 3</td>
</tr>
<tr>
<td>ENG 102 Communications Skills II</td>
<td>Social Science from the Core 3</td>
</tr>
<tr>
<td>FRS 100 Freshmen Seminar</td>
<td>EEN 342 Electromagnetic Field Theory 3</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>MTH 300 Linear Algebra 3</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>MTH 384 Math Modeling 3</td>
</tr>
<tr>
<td>MTH 251 Calculus II</td>
<td>OEN 320 Optical Systems Analysis 3</td>
</tr>
<tr>
<td>OEN 100 Introduction to Engineering</td>
<td>OEN 340 Laser &amp; Photonics 3</td>
</tr>
<tr>
<td>PED 100 Fundamentals of Fitness for Life</td>
<td>OEN 340L Laser &amp; Photonics Lab 1</td>
</tr>
<tr>
<td>PHY 250 University Physics Lecture</td>
<td>OEN 360 Introduction to Optical Materials 3</td>
</tr>
<tr>
<td>PHY 250L University Physics Lab</td>
<td>OEN 380 Introduction to Quantum Mechanics 3</td>
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<tr>
<td>PHY 251 University Physics Lecture</td>
<td>TOTAL 31 cr hrs</td>
</tr>
<tr>
<td>PHY 251L University Physics Lab</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> 33 cr hrs</td>
<td></td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities from the core</td>
<td>Cultural Elective 3</td>
</tr>
<tr>
<td>EEN 257 Material Science</td>
<td>Engineering Elective 3</td>
</tr>
<tr>
<td>EEN 200 Elements of Electronics I</td>
<td>Elective 3</td>
</tr>
<tr>
<td>MTH 252 Calculus III</td>
<td></td>
</tr>
<tr>
<td>MTH 372 Differential Equations</td>
<td>OEN 460 Optical Communications I 3</td>
</tr>
<tr>
<td>MTH 373 Advance Vector Calculus</td>
<td>OEN 461 Optical Communications II 3</td>
</tr>
<tr>
<td>OEN 200 Geometric &amp; Instrumentation Optics I</td>
<td>OEN 461L Optical Communications Lab II 1</td>
</tr>
<tr>
<td>OEN 200L Geometric &amp; Instrumentation Optics Lab I</td>
<td>OEN 490 Senior Seminar 1</td>
</tr>
<tr>
<td>OEN 201 Geometric &amp; Instrumentation Optics II</td>
<td>OEN 498 Senior Project (stage II) 3</td>
</tr>
<tr>
<td>OEN 201L Geometric &amp; Instrumentation Optics Lab II</td>
<td>OEN 499 Senior Project (stage II) 3</td>
</tr>
<tr>
<td>PHY 320 Waves</td>
<td>TOTAL 30 cr hrs</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
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</tr>
<tr>
<td><strong>TOTAL</strong> 33 cr hrs</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
</tbody>
</table>

**DEPARTMENT OF MATHEMATICS**  
Michael Keeve, Department Head  
(757) 823-8820

The Mathematics Department assists students of all majors in mastering the quantitative skills necessary for success in their various disciplines. The Department prepares students majoring in mathematics for careers in the mathematical sciences from both a theoretical and an applied viewpoint, providing simultaneous preparation for those who wish to pursue graduate study. The Department's specific goals are summarized as follows:

1. To assist students of all majors in mastering basic mathematical skills, maximizing their problem-solving skills, and acquiring an appreciation for the critical role of quantitative thinking in modern society.
2. To aid students in developing the mathematical and computational skills necessary for use in various quantitative fields such as engineering and the natural sciences, business and economics, and the vocational areas.
3. To prepare students for various career opportunities as mathematicians in the applied sciences.
4. To prepare secondary level mathematics teachers.
5. To help students develop the necessary background for further study at the graduate level.

**FACILITIES**

The Department maintains a fully equipped Mathematics Resource Center for students enrolled in entry level mathematics courses. In addition, the Department shares with the Computer Science Department a Microcomputer Laboratory.

**THE MATHEMATICS CURRICULUM**

General Department Requirements

All students at Norfolk State University are required to complete the General Education Core in order to qualify for the Bachelor's Degree. Additionally, the Department requires that:

1. All majors must complete the prerequisites or their equivalents prior to enrolling in more advanced mathematics courses.
2. Mathematics majors must earn at least a grade of "C" in all mathematics and computer science courses and in certain other courses specified in the curriculum.
3. Mathematics majors must pass a comprehensive examination covering the content of the core mathematics courses.

**Programs of Study**

The Department of Mathematics offers the B.S. Degree in Mathematics. The curriculum emphasizes two areas: Applied Mathematics and Mathematics with Teacher Certification, for those seeking to teach mathematics in the public schools.
**Applied Mathematics**: This option provides a strong preparation in mathematics with applications in engineering and the physical sciences. Graduates in this program are qualified as mathematical scientists or engineers for opportunities in industry, government, or graduate school.

**Teacher Certification**: This program is designed to prepare students to teach mathematics at the secondary school level. Students must apply for admission to teacher education, and admission requirements include passing the PRAXIS I Examination. The Master of Arts in Teaching (MAT) and the Master of Arts in Urban Education (MASAC) degrees are offered through the School of Education with concentrations in mathematics. The School of Education also offers programs of certification to persons with degrees in any of the previously described sequences.

The department also offers:

**Dual Degree Program**: This program allows students to complete a primary major in one discipline and then complete a second/dual degree in mathematics.

**Minor Degree Program**: This program allows students to minor in mathematics. Students whose major is in the applied sciences or engineering typically choose the Mathematics Minor.

**APPLIED MATHEMATICS CURRICULUM**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100 Biological Science</td>
<td>HIS 1XX History Elective</td>
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<tr>
<td>BIO 100L Biological Science Lab</td>
<td>HUM 210 Humanities</td>
</tr>
<tr>
<td>CSC 169 Introduction to Computer Science</td>
<td>MTH 331 Algebraic Structures</td>
</tr>
<tr>
<td>CSC 170 Computer Programming</td>
<td>MTH 351 Probability &amp; Statistics I</td>
</tr>
<tr>
<td>ENG 101 Communications Skills</td>
<td>MTH 352 Probability &amp; Statistics II</td>
</tr>
<tr>
<td>ENG 102 Communications Skills</td>
<td>SOC 101 Introduction to Social Sciences</td>
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<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>TOTAL 30 cr hrs</td>
</tr>
<tr>
<td>MTH 170 Technology in the Math Curriculum</td>
<td>Fourth Year</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>MTH 401 Numerical Analysis I</td>
</tr>
<tr>
<td>MTH 251 Calculus II</td>
<td>MTH 473 Introduction to Real Analysis</td>
</tr>
<tr>
<td>PED 100 Physical Education</td>
<td>MTH 496 Mathematics Seminar</td>
</tr>
<tr>
<td>PHY 152 General Physics I</td>
<td>MTH 497 Mathematics Seminar</td>
</tr>
<tr>
<td>PHY 152L General Physics I Lab</td>
<td>TOTAL 28 cr hrs</td>
</tr>
<tr>
<td>TOTAL 33 cr hrs</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
</tbody>
</table>

**Second Year**

| Computer Programming Electives (200 Level) | 6 |
| Science Elective (200 Level or above) | 3 |
|ENG 203 Advanced Communication Skills | SCM 285 Principles of Speech |
| MTH 252 Calculus III | TOTAL 28 cr hrs |
| MTH 300 Linear Algebra | General Education Requirements |
| MTH 372 Differential Equations | Major Requirements |
| MTH 373 Advanced Vector Calculus | Restricted Electives |
| PHY 153 General Physics II | TOTAL 120 cr hrs |
| PHY 153L General Physics II Lab | General Electives |
| TOTAL 29 cr hrs | APPLIED ELECTIVES: |
| Third Year | Note: Students will take 15 hours of applied electives as indicated. |
| Applied Electives | Third Year: MTH 35X, MTH 382, MTH 384, PHY 3XX (6 hours) |
| General Elective | Fourth Year: MTH 402, MTH 474, MTH 484, MTH 492, PHY 3XX, PHY 4XX, EEN 3XX, EEN 4XX (9 hours) |

**MATHEMATICS: TEACHER CERTIFICATION CURRICULUM**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100/100L Biological Science + Lab</td>
<td>MTH 242 History of Mathematics</td>
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<tr>
<td>CSC 160 BASIC Programming</td>
<td>MTH 252 Calculus III</td>
</tr>
<tr>
<td>CSC 290 Computer Science Elective</td>
<td>MTH 252 Calculus III</td>
</tr>
<tr>
<td>ENG 101/102 Communication Skills</td>
<td>MTH 321 Linear Algebra</td>
</tr>
<tr>
<td>HED 100 Personal &amp; Community Health</td>
<td>MTH 372 Differential Equations</td>
</tr>
<tr>
<td>MTH 170 Technology in the Math Curriculum</td>
<td>SED 201 Amer. Schools &amp; Teaching Profession</td>
</tr>
<tr>
<td>MTH 184 Calculus I</td>
<td>SOC 101 Introduction to Sociology</td>
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<tr>
<td>MTH 251 Calculus II</td>
<td>TOTAL 31 cr hrs</td>
</tr>
<tr>
<td>PED 100 Physical Education</td>
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</tr>
<tr>
<td>PHY 152/152L General Physics I + Lab</td>
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</tr>
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<td>TOTAL 33 cr hrs</td>
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Note: Students will take 15 hours of applied electives as indicated.
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#### Third Year

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MTH 496,497 Mathematics Seminar</td>
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<tr>
<td>SCM 285 Principles of Speech</td>
<td>3</td>
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<tr>
<td>MTH 351 Probability &amp; Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 331 Algebraic Structures</td>
<td>3</td>
</tr>
<tr>
<td>MTH 310 Discrete Mathematics</td>
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<td>MTH 3XX Mathematics Elective</td>
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<td>SED 201 American Schools and the Teaching Profession</td>
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</tr>
<tr>
<td>SED 380 Teaching of Math in Sec. Schools</td>
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</tr>
<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
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<tr>
<td>SED 380 Teaching of Math in Sec. Schools</td>
<td>3</td>
</tr>
<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>SED 380 Teaching of Math in Sec. Schools</td>
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<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
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**TOTAL** 28 cr hrs

**Summary of Graduation Requirements**

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<th>Category</th>
<th>Credits</th>
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<td>Major Requirements</td>
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<tr>
<td>Professional Education Requirements</td>
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<td>Student Teaching/Field Experiences</td>
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<td>Restricted Electives</td>
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<td>General Electives</td>
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**Total for Bachelor of Science** 122 cr hrs

### Fourth Year

<table>
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<tbody>
<tr>
<td>MTH 310 Discrete Mathematics</td>
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<tr>
<td>MTH 3XX Mathematics Elective</td>
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<td>SED 380 Teaching of Math in Sec. Schools</td>
<td>3</td>
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<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
<td>3</td>
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<tr>
<td>SED 380 Teaching of Math in Sec. Schools</td>
<td>3</td>
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<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
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<tr>
<td>SED 380 Teaching of Math in Sec. Schools</td>
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<tr>
<td>SED 384 Seminar in Assessment and Evaluation</td>
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</table>

**TOTAL** 30 cr hrs

#### MATHEMATICS: DUAL DEGREE CURRICULUM

**Description:**

This sequence permits students to complete a primary major in one discipline and then to complete requirements for a second, "dual", degree in mathematics. Students could graduate with both degrees simultaneously or, if necessary, graduate with the primary degree in one semester and complete the remaining dual degree requirements within one year. The requirements for the dual degree include 30 semester credit hours of mathematics as outlined below. Students must complete a minimum of 30 credit hours of courses above the total hours required for the primary degree. Thus the minimum requirement for the two degrees is 150 credit hours.

**Curriculum Outline:**

1. **COMPLETE PRIMARY DEGREE REQUIREMENTS** (Minimum of 120 Semester Hours)

2. **COMPLETE DUAL MATHEMATICS REQUIREMENTS** (30 Semester Hours)

   - MTH 184 Calculus I 4
   - MTH 251 Calculus II 4
   - MTH 252 Calculus III 4
   - MTH 300 Linear Algebra 3
   - MTH 351 Probability & Statistics I 3
   - MTH 372 Differential Equations 3
   - MTH 373 Advanced Vector Calculus 3
   - MTH 310 Discrete Mathematics (or MTH 310, Discrete Mathematics)

**Mathematics Electives:**

(Take 3 hrs from: MTH 310, 331, 352, 382, 384; and take 3 hrs from 401, 431, 451, 473, 484.)

3. **COMPLETE 30-HOUR MINIMUM REQUIREMENT**

   Take additional hours, if needed, to assure the completion of a minimum of 30 semester hours above the total hour requirement for the primary degree.

**Total for Dual Degree:** A minimum of 150 Hours
MINOR IN MATHEMATICS

Minor Requirements (16 hours)

I. Core (10 credit hours)

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<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MTH 252</td>
<td>Calculus III</td>
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<td>MTH 351</td>
<td>Probability &amp; Statistics I</td>
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<td>MTH 372</td>
<td>Differential Equations</td>
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</table>

II. Electives (6 credit hours)

(Choose any 2 courses from MTH 3XX or MTH 4XX)

Some suggestions are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MTH 300</td>
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<td>MTH 331</td>
<td>Abstract Algebra</td>
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<td>MTH 352</td>
<td>Probability &amp; Statistics II</td>
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<td>MTH 373</td>
<td>Advanced Vector Calculus</td>
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<td>MTH 382</td>
<td>Introduction to Applied Math</td>
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<td>MTH 384</td>
<td>Mathematical Modeling</td>
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<tr>
<td>MTH 401</td>
<td>Numerical Analysis I</td>
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</table>

DEPARTMENT OF NURSING

Bennie L. Marshall, Department Head
(757) 823-9013

The Department of Nursing offers Associate of Science and Bachelor of Science Degree Programs in Nursing, which are fully accredited by the National League for Nursing Accrediting Commission and approved by the Virginia Board of Nursing. The Associate Degree Program prepares students as technical nurses able to assist individuals with self-care deficits associated with common recurring health problems. This program has two tracks: one for individuals without prior nursing experience and one for qualified licensed practical nurses (LPNs). The traditional track can be completed in two academic years and a summer session. Qualified LPNs can complete the nursing courses within two semesters. The Bachelor of Science (BSN) degree is designed as an upper-level program for individuals who have associate degrees or diplomas in nursing, the second degree track is for individuals who possess a non-nursing baccalaureate degree, or for qualified licensed practical nurses desiring the BSN. Graduates are prepared as generalists in the practice of professional nursing. Upon graduation from the pre-licensure programs, individuals are eligible to take the National Council Licensing Examination (NCLEX-RN) for Registered Nurses.

The Virginia Board of Nursing has the authority to deny, revoke, or suspend a license issued, or to otherwise discipline a licensee upon proof that the licensee has violated any of the provisions of a specified Code of Virginia. Individuals with criminal records may be denied licensure and should contact the Virginia Board of Nursing for further information.

ASSOCIATE DEGREE PROGRAM

Admission Criteria

Admission to the Associate Degree Nursing sequence is competitive. Recommendations to the Departmental Admissions Committee are based upon completion of the following minimal criteria:

1. Admission to the Department of Nursing is an independent process that begins after official acceptance to the University. Acceptance to the University is complete only when the student has received an official letter of acceptance from the University’s Admissions Office. Persons admitted to the University no later than December 1st will be given priority admission; the final deadline for admission for the Fall semester is March 1.

2. Two units of Mathematics, including one unit of algebra and one unit of general mathematics, and two units of science, including one unit of biology and one unit of chemistry at the high school level or higher. A minimum grade of “C” is required in each course. Biology and chemistry courses must be current within ten years.

   A copy of high school and/or college transcript(s) must be mailed with application to the Department of Nursing.

   Persons applying who received a GED Certificate must provide proof of having obtained a “C” or better in Biology, Chemistry, and Algebra at the high school or college level. Evidence must be provided prior to admission to the nursing sequence.

3. Maintenance of a cumulative grade point average of “C” (2.50) or better in high school or college work. The cumulative average for transfer students is determined by averaging all previous college work, and is inclusive of the most recent grades.

4. Mathematics and English classes will depend on SAT/ACT scores, high school GPAs and the Math placement test.

5. Pre-nursing students are required to obtain a recommendation from their pre-nursing advisor relative to their readiness for admission to the nursing sequence.

   Students who have not met the criteria listed above, who have repeated support science courses, or who have had multiple withdrawals from support science courses will not be recommended to the nursing sequence.

6. Other requirements include: CPR (cardio-pulmonary resuscitation) certification, liability insurance, Hepatitis B series, Varicella Titer or vaccine, PPD, and criminal background checks. If PPD is positive, then it must be followed with an annual chest x-ray.
Associate Degree Program Policies

Specific policies related to grading, promotion, and retention in the program are delineated in the Associate Degree Student Handbook, published annually and distributed when students begin their associate degree nursing courses.

Criteria for Readmission

Readmission is competitive and is granted on a space available basis. A nursing student may not continue in the program if he/she fails a total of two nursing courses or fails the same nursing course twice. The student must wait two (2) years before reapplying to the Nursing Sequence. The final decision to grant readmission to the nursing program rests with the Department Chairperson.

ADVANCED PLACEMENT FOR THE ASSOCIATE DEGREE PROGRAM

Advanced placement examinations are offered for selected courses based on the applicant's nursing qualifications. To qualify to take the examinations, the applicant must be admitted to the Department of Nursing. Nursing qualifications refer to persons falling into the following categories:

1. L.P.N.'s/L.V.N's;
2. Students who have completed two years of baccalaureate nursing education;
3. Students who have completed one year of diploma or associate degree nursing education.

Procedure for Advanced Placement and Readmission

1. Applicants seeking advanced placement and readmission must first meet the admission requirements listed earlier in the Catalog.
2. Applicants seeking advanced placement or readmission to Nursing 150 and 160 will be required to do the following satisfactorily:
   a. Perform an on-campus laboratory skills test for advanced placement or for readmission, which will consist of two (2) technical skills;
   b. Calculate and administer correctly parenteral injections (I.M. and S.Q) to individuals throughout the life span.
3. Failure to complete the above will result in said applicant being denied advanced placement or readmittance.
4. To receive advanced placement in the curriculum, applicants must validate previous knowledge through one or a combination of the following mechanisms:
   a. satisfactory completion of AD or BS nursing course(s) from an NLN-accredited institution within the past 5 years;
   b. satisfactory completion of NLN Mobility I examination(s);
   c. satisfactory completion of the NUR 153 advanced placement examination.

BACHELOR'S DEGREE PROGRAM

BACCALAUREATE DEGREE PROGRAM POLICIES

Specific policies related to grading, promotion, and retention in the program are delineated in the Baccalaureate Degree Student Handbook, published annually and distributed when students begin their baccalaureate degree nursing courses.

UPPER-LEVEL BSN PROGRAM

Admission to the upper-level B.S. Program in Nursing is competitive and open to all qualified applicants. The minimal admission requirements are:

1. Minimum grade point average of 2.0 in college work.
2. A grade of "C" or better in all previous nursing and science courses.
3. Licensure as a registered nurse in the Commonwealth of Virginia.
4. Receipt of official transcript(s) from previously attended college(s) or School of Nursing.
5. Completion of prerequisite courses or credit by examination (CLEP, ACT-PEP).
6. Evidence of a physical examination performed within the last 12 months.
7. Evidence of current liability insurance.
9. Criminal background checks.

PREREQUISITE COURSES

<table>
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<tr>
<th>Course</th>
<th>Hours</th>
<th>Description</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Mathematics (Math 105)</td>
<td>3</td>
<td>Introductory Sociology</td>
<td>3</td>
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<td>Computer Concepts</td>
<td>3</td>
<td>Human Anatomy &amp; Physiology</td>
<td>8</td>
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<tr>
<td>English Composition</td>
<td>6</td>
<td>Microbiology</td>
<td>4</td>
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<tr>
<td>General Psychology</td>
<td>3</td>
<td>Lower-Level Nursing Courses</td>
<td>30</td>
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<tr>
<td>Human Growth &amp; Development or Child P</td>
<td>3</td>
<td>TOTAL</td>
<td>63 cr hrs</td>
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</table>

105
SECOND DEGREE TRACK BACCALAUREATE PROGRAM

Admission Criteria

Admission to the B.S.N. Program - Second-degree pathway for college graduates is competitive and open to all qualified applicants. The minimal admission requirements are as follows:

1. Completion of undergraduate or higher degree.
2. Admission to the University by December 1 for summer session, and June 1, for January session.
3. A cumulative grade point average of 2.5 in the applicant's prior degree and 2.0 or "C" in the following courses: Anatomy and Physiology, biological sciences, and Chemistry.
4. Receipt of official transcript(s) from previously attended college(s).
5. Completion of prerequisite courses or credit by examination (CLEP, ACT-PEP).
6. Evidence of a physical examination performed within the last 12 months.
7. Evidence of current liability insurance.
9. Criminal background checks.

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<tr>
<td>Communication Skills</td>
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# NURSING ASSOCIATE DEGREE CURRICULUM

## First Year

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<th>2nd Semester</th>
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<tr>
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<td>2nd Semester</td>
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<td>BIO 163 Microbiology for Health Sciences</td>
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<td>BIO 165 Human Anatomy &amp; Physiology</td>
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<td>SOC 110 Introduction to Sociology</td>
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<td>16 cr hrs</td>
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<tr>
<td>NUR 150L Fundamental Concepts of Nursing Lab</td>
<td>3</td>
<td>NUR 271 Contemporary Trends in Nursing Practice</td>
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<tr>
<td>NUR 153 Fundamental Pharmacological Skills</td>
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<td>TOTAL</td>
<td>17 cr hrs</td>
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### Summer Session

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<td>PSY 228 Human Growth &amp; Development</td>
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### TOTAL

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<td></td>
<td>70 cr hrs</td>
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## Second Year

## Fall Semester

| FRS 100 Freshman Seminar | 0 | BIO 163 Microbiology for Health Sciences | 4 |
| BIO 165 Human Anatomy & Physiology | 4 | NUR 275 Clinical Nursing II | 9 |
| ENG 101 Communication Skills I | 3 | TOTAL | 16 cr hrs |
| NUR 150 Fundamental Concepts of Nursing* | 4 | NUR 271 Contemporary Trends in Nursing Practice | 1 |
| NUR 272 Seminar | 2 |

### SUMMARY OF GRADUATION REQUIREMENTS

| General Education Requirements | 30 |
| Major Requirements | 40 |
| TOTAL | 70 cr hrs |

## Spring Semester

| BIO 166 Human Anatomy & Physiology | 4 | NUR 285 Clinical Nursing III | 4 |
| NUR 160 Clinical Nursing I** | 4 | NUR 285L Clinical Nursing III Lab | 5 |
| NUR 160L Clinical Nursing I Lab | 5 | TOTAL | 15 cr hrs |
| PSY 210 General Psychology | 3 |

## TOTAL

| 16 cr hrs | 70 cr hrs |

## LPN TO ADN: AN ASSOCIATE DEGREE TRACK FOR LPNs - Option I Curriculum Track

(Three Semesters & One Summer Session - 16 Months)

### Advanced Placement

|       | 16 cr hrs |

## Spring Semester

| BIO 163 Microbiology for Health Sciences | 4 |
| NUR 271 Contemporary Trends in Nursing Practice | 1 |
| NUR 276 Clinical Nursing III | 4 |
| NUR 277 Seminar | 2 |

## Summer Session

| BIO 166 Human Anatomy & Physiology | 4 | NUR 285 Clinical Nursing III Lab | 5 |
| NUR 199 LPN-RN Bridge | 3 |
| TOTAL | 16 cr hrs |

## Fall Semester

| CSC 150 Computer Literacy | 3 |
| ENG 102 Communication Skills II | 3 |
| TOTAL | 70 cr hrs |

## LPN TO ADN: AN ASSOCIATE DEGREE TRACK FOR LPNs - Option II Curriculum Track

(Four Semesters 24 Months)

### Advanced Placement

|       | 16 cr hrs |

## Fall Semester

| FRS 100 Freshman Seminar | 0 | BIO 163 Microbiology for Health Sciences | 4 |
| BIO 165 Human Anatomy & Physiology | 4 | SOC 110 Introduction to Sociology | 3 |
| CSC 150 Computer Literacy | 3 | NUR 275 Clinical Nursing II | 4 |
| ENG 101 Communication Skills I | 3 | NUR 275L Clinical Nursing III Lab | 5 |
| PSY 210 General Psychology | 3 |
| TOTAL | 16 cr hrs |

## Spring Semester

| NUR 272 Contemporary Trends | 1 |
| NUR 285 Clinical Nursing III | 4 |
| NUR 285L Clinical Nursing III Lab | 5 |
| NUR 287 Seminar | 2 |
| TOTAL | 12 cr hrs |

## TOTAL

| 13 cr hrs | 70 cr hrs |

## SUMMARY OF GRADUATION REQUIREMENTS

| General Education Requirements | 30 |
| Major Requirements | 40 |
| TOTAL | 70 cr hrs |
### Junior Year

**First Semester**
- Foreign Language/Humanities: 3 cr hrs
- BIO 320 Pathobiology: 3 cr hrs
- CHM 100 Chemistry: Man and Environment: 3 cr hrs
- PSY 270 Statistics or SOC 355: 3 cr hrs
- SCM 285 Principles of Speech: 3 cr hrs
- **TOTAL**: 15 cr hrs

**Second Semester**
- BIO 320 Pathobiology: 3 cr hrs
- NUR 418 Conceptual Models for Nursing: 3 cr hrs
- NUR 429 Providing Complex Nursing Systems for Families & Groups: 3 cr hrs
- **TOTAL**: 16 cr hrs

### Senior Year

**First Semester**
- African-American Perspective: 3 cr hrs
- Elective (300-400 Level): 3 cr hrs
- Humanities Elective: 3 cr hrs
- **TOTAL**: 15 cr hrs

*NURs may take NUR 415 prior to being admitted to the nursing program. If the RN matriculates in the program, the credits will be applied to the degree.*

### NURSING SECOND-DEGREE BACCALAUREATE PROGRAM

#### Summer Session
- NUR 415 Health Assessment: 3 cr hrs
- NUR 418 Conceptual Models for Nursing: 3 cr hrs
- NUR 362L Essentials of Nursing Lab*: 2 cr hrs
- **TOTAL**: 10 cr hrs

#### Fall Semester
- NUR 321 Multiculturalism/Bio Ethics: 3 cr hrs
- NUR 419 Providing Nursing Systems for Individuals and Small Groups*: 5 cr hrs
- NUR 419L Providing Nursing Systems for Individuals and Small Groups Lab*: 5 cr hrs
- NUR 444 Planning Nursing Systems for Adults: 3 cr hrs
- **TOTAL**: 16 cr hrs

#### Spring Semester
- NUR 429 Providing Nursing Systems for Individuals and Large Groups*: 3 cr hrs
- NUR 429L Providing Nursing Systems for Individuals and Large Groups Lab*: 5 cr hrs
- NUR 444 Planning Nursing Systems for Adults: 3 cr hrs
- **TOTAL**: 17 cr hrs

### SECOND-DEGREE BACCALAUREATE PROGRAM EVENING AND WEEKEND

#### Summer Semester
- NUR 419G Providing Nursing Systems for Individuals and Small Groups Lab*: 2 cr hrs
- NUR 421 Multiculturalism/Bio Ethics: 3 cr hrs
- **TOTAL**: 7 cr hrs

#### Fall Semester
- NUR 419F Providing Nursing Systems for Individuals and Small Groups*: 3 cr hrs
- NUR 419H Providing Nursing Systems for Individuals and Small Groups Lab*: 3 cr hrs
- NUR 444 Planning Nursing Systems for Adults*: 3 cr hrs
- NUR 462 Nursing Leadership Management: 3 cr hrs
- **TOTAL**: 11 cr hrs

#### Post Summer
- NUR 470 Seminar on Professional Development: 3 cr hrs
- **TOTAL SEMESTER HOURS**: 49 cr hrs
- **TOTAL HOURS FOR DEGREE**: 120 cr hrs
LPN - BSN CURRICULUM

Summer Session
- NUR 418: Conceptual Models for Nursing 3 cr
- NUR 415: Health Assessment 3 cr
- NUR 362L: Essentials of Nursing Laboratory* 2 cr
- NUR 362: Essentials of Nursing Skills and Related Concepts* 2 cr
TOTAL 10 cr hrs

Fall Semester
- NUR 429: Providing Nursing Systems for Individuals and Large Groups* 3 cr
- NUR 362: Essentials of Nursing Skills and Related Concepts* 2 cr
- NUR 415: Health Assessment 3 cr
- NUR 419: Providing Nursing Systems for Individuals and Small Groups* 5 cr
- NUR 444: Planning Nursing Systems for Adults* 3 cr
TOTAL 16 cr hrs

Spring Semester
- NUR 419: Providing Nursing Systems for Individuals and Small Groups* 5 cr
- NUR 475: Nursing Process Seminar* 3 cr
TOTAL 6 cr hrs

Summer Session
- NUR 461: Research Dimensions in Nursing 3 cr
- NUR 462: Nursing Leadership and Management 3 cr
TOTAL 17 cr hrs

TOTAL SEMESTER HOURS 49 cr hrs

TOTAL HOURS FOR DEGREE 122 cr hrs

*Courses are to be taken only by students in the second-degree program. All other courses are taken with students enrolled in the upper-level BSN program.

DEPARTMENT OF PHYSICS
Milton W. Ferguson, Department Head
(757) 823-8909

The Department of Physics provides the instruction necessary for the understanding of physics and earth science for students in this department and for other departments of the University. The Department also provides the research basis for students wishing to contribute to knowledge in the areas mentioned.

The Department offers the B.S. degree in Physics. Its graduates may enter occupations in industry, government, and education. Many graduates continue their education in graduate or professional schools. Students in other departments may elect to minor in either physics or astronomy.

The Minor in Astronomy is an ideal complementary minor primarily for students majoring in mathematics, engineering or the sciences. All science students are invited to complete the astronomy minor. Students majoring in Biology, Chemistry, Computer Science, Mathematics and Physics are the main target for this minor.

The Department also offers graduate study courses leading to the Master of Science degree in Materials Science. An undergraduate student may also elect to pursue a five-year dual degree: B.S. in Physics and M.S. in Materials Science.

The objectives of the Department are:
1. To develop in students an appreciation of the scientific method and its use in the solution of physical problems.
2. To develop the basic training in physics designed to meet the needs of students in pre-professional fields and professional fields.
3. To develop in students those qualities and abilities necessary for success in industry and advanced degree institutions.
4. To offer sufficient specialized training beyond the generally recognized basic courses to enable a graduate with a bachelor’s degree to enter directly into a professional career.

PHYSICS CURRICULUM

First Year
- FRS 100: Freshmen Seminar 0 cr
- ENG 101: Communication Skills I 3 cr
- ENG 102: Communication Skills II 3 cr
- HED 100: Personal and Community Health 2 cr
- HIS 10X: Social Science/History Electives 3 cr
- MTH 184: Calculus I 4 cr
- MTH 251: Calculus II 4 cr
- PED 100: Fundamentals of Fitness for Life 1 cr
- PHY 160: University Physics I 4 cr
- PHY 160L: University Physics Lab I 1 cr
TOTAL 30 cr hrs

Second Year
- Cultural Elective 3 cr
- Humanities Elective from core 3 cr
- Elective (unrestricted) 3 cr
- CSC 169: Introduction to Computer Science 3 cr
- MTH 252: Calculus III 4 cr
- MTH 372: Differential Equations 3 cr
- PHY 241: Physics Seminar 1 cr
- PHY 260: University Physics III 4 cr
- PHY 345: Mathematical Methods for 4 cr
- PHY 351: Concepts in Modern Physics 1 cr
TOTAL 31 cr hrs
### Third Year

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**Elective (Unrestricted)**: 10 cr hrs

**Total**: 28 cr hrs

### Fourth Year

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<td>PHY 545</td>
<td>Mathematical Methods for Physical Sciences II</td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

**General Education Requirements**: 40 cr hrs

**Major Requirements**: 73 cr hrs

**Electives**: 7 cr hrs

**Total**: 120 cr hrs

### Teacher Licensure Endorsement

Students wishing to pursue a career in teaching must take the following steps:

1. Follow the curriculum for the B.S. degree in Physics.
2. Use the elective hours for professional courses.
3. See the academic advisor in their major department.
4. See the academic advisor in the Department of Secondary Education and School Leadership in the Bozeman Education Building, Room 200.
5. Take the PRAXIS test and make a passing score. (See the School of Education PRAXIS coordinator, JBB 125.)
6. Take the following professional education courses (18 semester hours) plus student teaching (12 semester hours).

**FIVE-YEAR DUAL DEGREE: B.S. PHYSICS/MS. MATERIALS SCIENCE CURRICULUM**

#### First Year

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**Total**: 32 cr hrs

#### Second Year

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**Summer**

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**Total**: 3 cr hrs

#### Third Year

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**Total**: 33 cr hrs

#### Fourth Year

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**Total**: 3 cr hrs

**Total**: 32 cr hrs
PHY 468  Optics  3  MATS 797  Research  3
PHY 475  Electricity and Magnetism II  3  MATS 710  Special Topics  3
PHY 480  Quantum Mechanics II  3  MATS 799  Thesis Preparation  3
PHY 497  Research (to fill elective requirement)  3  PHY 653  Solid State Physics  3
PHY 498  Senior Project I  1  PHY 675  Electricity/Magnetism  3
PHY 499  Senior Project II  2  
PHY 580  Quantum Mechanics for Mat. Sci.  3  
TOTAL  30 cr hrs

Summer
MATS 697  Research  3  MTH 255, 471, 472, 474, 481, 482, 484, or CHM 345  TOTAL  3 cr hrs

Fifth Year
CHM 573  Advanced Inorganic Chemistry  3  CHM 663  Atomic and Molecular Spectroscopy  3
MATS 575  Instrumentation  3  PHY 653  Solid State Physics  3
CHM 663  Atomic and Molecular Spectroscopy  3  PHY 675  Electricity and Magnetism  3
CHPH 600  Seminar  3  MATS 610  Special Topics I  3
MATS 710  Special Topics II  3  
GRAND TOTAL  153 cr hrs

MINOR IN PHYSICS

CORE REQUIREMENT
PHY 160  University Physics I  4  PHY 365  Physical Mechanics I  3
PHY 160L  University Physics I Lab  1  PHY 366  Physical Mechanics II  3
PHY 161  University Physics II  4  PHY 375  Electricity and Magnetism I  3
TOTAL  9 cr hrs

UPPER DIVISION COURSES:
PHY 350  Modern Physics  3  PHY 475  Electricity and Magnetism II  3
TOTAL  3 cr hrs

MINOR IN ASTRONOMY

The Minor in Astronomy is an ideal complementary minor primarily for students in two general categories.

• Students currently majoring in engineering or the sciences.
• Students who have taken the introductory Math and Physics courses required of engineering and science majors, but have since changed their majors.

While all science students are invited to complete the astronomy minor, students who are not required to complete an introductory sequence of Physics courses as part of their major, may find scheduling more difficult. Students majoring in Biology, Chemistry, Computer Science, Mathematics and Physics are the main target for this minor.

Requires a minimum number of 18 credits And at least three from the following courses:

PHY 152  General Physics I  3  AST 301  Methods of Observational Astronomy  3
PHY 153  General Physics II  3  AST 302  Astrobiology  3
AST 201  Astronomy  3  AST 303  Intro. To Astrophysics  3
TOTAL  9 cr hrs  AST 401  Stellar Astrophysics  3

DEPARTMENT OF TECHNOLOGY
Carray Banks, Jr., Department Head
(757) 823-8712

The Department offers degrees in the following program areas: B.S. degree in Building Construction Technology, Design Technology, Computer Technology, Electronics Technology and Technology Education, A.S. Degree in Architectural Drafting, and a certificate in Industrial Management.

The mission of the Department of Technology is to provide programs and services to prepare graduates for a variety of responsible technological and/or technical management positions in industry, business, government, and educational enterprises. The Department commits to the responsibility of preparing students in quality industrial technology programs for careers in architectural drafting, CAD operators, estimators, planning officers, computer integrated design technology, manufacturing technology, industrial management technology, computer technology and electronic technology. The Department also prepares technology education teachers in accordance with VA licensure requirements.

ARCHITECTURAL DRAFTING

The Architectural Drafting Curriculum is designed to provide students with a technical education that will prepare them to work as semi-professionals immediately upon completion of the program. Graduates may fill such typical positions as: Architectural Draftsman, Mechanical Draftsman, Civil Draftsman, Technical Representative, Technical Salesperson, or CAD Operators.
## ARCHITECTURAL DRAFTING CURRICULUM
### A. S. DEGREE

### First Year

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>FRS 100</td>
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</tr>
<tr>
<td>BCT 162</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CSC 150</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Communication Skills I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Communications Skills II</td>
<td>3</td>
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<tr>
<td>HED 100</td>
<td>Personal &amp; Community Health</td>
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<tr>
<td>HIS 100</td>
<td>History or Civilization</td>
<td>3</td>
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<tr>
<td>BCT 170</td>
<td>Fund of Masony</td>
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<tr>
<td>MTH 151</td>
<td>College Algebra</td>
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<tr>
<td>TMD 150</td>
<td>Engineering Graphics</td>
<td>3</td>
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<tr>
<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
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<tr>
<td>TMD 151</td>
<td>Introduction to CAD</td>
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**TOTAL 31 cr hrs**

### Second Year

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<tr>
<td>BCT 260</td>
<td>Building Codes &amp; Specification</td>
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</table>

**TOTAL 33 cr hrs**

### SUMMARY OF GRADUATION REQUIREMENTS

- **General Education Requirements**: 22 cr hrs
- **Major Requirements**: 24 cr hrs
- **Other Requirements**: 18 cr hrs

**TOTAL 64 cr hrs**

## BUILDING CONSTRUCTION TECHNOLOGY

The Building Construction Technology program is designed to provide men and women with current technical/management competencies needed for technical and supervisory roles in residential, industrial, civil, and commercial construction industries.

### BUILDING CONSTRUCTION TECHNOLOGY CURRICULUM
### B.S. DEGREE

### First Year

<table>
<thead>
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<th>Course Title</th>
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<td>BCT 162</td>
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<td>Computer Literacy</td>
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<td>Communication Skills I</td>
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<td>ENG 102</td>
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<tr>
<td>PED 100</td>
<td>Fundamentals of Fitness for Life</td>
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<td>SOC 101</td>
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**TOTAL 33 cr hrs**

### Second Year

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<tr>
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**TOTAL 33 cr hrs**

### SUMMARY OF GRADUATION REQUIREMENTS

- **General Education Requirements**: 40 cr hrs
- **Major Requirements**: 45 cr hrs
- **Other Requirements**: 36 cr hrs

**TOTAL 121 cr hrs**

## ELECTRONIC TECHNOLOGY

The Electronic Technology program is designed to provide men and women with technical-management competencies needed for professional positions in scientific, technical, and management applications of instrumentation, industrial control, and communications as applied to the industrial setting.
## ELECTRONIC TECHNOLOGY CURRICULUM
### B.S. DEGREE

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<td>FRS 100 Freshman Seminar</td>
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<tr>
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<td>ELT 113 Intermediate Electronics</td>
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<td>ENG 102 Communication Skills II</td>
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<td>HED 100 Personal and Community Health</td>
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<tr>
<td>HIS 100 History of Civilization</td>
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<td>MTH 151 College Algebra</td>
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<tr>
<td>MTH 153 College Algebra &amp; Trig.</td>
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**Second Year**

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<td>CSC 150 Computer Literacy</td>
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<td>ETL 215 Circuit Analysis</td>
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<td>ITM 147 Introduction to Manufacturing Processes</td>
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<td>IMT 205 Industrial Safety &amp; Management</td>
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<td>MTH 184 Calculus I</td>
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<td>PHY 152 General Physics</td>
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**Third Year**

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<td>CHM 120 General Chemistry for Non-Science Majors</td>
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<td>CHM 119L General Chemistry Lab</td>
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<td>ELT 310 Digital Electronics</td>
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<td>ELT 313 Industrial Electronics</td>
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<td>IMT 244 Indust. Specifications &amp; Tech Documentation</td>
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<td>TMD 151 Introduction to CAD</td>
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<td><strong>TOTAL</strong></td>
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**Fourth Year**

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<tr>
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<td>CHM 120L General Chemistry Lab</td>
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<tr>
<td>ELT 412 Electronic Communication</td>
<td>3</td>
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<tr>
<td>ELT 413 Microwaves</td>
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<td>ELT 415 Electronic Design &amp; Application</td>
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<td>HIS 335 African American History or other</td>
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<tr>
<td>Cultural Elective.</td>
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<tr>
<td>IMT 410 First-Line Supervision &amp; Foremanship</td>
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<tr>
<td>IMT 446 Statistical Quality Control</td>
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<tr>
<td>SCM 285 Principles of Speech</td>
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<tr>
<td>SOC 101 Introduction to Social Science</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>28 cr hrs</strong></td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

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<td><strong>TOTAL</strong></td>
<td><strong>120 cr hrs</strong></td>
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## TIDEWATER COMMUNITY COLLEGE AND NORFOLK STATE UNIVERSITY ARTICULATION AGREEMENT

### ELECTRONIC TECHNOLOGY CURRICULUM - LEADING TO THE BACHELOR OF SCIENCE DEGREE

**Third Year**

<table>
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<tbody>
<tr>
<td>Humanities Elective</td>
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<tr>
<td>CHM 120 General Chemistry for Non Science Majors</td>
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<tr>
<td>CHM 120L General Chemistry Lab</td>
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<tr>
<td>CIT 280 Computer Programming or CSC 170</td>
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</tr>
<tr>
<td>ELT 412 Electronic Communication</td>
<td>3</td>
</tr>
<tr>
<td>ELT 413 Microwaves</td>
<td>3</td>
</tr>
<tr>
<td>ELT 415 Electronic Design &amp; Application</td>
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</tr>
<tr>
<td>ELT 415L Electronic Design &amp; Application Lab</td>
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<tr>
<td>IMT 410 First-Line Supervision &amp; Foremanship</td>
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<td>IMT 446 Statistical Quality Control</td>
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</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>3</td>
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<tr>
<td>SOC 101 Introduction to Social Science</td>
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<td>TMD 151 Introduction to CAD</td>
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<td><strong>TOTAL</strong></td>
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**Fourth Year**

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<td>Electives</td>
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<td><strong>TOTAL</strong></td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

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<td><strong>TOTAL</strong></td>
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## COMPUTER TECHNOLOGY

The Computer Technology program is designed to provide students with technical management oriented competencies related to electronics and computer hardware-software applications and aspects of industrial management and human relations to cope effectively with industrial problems.
### Introduction to Social Science

Major Requirements

- **3 cr**
- **24 cr**

Other Requirements

- **56 cr**

On-line courses in which a certificate is granted upon completion of six (6) upper-level Industrial Management courses.

The Industrial Management Certificate is designed to provide graduates with broad technical and managerial competencies needed for entry level roles in materials testing, detailing, product design, machine design, or quality control in manufacturing industries.

The Industrial Management Certificate is designed to provide graduates with broad technical and managerial competencies needed for entry level roles in materials testing, detailing, product design, machine design, or quality control in manufacturing industries.

**DESIGN TECHNOLOGY CURRICULUM**

**B.S. DEGREE**

- **First Year**
  - **FRS 100** Freshman Seminar
  - **CSC 150** Computer Literacy
  - **ELT 111** Basic Electronics
  - **ELT 111L** Basic Electronics Lab
  - **ELT 113** Intermediate Electronics
  - **ELT 113L** Intermediate Electronics Lab
  - **ENG 101** Communication Skills I
  - **ENG 102** Communication Skills II
  - **HED 100** Personal and Community Health
  - **TMD 150** Engineering Graphics
  - **ITM 147** Introduction to Manufacturing Process OR TMD 147 Engineering
  - **MTH 151** General Physical

- **Second Year**
  - **CHM 119** General Chemistry for Non Science Majors
  - **CHM 119L** General Chemistry Lab
  - **CIT 280** Computer Programming or CSC 170
  - **CIT 290** Digital Logic I
  - **ELT 213** Semiconductor Electronics
  - **ELT 213L** Semiconductor Electronics Lab
  - **ELT 215** Circuit Analysis
  - **TMD 151** Introduction to CAD
  - **TMD 251** Advanced CAD
  - **TMD 184** Calculus I
  - **ENG 299** Writing Competency Exam

- **Third Year**
  - **PHY 152L** General Physics Lab
  - **SCM 285** Principles of Speech
  - **ITM 205** Industrial Safety & Management
  - **HUM 211** Humanities
  - **IMT 244** Indust. Specifications & Tech Documentation
  - **HED 100** Personal and Community Health
  - **ENG 102** Fundamentals of Fitness for Life
  - **CSC 150** General Physics

- **Fourth Year**
  - **CHM 221** General Chemistry for Non Science Majors
  - **CHM 221L** General Chemistry Lab
  - **CIT 305** Computer Diagnostics and Repair
  - **CIT 305L** Computer Diagnostics and Repair Lab
  - **CIT 355** Programmable Logic Controllers
  - **CIT 355L** Programmable Logic Controllers (PLC’s)
  - **CIT 393** Digital Logic II
  - **CIT 430** Microprocessors
  - **HIS 335** African American History or Humanities
  - **HUM 210** Humanities
  - **IMT 445** Statistical Quality Control
  - **IMT 410** First Line Supervision and Foremanship
  - **PHS 152** General Physics Lab
  - **PHS 152L** General Physics Lab
  - **SCM 285** Principles of Speech
  - **SOC 101** Introduction to Social Science
  - **TMD 152** Advanced CAD
  - **TMD 252** Advanced CAD
  - **TMD 225** Mechanics I: Statics
  - **TMD 227** Dynamics
  - **TMD 252** Tool Design
  - **TMD 299** Writing Competency Exam

**SUMMARY OF GRADUATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
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<td>Major Requirements</td>
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<tr>
<td>Other Requirements</td>
<td>24</td>
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</tbody>
</table>

**TOTAL** **120 cr hrs**

**DESIGN TECHNOLOGY CURRICULUM (MECHANICAL)**

**B.S. DEGREE**

- **First Year**
  - **FRS 100** Freshman Seminar
  - **CSC 150** Computer Literacy
  - **ELT 111** Basic Electronics
  - **ELT 111L** Basic Electronics Lab
  - **ELT 113** Intermediate Electronics
  - **ELT 113L** Intermediate Electronics Lab
  - **ENG 101** Communication Skills I
  - **ENG 102** Communication Skills II
  - **HED 100** Personal and Community Health
  - **TMD 150** Engineering Graphics
  - **ITM 147** Introduction to Manufacturing Processes
  - **MTH 151** College Algebra
  - **MTH 153** College Algebra & Trigonometry
  - **PED 100** Fundamentals of Fitness for Life

- **Second Year**
  - **CHM 119** General Chemistry for Non Science Majors
  - **CHM 119L** General Chemistry Lab
  - **CIT 280** Computer Programming or CSC 170
  - **TMD 151** Introduction to CAD
  - **IMT 244** Indust. Specifications & Tech Documentation
  - **PHY 152** General Physics
  - **MTH 184** Calculus I

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Education Requirements</td>
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<tr>
<td>Major Requirements</td>
<td>56</td>
</tr>
<tr>
<td>Other Requirements</td>
<td>24</td>
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</tbody>
</table>

**TOTAL** **120 cr hrs**

The Design Technology (Mechanical) program is designed to provide students with technical-management oriented competencies needed for entry level roles in materials testing, detailing, product design, machine design, or quality control in manufacturing industries.

The Industrial Management Certificate is designed to provide graduates with broad technical and managerial competencies needed to develop technical analysis solutions to industrial problems in design and implementation of systems involving the use of human, material, energy, informational, and financial resources in industry, business, and governmental settings. Students take a series of on-line courses in which a certificate is granted upon completion of six (6) upper-level Industrial Management courses.
<table>
<thead>
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<th>Fourth Year</th>
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<td>IMT 340 Engineering Economics</td>
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<td>IMT 410 First Line Supervision &amp; Foremanship</td>
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<td>IMT 445 Statistical Quality Control</td>
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<td>ITM 453 Robotics &amp; CIMS</td>
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<td>TMD 448 Thermodynamics</td>
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<td>TMD 455 Mechanical Design</td>
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<td><strong>TOTAL</strong></td>
<td>29 cr hrs</td>
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</table>

**SUMMARY OF GRADUATION REQUIREMENTS**

- General Education Requirements: 40 cr hrs
- Major Requirements: 49 cr hrs
- Other Requirements: 31 cr hrs
- **TOTAL** 120 cr hrs

**TIDEWATER COMMUNITY COLLEGE AND NORFOLK STATE UNIVERSITY ARTICULATION AGREEMENT**

**DESIGN TECHNOLOGY CURRICULUM (MECHANICAL) - LEADING TO THE BACHELOR OF SCIENCE DEGREE**

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>Humanities Elective</td>
<td>Electives</td>
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<tr>
<td>Social Science Elective</td>
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<tr>
<td>CHM 221 General Chemistry I</td>
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<tr>
<td>CHM 221L General Chemistry Lab</td>
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</tr>
<tr>
<td>CIT 280 Computer Programming or CSC 170</td>
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<tr>
<td>HIS 335 African-American History</td>
<td>3</td>
</tr>
<tr>
<td>ITM 353 Computer Numerical Control &amp; Computer Aided Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>SCM 285 Principles of Speech</td>
<td>3</td>
</tr>
<tr>
<td>TMD 345 Mechanics II: Strength of Materials</td>
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<tr>
<td>TMD 345L Mechanics II Lab: Properties of Materials</td>
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<tr>
<td>TMD 348 Fluid Mechanics</td>
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</tr>
<tr>
<td>TMD 355 Machine Design</td>
<td>3</td>
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<tr>
<td>ENG 299 Writing Competency Exam</td>
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**SUMMARY OF GRADUATION REQUIREMENTS**

- General Education Requirements: 22 cr hrs
- Major Requirements: 25 cr hrs
- Other Requirements: 15 cr hrs
- **TOTAL** 62 cr hrs

**SPECIAL ACADEMIC PROGRAMS**

**DOZORETZ NATIONAL INSTITUTE FOR MINORITIES IN APPLIED SCIENCES**

(857) 823-2511

The Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) was established in December, 1985. Its goal is to address the severe shortage of minority scientists by producing graduates who are capable of successfully completing graduate studies in the basic and applied sciences, and of entering occupations in industry, government, and education. Graduates of the Institute will also be capable of entering medical or other professional schools. Successful completion of the DNIMAS program results in a Bachelor of Science in Biology, a Bachelor of Science in Chemistry, a Bachelor of Science in Computer Science, a Bachelor of Science in Mathematics, or a Bachelor of Science in Physics.

The DNIMAS program is unique. All of its students are supported by full, four-year scholarship/grant aid. It represents a major commitment by Norfolk State University to provide the best possible education in the sciences for highly qualified and motivated students. The program features: a three week, pre-matriculation summer session, intensive science curricula, reserved microcomputer labs available for student use, research internships, field trips, projects, career counseling, and seminars.

**ADMISSION**

Students are admitted to the DNIMAS Program from high school for the Fall of each academic year. Applications are accepted for early decision on or before November 30 of the preceding year. The deadline for applications for regular admission is January 31.

Applications to the DNIMAS program may be obtained by writing or calling:

Director of DNIMAS
Norfolk State University
700 Park Avenue
Norfolk, VA 23504

Students in the DNIMAS program may matriculate in one of the following curricula. For details on these curricula and course descriptions, see the departmental descriptions in this catalog.
<table>
<thead>
<tr>
<th>First Year</th>
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<tbody>
<tr>
<td>APS 110 Applied Sciences seminar</td>
<td>1 APS 310 Applied Sciences seminar</td>
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<tr>
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<td>1 APS 311 Applied Sciences seminar</td>
</tr>
<tr>
<td>BIO 110H General Biology</td>
<td>4 BIO 270 Comparative Anatomy or BIO 263</td>
</tr>
<tr>
<td>BIO 160H General Zoology</td>
<td>4 Biology Elective</td>
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<td>CHM 223A General Chemistry I</td>
<td>4 BIO 362 Histology and Micro Technique</td>
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<td>1 CHM 431 General Biochemistry I</td>
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<tr>
<td>CHM 224A General Chemistry II</td>
<td>4 CHM 431L General Biochemistry I Lab</td>
</tr>
<tr>
<td>CHM 222L General Chemistry II Lab</td>
<td>1 CHM 432 General Biochemistry II</td>
</tr>
<tr>
<td>ENG 101H Communication Skills</td>
<td>3 CHM 432L General Biochemistry II Lab</td>
</tr>
<tr>
<td>ENG 102H Communication Skills II</td>
<td>3 CSC 200 Advanced Computer Concepts</td>
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<tr>
<td>MTH 184H Analytic Geometry/Calculus</td>
<td>4 PHY 250A University Physics</td>
</tr>
<tr>
<td>MTH 251H Analytic Geometry/Calculus</td>
<td>4 PHY 250L University Physics Lab</td>
</tr>
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<td>PED 100 Fundamentals of Fitness for Life</td>
<td>1 PHY 251A University Physics</td>
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<td>Second Year</td>
<td>Fourth Year</td>
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<td>Social Science Elective</td>
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<tr>
<td>APS 210 Applied Science Seminar</td>
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<td>1 Biology Elective</td>
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<tr>
<td>BIO 161 General Botany</td>
<td>4 Humanities Elective/MUS 301*</td>
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<tr>
<td>BIO 278 Cell Biology</td>
<td>4 APS 410 Applied Sciences seminar</td>
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<tr>
<td>BIO 310 General Microbiology</td>
<td>4 BIO 351 Principles of Genetics</td>
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<tr>
<td>CHM 321 Organic Chemistry I</td>
<td>3 BIO 364 Seminar/Colloquium</td>
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<td>CHM 321L Organic Chemistry I Lab</td>
<td>2 BIO 459 General Physiology</td>
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<tr>
<td>CHM 322 Organic Chemistry II</td>
<td>3 BIO 474 Molecular Biology</td>
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<td>3 BIO 497 Introduction to Research</td>
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<tr>
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<td>SCM 285H Principles of Speech</td>
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<td></td>
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*Select from HUM 210, MUS 301, FIA 301, ENG 207

**BIOLOGY (PRE-PROFESSIONAL - DNIMAS)**

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<td>1 APS 311 Applied Sciences seminar</td>
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<td>4 BIO 253 Human Physiology</td>
</tr>
<tr>
<td>BIO 160H General Zoology</td>
<td>4 BIO 272 Human Anatomy</td>
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<tr>
<td>CHM 223A General Chemistry I</td>
<td>4 BIO 351 Principles of Genetics</td>
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<tr>
<td>CHM 221L General Chemistry I Lab</td>
<td>1 CHM 431 General Biochemistry I</td>
</tr>
<tr>
<td>CHM 224A General Chemistry II</td>
<td>4 CHM 431L General Biochemistry Lab</td>
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<tr>
<td>CHM 222L General Chemistry II Lab</td>
<td>1 CHM 432 General Biochemistry II</td>
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<td>3 CHM 432L General Biochemistry II Lab</td>
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<td>ENG 102H Communication Skills II</td>
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<td>MTH 184H Analytic Geometry/Calculus</td>
<td>4 PHY 250L University Physics Labs</td>
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<td>MTH 251H Analytic Geometry/Calculus</td>
<td>4 PHY 251A University Physics</td>
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<tr>
<td>Second Year</td>
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<td>1 ENG 203/30 Advanced Communication Skills</td>
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<tr>
<td>APS 211 Applied Science Seminar</td>
<td>1 Humanities Elective*</td>
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<tr>
<td>BIO 161 General Botany</td>
<td>3 APS 410 Applied Sciences seminar</td>
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<tr>
<td>BIO 310 General Microbiology</td>
<td>4 BIO 351 Principles of Genetics</td>
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<tr>
<td>BIO 278 Cell Biology</td>
<td>4 BIO 362 Hist/Micro technique</td>
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<tr>
<td>CHM 321 Organic Chemistry I</td>
<td>4 BIO 364 Seminar/Colloquium</td>
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<tr>
<td>CHM 321L Organic Chemistry I Lab</td>
<td>3 Biology Elective</td>
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<tr>
<td>CHM 322 Organic Chemistry II</td>
<td>2 BIO 474 (472) Molecular Biology/Cell Structure</td>
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<td>3 BIO 495 Biostatistics</td>
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<tr>
<td>CSC 169 Introduction to Computer Science</td>
<td>2 BIO 497 Introduction to Research</td>
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<td>HED 100 Personal &amp; Community Health</td>
<td>TOTAL 31 cr hrs</td>
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<tr>
<td>SCM 285H Principles of Speech</td>
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Norfolk State University 2004-2005 University Catalog
## CHEMISTRY (DNIMAS)

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<td>1 APS 311 Applied Sciences seminar</td>
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<td>4 CHM 322L Analytical Chemistry II</td>
</tr>
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<td>CHM 221L</td>
<td>1 CHM 332L Analytical Chemistry II Lab</td>
</tr>
<tr>
<td>CHM 224A</td>
<td>2 BIOL 110H General Biology</td>
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<tr>
<td>CHM 222L</td>
<td>1 APS 350 Scientific Instrumentation</td>
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<tr>
<td>CSC 169</td>
<td>4 BIOL 210H General Biology</td>
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<td>CSC 200</td>
<td>3 CHM 210H General Biology</td>
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<tr>
<td>ENG 101H</td>
<td>3 CHM 310 Research or CHM 398</td>
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<td>ENG 102H</td>
<td>3 CHM 345 Math &amp; Logic in the Physical Sciences</td>
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<td>HED 100</td>
<td>2 CHM 351 Seminar or CHM 352</td>
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<tr>
<td>MTH 184H</td>
<td>1 CHM 361 Physical Chemistry I</td>
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<tr>
<td>MTH 251H</td>
<td>4 CHM 362 Physical Chemistry I</td>
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<td>PED 100</td>
<td>4 CHM 363L Physical Chemistry Lab</td>
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<td>1 CHM 397 Research or CHM 398</td>
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**Fourth Year**

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### CHEMISTRY - PRE-MEDICINE (DNIMAS)

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<tr>
<td>APS 111</td>
<td>1 APS 310 Applied Sciences seminar</td>
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<tr>
<td>CHM 223A</td>
<td>1 APS 311 Applied Sciences seminar</td>
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<td></td>
<td>4 CHM 322L Analytical Chemistry II</td>
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<tr>
<td>CHM 221L</td>
<td>1 CHM 332L Analytical Chemistry II Lab</td>
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<tr>
<td>CHM 224A</td>
<td>2 CHM 342L Synth. &amp; Anal. in Organic</td>
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<tr>
<td>CHM 222L</td>
<td>3 CHM 451 Seminar or CHM 452</td>
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<tr>
<td>CSC 169</td>
<td>3 CHM 473 Advanced Inorganic Chemistry</td>
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<td>CSC 200</td>
<td>2 CHM 431 Biochemistry</td>
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<td>ENG 101H</td>
<td>1 CHM 497 Research or 498</td>
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<td>ENG 102H</td>
<td>3 CHM 351 Seminar or CHM 352</td>
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<td>HED 100</td>
<td>1 CHM 361 Physical Chemistry I</td>
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<tr>
<td>MTH 184H</td>
<td>4 CHM 362 Physical Chemistry II</td>
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<tr>
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<td>4 CHM 363L Physical Chemistry Lab</td>
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<tr>
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<td>1 CHM 379 Research or CHM 398</td>
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<td>3 CHM 473 Advanced Inorganic Chemistry</td>
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**Fourth Year**

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<tbody>
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* Select 6 hrs from: CHM 397, 398, 473L, 431L, 432, 432L, 461L, 462L, 475, 476, 481, 497, 498 (Max of 1 elective hr. of research)
### COMPUTER SCIENCE (DNIMAS)

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<td>Applied Sciences seminar</td>
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<tr>
<td>APS 111</td>
<td>Applied Sciences seminar</td>
</tr>
<tr>
<td>CHM 223A</td>
<td>General Chemistry I</td>
</tr>
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<td>CHM 223L</td>
<td>General Chemistry I Lab</td>
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<td>CHM 224A</td>
<td>General Chemistry II</td>
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<td>General Chemistry II Lab</td>
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<td>CSC 169</td>
<td>Introduction to Computer Science</td>
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<tr>
<td>CSC 170</td>
<td>Computer Programming I</td>
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<tr>
<td>ENG 101H</td>
<td>Communication Skills I</td>
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<td>ENG 102H</td>
<td>Communication Skills II</td>
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<tr>
<td>HED 100</td>
<td>Personal &amp; Community Health</td>
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<tr>
<td>MTH 251H</td>
<td>Calculus II</td>
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<tr>
<td>MTH 251H</td>
<td>Calculus II</td>
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<tr>
<td>PED 100</td>
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<tr>
<td>APS 210</td>
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<td>CSC 260</td>
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<tr>
<td>CSC 268</td>
<td>Computer Organization and Assembly Language Programming</td>
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<tr>
<td>CSC 270</td>
<td>Discrete Structures</td>
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<tr>
<td>CSC 295</td>
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<td>University Physics Lab</td>
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### COMPUTER SCIENCE/ELECTRICAL ENGINEERING (DNIMAS)

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<td>Applied Science Seminar</td>
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<td>Introduction to Computer Science</td>
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<td>CSC 170</td>
<td>Computer Programming I</td>
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<td>MTH 251H</td>
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<tr>
<td>CSC 270</td>
<td>Discrete Structures</td>
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<tr>
<td>CSC 286</td>
<td>Computer Organization and Assembly Language</td>
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<td>MTH 252H</td>
<td>Calculus III</td>
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<td>MTH 300</td>
<td>Linear Algebra</td>
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<td>PHY 250A/251A University Physics</td>
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<td>SCM 285H</td>
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## APPLIED MATHEMATICS (DNIMAS)

### First Year
- **APS 110** Applied Sciences seminar  
- **APS 111** Applied Sciences seminar  
- **CSC 169** Introduction to Computer Science  
- **ENG 101H** Communication Skills I  
- **MTH 300** Linear Algebra  
- **MTH 372** Differential Equations  
- **PED 100** Fundamentals of Fitness for Life  
- **PHYS 250** University Physics  
- **PHYS 250L** University Physics Lab  
- **PHYS 251** University Physics Lab  

### Second Year
- **CSC 292** UNIX and C Programming  
- **APS 210** Applied Sciences Seminar  
- **APS 211** Applied Sciences Seminar  
- **MTH 252** Calculus III  
- **MTH 384** Math Modeling and Simulation  
- **MTH 372** Differential Equations  
- **MTH 384** Math Modeling and Simulation  
- **MTH 385** University Physics Lab  
- **MTH 386** University Physics Lab  
- **MTH 387** University Physics  

### Fourth Year
- **APS 310** Applied Sciences seminar  
- **APS 311** Applied Sciences seminar  
- **CHM 222** General Chemistry I Lab  
- **ENG 303** Professional & Technical Writing  
- **ENG 101H** Communication Skills I  
- **MTH 382** Introduction to Applied Mathematics  
- **MTH 382** Linear Algebra  
- **MTH 384** Math Modeling and Simulation  
- **MTH 401** Numerical Analysis II  
- **PED 100** Fundamentals of Fitness for Life  
- **PHYS 250A** University Physics  
- **PHYS 250L** University Physics Lab  
- **PHYS 251A** University Physics  
- **PHYS 251L** University Physics Lab  

### Summary of Graduation Requirements

- **First Year:** 35 cr hrs
- **Second Year:** 29 cr hrs
- **Fourth Year:** 32 cr hrs

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## PHYSICS (DNIMAS)

### First Year
- **APS 110** Applied Sciences seminar  
- **APS 111** Applied Sciences seminar  
- **CSC 169** Introduction to Computer Science  
- **ENG 101H** Communication Skills I  
- **MTH 300** Linear Algebra  
- **MTH 372** Differential Equations  
- **PED 100** Fundamentals of Fitness for Life  
- **PHYS 250** University Physics  
- **PHYS 250L** University Physics Lab  
- **PHYS 251** University Physics Lab  

### Second Year
- **CSC 292** UNIX and C Programming  
- **APS 210** Applied Sciences Seminar  
- **APS 211** Applied Sciences Seminar  
- **MTH 252** Calculus III  
- **MTH 372** Differential Equations  
- **PHYS 250A** University Physics  
- **PHYS 250L** University Physics Lab  
- **PHYS 251A** University Physics  
- **PHYS 251L** University Physics Lab  

### Fourth Year
- **APS 310** Applied Sciences seminar  
- **APS 311** Applied Sciences seminar  
- **CHM 222** General Chemistry I Lab  
- **ENG 303** Professional & Technical Writing  
- **ENG 101H** Communication Skills I  
- **MTH 382** Introduction to Applied Mathematics  
- **MTH 382** Linear Algebra  
- **MTH 384** Math Modeling and Simulation  
- **MTH 384** Math Modeling and Simulation  
- **PED 100** Fundamentals of Fitness for Life  
- **PHYS 250A** University Physics  
- **PHYS 250L** University Physics Lab  
- **PHYS 251A** University Physics  
- **PHYS 251L** University Physics Lab  

### Summary of Graduation Requirements

- **First Year:** 35 cr hrs
- **Second Year:** 29 cr hrs
- **Fourth Year:** 28 cr hrs

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The primary mission of the Department of Naval Science is to provide professional and leadership instruction to students who desire to serve as commissioned officers in the United States Navy or Marine Corps. Participation in the NROTC Program is voluntary, and any student who meets the qualifications is eligible to participate.

The NROTC Program consists of two courses of instruction: the four-year program and the two-year program. Both apply to scholarship and non-scholarship (college program) students.

The four-year program is divided into a two-year basic course and a two-year advanced course. The basic course (NSC 101, 102, 201, 202 and accompanying naval laboratory sessions) is normally pursued by NROTC midshipmen during their freshman and sophomore years. While most freshmen begin the basic course during the fall semester, it is possible to enter the program at the beginning of the spring semester. The advanced course (NSC 301, 302, 401, 402 and accompanying naval laboratory sessions) is normally pursued during the junior and senior years. Students seeking a commission in the Marine Corps or Marine Corps Reserve substitute NSC 310, 410, and two approved elective courses for NSC 301, 302, 401, and 402.

Scholarship recipients supplement classroom instruction with at-sea training the summer between their junior and senior years. Similarly, Marine Corps option students attend the six-week Marine Officer Candidate School at Quantico, Virginia, the summer between their junior and senior years.

The two-year NROTC Program is extended to students who do not participate in NROTC during their freshman and sophomore years and who meet the program requirements. Applications to join must be submitted early in the spring semester of the sophomore year. For students accepted into this program, a six-week summer training period at the Naval Science Institute (NSI) in Newport, Rhode Island, following their sophomore year, replaces the Basic course segment of the four-year program. Students successfully completing summer training enroll in the Advanced course for their junior and senior years.

### REQUIREMENTS FOR FORMAL ENROLLMENT IN NROTC

1. Be a citizen of the United States.
2. Be physically qualified under standards prescribed by the Department of the Navy.
3. Be accepted by the University as a full-time enrolled student.
4. Be at least 17 years of age and not have reached 27 years of age by 30 June of the year you graduate. (Scholarship)
5. Be at least 17 years of age and not have reached 27 years of age by 30 June of the year you graduate. (College Program)
6. Possess a satisfactory record of moral integrity, maintain high standards of performance in academic and extracurricular activities, and manifest potential officer characteristics.
7. Have no moral obligation or personal convictions that prevent you from conscientiously bearing arms and supporting and defending the Constitution of the United States against all enemies, foreign and domestic.

### PARTICIPATION REQUIREMENTS

Students enrolling in the Basic course of instruction during their freshman year incur no military obligation. Those in the Advanced course must agree to serve a specific active duty period.

All College Program students may compete for three and two-year NROTC scholarships. NROTC scholarships pay for tuition, books, laboratory fees, and other required fees, except room and board. Additionally, scholarship students receive a monthly stipend of $200 (tax free). For specific information and requirements, contact the Department of Naval Science.

Advanced course students in the College Program (non-scholarship) are entitled to subsistence pay at the rate of $250 FR SO, $300 JR and $350 SR per month for each month of the school year, not to exceed 20 months maximum. While engaged in summer cruise training, all students receive one half of the basic pay of an Ensign.

Nursing program students participate in NROTC drill labs, classes as indicated below, and summer training. Those who complete the nursing program and naval science requirements are commissioned as Ensigns in the Navy Nurse Corps.

<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
<th>Second Year</th>
<th></th>
<th>Third Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSC 101*</td>
<td>2 cr</td>
<td>NSC 201</td>
<td>3 cr</td>
<td>NSC 301*</td>
<td>2 cr</td>
</tr>
<tr>
<td>NSC 111</td>
<td>1 cr</td>
<td>NSC 202</td>
<td>3 cr</td>
<td>NSC 302</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSC 112</td>
<td>1 cr</td>
<td>NSC 211</td>
<td>1 cr</td>
<td>NSC 301*</td>
<td>2 cr</td>
</tr>
<tr>
<td>NSC 102*</td>
<td>3 cr</td>
<td>NSC 212</td>
<td>1 cr</td>
<td>NSC 302</td>
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<td>TOTAL</td>
<td>7 cr</td>
<td>TOTAL</td>
<td>8 cr</td>
<td>TOTAL</td>
<td>11 cr</td>
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</tbody>
</table>

### NOTES

- This Department does not offer a major course program.
- *Indicates courses required for NROTC nursing college program and scholarship students.
The Ethelyn R. Strong School of Social Work provides social work education through its BSW, MSW, DSW and continuing education programs.

The School's mission is to provide social work education which prepares students with competence to develop and deliver services that strengthen and/or empower individuals, families, groups, organizations, and communities. Such practice fosters meaningful interaction between people and their environments and contributes to the alleviation of the social structural causes and consequences of poverty and oppression, and thereby increase the prospect of community well being. This mission combines the profession's philosophical foundations with the purpose and mission of Norfolk State University as a historically Black university in an evolving global community.

The School and its programs emphasize the values of social justice, social responsibility and respect for human rights, dignity, and diversity. There is a special commitment to the affirmation of the strengths of diversity of all populations. The School is especially committed to address the strengths and challenges which African American communities experience.

The focus at the BSW level is on the preparation of all students for a generalist approach to the first level of professional practice. Beginning level practitioners with a generalist perspective and knowledge of social systems recognize that the target for change may not only be the individual, but may be one or more of the social systems that comprise the individual’s environment.

ACCREDITATION

The School of Social Work is accredited by the Council on Social Work Education which accredits programs at the BSW and MSW levels.

ORGANIZATION OF THE SCHOOL

The School is administered by the Dean. The Assistant Dean is responsible for administrative matters. The BSW Program Director is responsible for the BSW Program. The MSW Program Director is responsible for the MSW Program Curriculum. The Director of the DSW Program is responsible for the DSW Program.

DEGREES OFFERED

BSW, MSW and DSW

ADMISSION REQUIREMENTS

BSW applicants must meet University requirements for admission. After successfully completing the first two years of pre-social work course requirements, students must apply for Candidacy for the BSW degree. Candidacy is the official application process for admission to the professional phase of the Social Work Program. Candidacy requirements are:

1. Student must have completed the first two years of General Education and pre-social work requirements. Social work required courses are considered part of the major, and are designated for social work majors only except for SWK 200 Introduction to Social Work. Student must have a minimum cumulative grade point average of 2.0 on the 4.0 scale (an overall average of C or better).
2. Student must complete and submit all candidacy application materials to the Director of the Baccalaureate Social Work Program.
3. Student must not have repeated a required social work course more than once.
4. Continued matriculation at the professional level of the Baccalaureate Program requires that the student:
   a) Maintain an overall GPA of 2.0 or better.
   b) Maintain an average of 2.5 GPA in major courses.
   c) Must have earned a grade of C or better in designated courses as enumerated in the Social Work Curriculum.
   d) Complete degree requirements in accordance with the University Catalog and School of Social Work Field Manual.

GENERAL EDUCATION REQUIREMENTS

The School follows University requirements for the general education core of 40 hours.

ASSESSMENT REQUIREMENT

Social Work majors are required to complete the competency based assessment requirements, as set forth by the Social Work Program and the University. Also, students are required to meet state competency mandates.
Norfolk State University 2004-2005 University Catalog

BACCALAUREATE SOCIAL WORK
Carrie R. Waites, Baccalaureate Program Director
(757) 823-8122

The undergraduate Social Work Program comprises two phases: Pre Social Work Education and Professional Social Work Education. The professional social work phase begins in the junior year and combines academic course work and field practicum. The baccalaureate social work (BSW) degree is conferred on undergraduates who complete all of the academic requirements of the program and of Norfolk State University. This degree is recognized as the first professional level of social work practice. Certain criteria are, therefore, established for admission to and continued matriculation in the professional program.

GOALS

The goals of the BSW Program are:

1. To prepare the student for employment as a beginning professional social work practitioner utilizing a generalist approach.
2. To prepare student to work differentially with diverse populations with a special commitment to the affirmation of the unique diversity of African Americans.
3. To teach students to competently develop and deliver direct services that strengthens and/or empower individuals, families, groups, organizations, and communities.
4. To provide students with a foundation of values and ethics which guide professional practice.
5. To provide content about the interaction of people and their environments that contributes to the alleviation of the causes and consequences of poverty and oppression.
6. To introduce students to a variety of modes of learning which will enhance life-long professional development.

SOCIAL WORK CURRICULUM

PRE SOCIAL WORK REQUIREMENTS

<table>
<thead>
<tr>
<th>First Year</th>
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<tbody>
<tr>
<td>FRS 100</td>
<td>SWK 200</td>
</tr>
<tr>
<td>PDE 100</td>
<td>HUM 210</td>
</tr>
<tr>
<td>HED 100</td>
<td>HUM 211</td>
</tr>
<tr>
<td>ENG 101</td>
<td>XXX XXX</td>
</tr>
<tr>
<td>ENG 102</td>
<td>ECN211</td>
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<td>BIO 105/105L</td>
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<td>PED 100</td>
<td>POS 231</td>
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<td>ENG 101</td>
<td>PSY 340</td>
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<td>ENG 102</td>
<td>SOC 344</td>
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<td>SOC 110</td>
<td>SOC 355</td>
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<td>HIS 100</td>
<td>SWK 416</td>
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<td>TOTAL</td>
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PROFESSIONAL SOCIAL WORK REQUIREMENTS

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<th>Third Year</th>
<th>Fourth Year</th>
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<tr>
<td>Cultural Perspective</td>
<td>Electives</td>
</tr>
<tr>
<td>SWK 309 Human Behavior and Social Environment I</td>
<td>SWK 316 Generalist Practice: Individuals &amp; Families</td>
</tr>
<tr>
<td>SWK 312 Introduction to Generalist Practice</td>
<td>SWK 319 Human Behavior and Social Environment III</td>
</tr>
<tr>
<td>SWK 300 Social Welfare Policy and Services II</td>
<td>SOC 331 Social Psychology</td>
</tr>
<tr>
<td>SWK 313 Generalist Practice: Individuals &amp; Families</td>
<td>SOC 344 Methods of Social Research***</td>
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<tr>
<td>SWK 319 Human Behavior and Social Environment III</td>
<td>SOC 355 Elementary Social Stastics ***</td>
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<tr>
<td>SOC 331 Social Psychology</td>
<td>SWK XXX Social Work Elective</td>
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<tr>
<td>SOC 344 Methods of Social Research***</td>
<td>Total 30 cr hrs</td>
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<tr>
<td>SOC 355 Elementary Social Stastics ***</td>
<td>SUMMARY OF GRADUATION REQUIREMENTS</td>
</tr>
<tr>
<td>SWK XXX Social Work Elective</td>
<td>General Education Requirements 40</td>
</tr>
<tr>
<td>TOTAL 30 cr hrs</td>
<td>Major Requirements 72</td>
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</table>

***Minimum grade of C required in all Social Work courses and those with *** beside them.

****Cultural Perspective ****(Select one) - HIS 335, HIS 336, HIS 370, HIS 371,PSY 340, SOC 237

*****Restricted Elective (Natural Sciences) - CHM 100, PHY 100, SCI 100, Astronomy, Geology, Oceanography, Meteorology

Electives 8

TOTAL 120 cr hrs
## COURSE DESCRIPTIONS

Course descriptions are notated with the following abbreviations and can be found on the subsequent pages listed in alphabetical order.

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<tr>
<td>Elementary Education (EED)</td>
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<td>Engineering (EEN)</td>
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<td>English (ENG)</td>
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<td>Exercise Science (EXS)</td>
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<td>Fashion Design/Merchandising (FDM)</td>
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<td>Finance (FNC)</td>
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<td>Fine Arts (FIA)</td>
<td>p. 137-139</td>
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<td>French (FRN)</td>
<td>p. 139-140</td>
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<td>Funeral Services (FNS)</td>
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<tr>
<td>General Studies (FRS/GST)</td>
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<td>German (GRM)</td>
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<td>Health Education (HED)</td>
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<td>Health Information Management (HIM)</td>
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<td>Journalism (JRN)</td>
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<td>Management (MGT)</td>
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<td>Mass Communications (MCM)</td>
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<td>Medical Technology (MDT)</td>
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<td>Military Science (MIS)</td>
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<td>Music (MUS)</td>
<td>p. 150-153</td>
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<td>Naval Science (NSC)</td>
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<td>Nursing (NUR)</td>
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<td>Optical Engineering (OEN)</td>
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<td>Physical Education (PED)</td>
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<td>Social Work (SWK)</td>
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<td>Technology Education (TED)</td>
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<td>Theatre (DRM)</td>
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<tr>
<td>Urban Planning (URP)</td>
<td>p. 164-165</td>
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</tbody>
</table>
ACCOUNTING - ACC

201 Three Credits
PRINCIPLES OF ACCOUNTING I
PREREQUISITE: Sophomore Standing
Study of the fundamental principles and concepts of accounting used in the preparation of financial statements. Emphasis on service and merchandising companies.

202 Three Credits
PRINCIPLES OF ACCOUNTING II
PREREQUISITE: ACC 201
Continuation of ACC 201. Emphasis on accounting for partnerships and corporations, long-term debt, analysis of financial statements, statement of cash flows, and introduction to management accounting.

301 Three Credits
INTERMEDIATE ACCOUNTING I
PREREQUISITE: ACC 202
Rigorous study of the methodology and underlying theory of financial accounting. In-depth analysis of valuation alternatives and their effect on income measurement.

302 Three Credits
INTERMEDIATE ACCOUNTING II
PREREQUISITE: ACC 301
Continuation of ACC 301. In-depth study of the accounting theory and principles surrounding the valuation of accounts in the financial statement.

315 Three Credits
FEDERAL INCOME TAX I
PREREQUISITE: ACC 202
Study of the basic concepts of federal income taxation and related reporting requirements. Emphasis on the taxation of individuals.

316 Three Credits
FEDERAL INCOME TAX II
PREREQUISITE: ACC 315
Study of the basic concepts of federal income taxation and related reporting requirements as they apply to partnerships and corporations. Emphasis on the formation, operation, dissolution and reorganization of corporations.

325 Three Credits
MANAGERIAL ACCOUNTING
PREREQUISITES: ACC 202; MSY 284
Focuses on the uses of accounting information in industry, government, and not-for-profit organizations. Topics concentrate on the underlying conceptual framework of management accounting, the role of accounting in management planning and control, and the usefulness of accounting data for evaluating the results of operations and in the various decision making processes. (Not available for credit for accounting majors).

330 Three Credits
ACCOUNTING SYSTEMS
PREREQUISITES: ACC 301; MSY 284
Study of current techniques of processing and utilizing accounting data for information systems. Emphasis on internal control and reporting in a computerized accounting environment.

361 Three Credits
FINANCIAL STATEMENT ANALYSIS
PREREQUISITES: FNC 360; ACC 202; MSY 284
Study of the methods and tools of analysis and interpretation of financial statements. Emphasis on financial analysis techniques.

411 Three Credits
INTERMEDIATE ACCOUNTING III
PREREQUISITE: ACC 302
Continuation of ACC 302. Emphasis on the accounting literature and the concepts of accounting theory.

412 Three Credits
ADVANCED ACCOUNTING
PREREQUISITE: ACC 411
Accounting for partnerships, home offices, branches, combinations, and consolidations. Emphasis on foreign currency translation and other aspects of international accounting.

413 Three Credits
COST ACCOUNTING
PREREQUISITE: ACC 202; MSY 284
Study of cost accounting systems, product costing, and inventory valuation. Emphasis on the uses of accounting data as an aid in managerial planning and control.

414 Three Credits
AUDITING
PREREQUISITES: ACC 302; MSY 284
Rigorous study of the examination of financial statements by independent auditors within the framework of generally accepted accounting principles using generally accepted auditing standards.

415 Three Credits
ADVANCED COST ACCOUNTING
PREREQUISITE: ACC 413
Continuation of ACC 413. Focuses on capital budgeting, inventory control, cost allocation, segmented statements, decentralization, and accounting systems.

416 Three Credits
INTERNAL AUDITING
PREREQUISITES: ACC 302, 330
Concerns the independent appraisal function within an organization to examine and evaluate its activities. Emphasis on internal controls and on compliance with applicable laws, regulations, and policies.

418 Three Credits
GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING
PREREQUISITE: ACC 302
Theory and application of accounting within governmental and not-for-profit organizations, including fund allocations.

420 Three Credits
SELECTED TOPICS IN ACCOUNTING
PREREQUISITE: ACC 302
Topics covered give additional consideration to selected accounting problems. Current accounting issues are examined.

455 Three Credits
THEORY OF ACCOUNTING
PREREQUISITE: ACC 302
Thorough study and review of accounting literature and pronouncements of rule-making organizations. Financial Accounting Standards Board Statements explored in depth. Current issues and developments are also studied.

ADMINISTRATIVE SYSTEMS

MANAGEMENT - ASM

101 One Credit
KEYBOARDING FOR INFORMATION PROCESSING
PREREQUISITE: ACC 202; MSY 284
Focuses on the uses of accounting information in industry, government, and not-for-profit organizations. Topics concentrate on the underlying conceptual framework of management accounting, the role of accounting in management planning and control, and the usefulness of accounting data for evaluating the results of operations and in the various decision making processes. (Not available for credit for accounting majors).

110 Three Credits
KEYBOARDING II
PREREQUISITE: Key a minimum of 25 words a minute
Introduction to keyboarding that covers the basic techniques needed to key alphabetically and numerically. Develop the basic skills required to collect, use, and store information via a standard keyboard on a microcomputer.

215 Three Credits
KEYBOARDING III
PREREQUISITE: ASM 100 or advanced placement
Continued keyboarding/formating/editing skills for a variety of office simulations, applying production skills for simulation, and making decisions about execution of jobs/simulations without direct supervision. Speed and accuracy are stressed.

230 Three Credits
OFFICE COMMUNICATIONS
PREREQUISITE: ENG 102 or equivalent
Communication theory and practice that includes grammar mechanics, speaking to large and small groups, listening, composing messages, writing reports, and communicating with other cultures and nationalities. Includes hands-on experience with the Internet and presentation software programs.

244 Three Credits
WORD/INFORMATION PROCESSING AND DESKTOP PUBLISHING
PREREQUISITE: ASM 100; MSY 184 or department permission
Overview of office systems within contemporary organizations, emphasizing principles and processes, people, and productivity. Major technology that supports information creation, manipulation, and distribution. Focuses on document production using specified software programs. Accurate production is stressed. Includes an introduction to desktop publishing.

324 Three Credits
BUSINESS SYSTEMS AND PROCEDURES
PREREQUISITE: ASM 110, 244 or department permission
Analysis of the components of an office information system. Emphasis on managerial techniques and strategies for controlling effective and efficient information flow, to analyze, design and implement proposed systems. Includes multimedia presentations, integration, and use of business microcomputer software.

330 Three Credits
BUSINESS COMMUNICATIONS
PREREQUISITE: Sophomore level courses, and the teacher’s examination for licensure requirements
Techniques for writing management-oriented internal and external communications. Emphasis on the planning, oral and written presentations, audience perceptions, data organization, media selection, preparation techniques for business letters, and an overview of reports. Includes hands-on experience with the Internet and presentation software.

499 Three Credits
SPECIAL SEMINAR IN BUSINESS SUBJECTS
PREREQUISITE: ACC 302, 233, 380; all freshman and sophomore level courses, and the teacher’s examination for licensure requirements
Instructional systems and materials for teaching business, office technology, and computer-related subjects.

ASTRONOMY - AST

201 Three Credits
GENERAL ASTRONOMY
PREREQUISITE: PHY 152
General overview of the astronomical sciences at the college physics level. The night sky, the Earth-Moon system, the solar system, the Milky Way galaxy, the system of galaxies and Cosmology. Instructional methods include lectures, multimedia presentations and exercises.

301 Three Credits
METHODS IN OBSERVATIONAL ASTRONOMY
PREREQUISITE: AST 201
Observational techniques of optical astronomy. The celestial sphere, naked-eyed observation and celestial system of coordinates. The use of the telescope and its auxiliary equipment. Observation of the sun, moon, planets and deep-sky objects. Astrogrography, photometry and spectrography using CCD cameras.

302 Three Credits
ASTROBIOLOGY
PREREQUISITE: AST 201
Study of origin and evolution of life on earth, exploration of the solar system, and probability of life in the solar system, in the universe, and communication with extraterrestrial life.

303 Three Credits
INTRODUCTION TO ASTROPHYSICS
PREREQUISITE: PHY 153; AST 201 or equivalents
Overview of physical fundamentals of astrophysics. Introduction to modern physics: special relativity, quantum mechanics, nuclear physics and statistical mechanics. Covers the content of practical applications in astrophysics topics. Instructional methods will include lectures, multi-media presentations and exercises.

401 Three Credits
STELLAR ASTROPHYSICS
PREREQUISITE: AST 303
Intermediate level study of the physics of stars, the sun, stellar models, origin and evolution, nucleosynthesis, and last stages in stellar evolution. Formulates a simple computer model of a star.

BIOLOGY - BIO

100 Three Credits
BIOLOGICAL SCIENCE
PREREQUISITES: ENG 101; MTH 103
COREQUISITE: BIO 100L
Study of the general principles and problems of biology, with special emphasis on the human organism, including anatomy, physiology growth, reproduction, and inheritance. The evolution and diversity among living things are discussed from an ecological perspective.

100L One Credit
BIOLOGICAL SCIENCE LABORATORY
COREQUISITE: BIO 100
Practical approach to understanding the nature of science. The exercises on cells, tissues, and organ systems are designed to help students understand the human systems.
HUMAN BIOLOGY
COREQUISITE: BIO 105L
Survey of the structure and function of the human body and the human life cycle with particular focus on reproduction, growth, and development.

HUMAN BIOLOGY LABORATORY
COREQUISITE: BIO 105
Laboratory includes dissection of preserved animals/structures, models and microscopic observations, slide/videos/tapes, computer-simulated dissections and experiments, and hands-on experiments.

GENERAL BIOLOGY
COREQUISITE: BIO 110L or Consent of Chair
Survey of basic concepts and principles with emphasis at the molecular and cellular levels of biological systems. Includes contemporary genetics, metabolism, and organ systems of representative plants and animals.

GENERAL ZOOLOGY
PREREQUISITE: BIO 110
COREQUISITE: BIO 110L or Consent of Chair
Biological concepts of animal life, including morphology, taxonomy, life histories, reproduction and distribution.

GENERAL BOTANY
PREREQUISITE: BIO 110
COREQUISITE: BIO 110L or Consent of Chair
Introductory study of the basic principles of botany, including comparative studies on morphology, physiology, genetics, ecology, and economic uses of major plants.

GENERAL ZOOLOGY LABORATORY
PREREQUISITE: BIO 110
COREQUISITE: BIO 160 or Consent of Chair
Biological concepts of animal life, including morphology, taxonomy, life histories, reproduction and distribution.

GENERAL BOTANY LABORATORY
PREREQUISITE: BIO 110
COREQUISITE: BIO 161L or Consent of Chair
Introductory study of the basic principles of botany, including comparative studies on morphology, physiology, genetics, ecology, and economic uses of major plants.

MICROBIOLOGY FOR THE HEALTH SCIENCES
COREQUISITE: BIO 163L or Consent of Chair
General survey of microorganisms that cause human diseases. The mechanisms of body defense and immunity to infectious agents are discussed.

MICROBIOLOGY FOR THE HEALTH SCIENCES LABORATORY
COREQUISITE: BIO 163 or Consent of Chair
Study of culture methods, microscopic sterilization, and aseptic techniques.

HUMAN ANATOMY AND PHYSIOLOGY
COREQUISITES: BIO 165L, 166L
One-year course consisting of an integrated study of the structure and function of the human body; BIO 165 is a lecture series on cells through the four major tissues, and BIO 166 presents lecture topics on the structure and function of organs and organ systems. (Must be taken in sequence).

HUMAN ANATOMY AND PHYSIOLOGY LABORATORY
COREQUISITES: BIO 165; 166 or Concurrent
Emphasis on hands-on activities aids such as computed managed instructions and hands-on experience with animal tissues.

HUMAN PHYSIOLOGY
PREREQUISITE: BIO 272 or Consent of the Instructor
Survey of the integration of functions in the human body, noting their structural relationships.
320 PATHOPHYSIOLOGY
PREREQUISITES: BIO 165 and 166
Introduction to the study of the normal physiology of various systems of the human body and how alterations in structure and function can initiate the onset of disease. Inherent in this course is a study of the adaptive capacity of the human body.

330 REVIEW OF HUMAN ANATOMY, PHYSIOLOGY AND MICROBIOLOGY FOR HEALTH PROFESSIONS
PREREQUISITES: BIO 166 and 163
COREQUISITE: BIO 330L or Consent of Chair
Study of the structure and function of the human body.

330L REVIEW OF HUMAN ANATOMY, PHYSIOLOGY AND MICROBIOLOGY FOR HEALTH PROFESSIONS LABORATORY
PREREQUISITES: BIO 166 and 163
COREQUISITE: BIO 330L or Consent of Chair
1 Credit

350 PARASITOLOGY
PREREQUISITE: BIO 110
COREQUISITE: BIO 350L or Consent of Chair
Study of symbiotic relationships between representatives that are dependent upon a symbiotic and the clinical and pathological implications inherent in such a relationship.

350L PARASITOLOGY LABORATORY
PREREQUISITE: BIO 110
COREQUISITE: BIO 350L or Consent of Chair
1 Credit

351 PRINCIPLES OF GENETICS
PREREQUISITES: BIO 160 and 161; CHM 222
COREQUISITE: BIO 351L or Consent of Chair
Study of the structure and properties of cells, the cellular relationships to the main types of tissue and histology of organs; the principles and methods of preparation of plant and animal tissues, and some techniques in histotechnology.

351L PRINCIPLES OF GENETICS LABORATORY
PREREQUISITES: BIO 160 and 161; CHM 222
COREQUISITE: BIO 351 or Consent of Chair
Introductory course dealing with the principles of heredity and variation in plants and animals, including man.

362 HISTOLOGY AND MICRO TECHNIQUE
PREREQUISITES: BIO 160 and 161
COREQUISITE: BIO 362L or Consent of Instructor
Study of the structure and properties of cells, the cellular relationships to the main types of tissue and histology of organs; the principles and methods of preparation of plant and animal tissues and some techniques in histotechnology.

364 SEMINAR AND COLLOQUIUM IN BIOLOGY
PREREQUISITE: Junior or Senior Standing or Consent of Instructor
Consideration of current research and development in biology, including reviews, reports, and discussions of investigations reported in scientific journals.

400 Forensic Molecular Biology
PREREQUISITE: Junior or Senior Standing or Consent of Instructor
Designed to provide students with the scientific background and hands-on experience on the molecular aspects of DNA forensics. Protocols and procedures currently used in DNA forensic tests will be performed, including DNA isolation from various sample sources, gel electrophoresis, PCR, STR analysis, and data interpretation. Relevant scientific journals will be consulted and articles discussed.

400L Forensic Molecular Biology Lab
One Credit

451 BIOLOGICAL INSTRUMENTAL TECHNIQUES
PREREQUISITES: CHM 221/221L and CHM 222/222L
Training and practice in various bio-instrumental techniques, including statistical analysis of data, respirometry, photo microscopy, spectrophotometry, chromatography, electrophoresis, and physiological measurements.

457 Evolution
PREREQUISITE: BIO 351 or Consent of Instructor
Discussion and lectures on the organic evolution of plants and animals.

459 General Physiology
PREREQUISITES: 16 semester hours of Biology and Organic Chemistry
COREQUISITE: BIO 459L or Consent of Chair
Discusses fundamental principles and properties of physiological processes common to animals.

459L General Physiology Laboratory
PREREQUISITES: 16 semester hours of Biology and Organic Chemistry
COREQUISITE: BIO 459L or Consent of Chair
Demonstrates fundamental principles and properties of physiological processes common to animals.

461 Plant Physiology
PREREQUISITES: BIO 161; CHM 322, 322L
COREQUISITE: BIO 461L or Consent of Instructor
Consideration of the physicochemical factors involved in plant growth with special emphasis on synthesis, water economy, transpiration, energy transfers, mineral nutrition, regulation, and the red, far-red reactions of phytochrome of seed plants.

461L Plant Physiology Laboratory
PREREQUISITES: BIO 161; CHM 322, 322L
COREQUISITE: BIO 461L or Consent of Instructor
Consideration of the physicochemical factors involved in plant growth with special emphasis on synthesis, water economy, transpiration, energy transfers, mineral nutrition, regulation, and the red, far-red reactions of phytochrome of seed plants.

469 Biochemistry
PREREQUISITES: CHM 222 or equivalent
COREQUISITE: BIO 461 or Consent of Instructor
Biochemical analysis of cellular function and consideration of the implications of the properties of cells, including the cell and its organelles, structural aspects and specificity, biochemistry of lipids, carbohydrates, and nucleic acids; regulation of cell metabolism; cellular basis of hormone action, and biochemical aspects of synthesis.

469L Biochemistry Laboratory
PREREQUISITES: CHM 222 or equivalent
COREQUISITE: BIO 461L or Consent of Instructor
Biochemical analysis of cellular function and consideration of the implications of the properties of cells, including the cell and its organelles, structural aspects and specificity, biochemistry of lipids, carbohydrates, and nucleic acids; regulation of cell metabolism; cellular basis of hormone action, and biochemical aspects of synthesis.

472 Cell Structure and Function
PREREQUISITES: BIO 160, 161; CHM 222, 222L
Introduction to biochemistry, cellular metabolism, and cellular ultrastructure as they relate to cell function.

474 Molecular Biology
PREREQUISITES: BIO 310; CHM 222 and 222L
Semi-quantitative introduction to chemical, physical or molecular aspects of biology. It is believed that through an interdisciplinary approach, science majors in general are given a firm background on which to build, and the course also enables students to acquire a fairly detailed understanding of biological phenomena.

474L Molecular Biology Laboratory
PREREQUISITE: Consent of the Instructor
Introduction to the basic techniques in recombinant DNA which encompasses the principles and practical aspects of molecular techniques through discussions, demonstrations, and hands-on experience, covering isolation of DNA, restriction enzyme digestion, gel electrophoresis, transformation of competent cells, nick translation, southern and northern blots, and DNA sequencing.

480 Introduction to Environmental Toxicology
PREREQUISITES: CHM 322, 322L
Multi-disciplinary course designed to focus on the importance of the electric approach to environmental toxicological studies. Examine the sources and types of environmental toxicant, the levels and modes of exposure, and their significant toxic hazard in the work place, the household, and the general environment.

482 Epidemiology
PREREQUISITE: BIO 310
Basic principles and methods of Epidemiology and the application to communicable and noncommunicable diseases, community health, and health services research. Reviews observational and experimental study design; methods and data analysis; and various indices of assessing morbidity, mortality, and population dynamics.

487 Ecological Toxicology
PREREQUISITE: BIO 271
COREQUISITE: BIO 487L and Consent of Chair
Study of the commonly used pesticides, their toxicity and implications for man and environment.

487L Ecological Toxicology Laboratory
PREREQUISITE: BIO 271
COREQUISITE: BIO 487 or Consent of Chair
Studies the use of pesticides, their toxicity and implications for man and environment.

490 Immunology of Toxins
PREREQUISITE: BIO 310
COREQUISITE: BIO 490L or Consent of Chair
Introduction to the specific and non-specific host mechanisms of defense as well as the humoral and cellular reactions.

490L Immunology of Toxins Laboratory
PREREQUISITE: BIO 310
COREQUISITE: BIO 490 or Consent of Chair
Special emphasis on the immune response of animals to infectious agents, microbial toxins, and environmental toxins.

492 Principles of Genetic Toxicology
PREREQUISITES: BIO 351; CHM 322 and 322L
General principles of toxicology as they relate to adverse genetic effects of environmental agents. Basic mechanism of action, involving the molecular and chemical basis, for mutagenic effects. Techniques for the detection and characterization of chemical mutagen will be included in the laboratory demonstrations.

494 Medical Entomology
PREREQUISITE: BIO 160
COREQUISITE: BIO 494L or Consent of Chair
Study of the taxonomy, morphology, behavior, and relationships of arthropods of medical importance, and arthropod-borne human diseases.

494L Medical Entomology Laboratory
PREREQUISITE: BIO 160
COREQUISITE: BIO 494 or Consent of Chair
Emphasis on the epidemiological aspects of the disease and the biological, chemical, and integrated methods of control of the arthropods.

495 Biostatistics
PREREQUISITES: BIO 110; MTH 153
Introduction to statistical methods of health sciences. The principles underlying basic methods of statistical analysis are examined, including elementary concepts of probability, descriptive statistics, and statistical estimation and testing. Special emphasis on the problems of interpreting data from experimental and observation studies.

496 Special Problems in Toxicology
PREREQUISITES: BIO 495; CHM 322 and 322L
Discussion and practical work sessions concerning the development of ideas and activities for specific experimental studies. The specific features include conversance with...
current methodology, initiation of independent and original protocols as a toxicological tool.

497 Two Credits

INTRODUCTION TO RESEARCH
PREREQUISITE: Junior or Senior Standing
Introduction to independent experimental work under the guidance of staff members. Provisions for Honors and undergraduate research participation projects and investigations.

499 Three Credits

TISSUE AND CELL CULTURE
PREREQUISITE: Consent of Instructor
COREQUISITE: BIO 499L
Study of the basic protocols currently employed in the initiation and maintenance of cell lines for in vitro studies, including cell structure, cell types and tissues, behavior of cells in culture, and environmental factors that modulate cell growth.

499L One Credit

TISSUE AND CELL CULTURE LABORATORY
PREREQUISITE: Consent of Instructor
COREQUISITE: BIO 499
Experience in fundamental aspects of handling cell lines.

500 Three Credits

BIOLICAL ASPECTS OF AGING
Study designed for gerontology students concerning the scientific basis of the causes, effects, mechanisms, and longevity of living organisms.

501 Three Credits

HISTORY OF BIOLOGICAL CONCEPTS
PREREQUISITES: BIO 110 and BIO 474
Study of significant developments in the field of biology that influenced modern biological concepts. Discoveries and their impact on technological advances are discussed.

502 Three Credits

MODERN BIOLOGY
PREREQUISITES: BIO 110 or equivalent, and CHM 321, 322
Fundamental concepts of biology at the organismal, cellular, and molecular levels. Emphasis on molecular biology of cell function and organization; topics include animal cells, assembly cell structure, principles and mechanisms of inheritance, the conformations and dynamics of nucleic acids and their interactions with proteins, and molecular and cell biology of growth regulation.

510 Three Credits

EXPERIENCE IN BIOLOGY
PREREQUISITES: BIO 110 and BIO 501
Theory and practice of selected biological and biochemical techniques of current importance to molecular biology including a coordinated succession of experiments employing modern laboratory tools to examine significant biological problems.

520 Three Credits

SPECIAL PROBLEMS IN BIOLOGY:
PREREQUISITE: BIO 110
Discusses techniques of current biology research in such areas as molecular biology, virology, immunology, microbiology

BUILDING CONSTRUCTION/TECHNOLOGY - BCT

162 Three Credits

MATERIALS OF CONSTRUCTION
Survey on construction materials, their characteristics, advantages, and limitations. Emphasis on the use of these materials in various building systems, including costs and durability.

260 Three Credits

BUILDING CODES AND SPECIFICATIONS
Emphasis on regional and national building codes, history of building regulations, zoning and its influence on construction and business, including specifications and accepted on costs, and durability.

262 Three Credits

METHODS OF BUILDING CONSTRUCTION I
Emphasis on the design planning and methods of sewage and electrical systems, as well as local and national building codes and techniques.

263 Three Credits

FUNDAMENTALS OF SURVEYING
Principles and practices of using basic surveying instruments, error analysis, and note keeping. (Meets 4 hrs. per week)

264 Three Credits

INTERMEDIATE SURVEYING
PREREQUISITE: BCT 263
Practice of obtaining horizontal, vertical, and angular measurements; azimuths and bearing; traverse surveys and computations; triangulation of ordnance precision; stadia; land area calculation, and construction surveys. (Meets 4 hrs. per week)

265 Three Credits

ARCHITECTURAL DETAILS
PREREQUISITE: TMD 150
Study of building construction components for residential buildings and light commercial construction. (Meets 6 hrs. per week)

266 Three Credits

ARCHITECTURAL DRAFTING
Study of building construction drawings for residential buildings and light commercial construction. (Meets 6 hrs. per week)

360 Three Credits

METHODS OF BUILDING CONSTRUCTION II
PREREQUISITE: BCT 262
Comprehensive study of building construction techniques in the construction industry. Emphasis on residential and commercial type structures. Field trips are included.

364 Three Credits

STEEL STRUCTURES
PREREQUISITES: TMD 345 and 345L
Theory and practice in the design and fabrication of structural steel in conformance with current codes and practices. (Meets 4 hrs. per week)

365 Three Credits

CONCRETE STRUCTURES
PREREQUISITES: TMD 345 and 345L
Theory and practice in the design of concrete structures in conformance with current codes and practices.

366 Three Credits

TIMBER STRUCTURES
PREREQUISITES: TMD 345 and 345L
Theory and practice in the design and fabrication of structural timber in conformance with current codes and practices.

370 Three Credits

COST ESTIMATES AND QUALITY CONTROL I
PREREQUISITE: BCT 266
Surveys methods of taking quantities from plans, preparation of unit price and lump sum estimates for structural units, including material, expediting, job supervision, site selection, and progress charts and graphs.

372 Three Credits

BUILDING CONSTRUCTION PRACTICES
Designed to provide practical experiences using the latest techniques in working with masonry, wood, electrical, plumbing, steel and concrete structures.

376 Three Credits

SOIL MECHANICS
COREQUISITE: BCT 376L
Study of the engineering properties of soil and how those properties affect behavior, such as the movement of water through soil, including ground water contamination, stresses in a soil mass, volume change, shear strength, subsurface investigations and lateral earth pressure.

376L One Credit

SOIL MECHANICS LABORATORY
COREQUISITE: BCT 376
Study of the skills necessary to perform soils testing.

462 Three Credits

PROBLEM ANALYSIS AND PLANNING
PREREQUISITES: BCT 260 and 370
Consideration given to individual problem solving and analysis in specialized areas.

464 Three Credits

ORGANIZATION AND SUPERVISION OF CONSTRUCTION
PREREQUISITE: BCT 462
Study of construction methods and organization; layout and planning; material requisitioning and progress scheduling, including basic training in estimating quantities of materials from plans and specifications, approximate cost data, fixed and operating cost in major construction works.

466 Three Credits

STRUCTURAL PLANNING AND DESIGN
PREREQUISITE: BCT 462
Comprehensive study of construction documents for group project, including preparation of working drawings, specifications, scheduling and cost estimates for project. (Meets 6 hrs. per week)

BUSINESS ADMINISTRATION - BAD

175 Three Credits

INTRODUCTION TO BUSINESS
Introduction to the world of business and the integrative nature of business activities, business topics germane to both corporate and entrepreneurial environment, including the impact of globalization. Emphasis on the decision making process in various interdepartmental business functional areas.

184 Three Credits

ESSENTIALS OF MICROCOMPUTING
Overview of computer information systems that introduces computer hardware, software, procedure, and explores their integration and application in business. The fundamentals of computer problem solving, programming in higher-level programming language and microcomputer software packages are discussed and applied.

453 One Credit

BUSINESS SEMINAR
PREREQUISITE: Junior or Senior Standing
Discusses special topics in business and modern business practices in seminar form. Speakers from corporate and academic world present seminars. Library research and attendance to seminars required.

CHEMISTRY - CHM

100 Three Credits

CHEMISTRY: MAN AND ENVIRONMENT
PREREQUISITES: ENG 101; MATH 103
COREQUISITE: CHM 100L
Survey of the principles and application of chemistry, designed for non-science major with limited background in science and mathematics. Includes topics in general, organic, and biochemistry designed to aid the student in understanding the chemical factors in our technological society.

101L One Credit

CHEMISTRY: MAN AND ENVIRONMENT LABORATORY
COREQUISITE: CHM 100
Introduction to laboratory techniques in chemistry.

119 Three Credits

BASIC CONCEPTS IN CHEMISTRY
Introduction to the basic concepts necessary for an understanding of chemistry. These fundamental concepts are the foundation for this course and are more fully developed in later chemistry courses. Designed for students with no chemistry background.

119L, 120L One Credit Each

GENERAL CHEMISTRY FOR NON-SCIENCE MAJORS
COREQUISITES: CHM 119L, 120L
Development of the principles of chemistry in such a way that delivers the important role of chemistry in daily living. Must be taken in sequence. (For non-science majors).

119L, 120L One Credit Each

GENERAL CHEMISTRY LABORATORY
COREQUISITES: CHM 119, 120
Study of the basic laboratory methodology in the form of experiments which relate to technology and daily experiences. Must be taken in sequence.

200 Three Credits

CHEMISTRY FOR LIFE
PREREQUISITE: High School Chemistry or CHM 100
COREQUISITE: CHM 200L
Survey of the principles and applications of chemistry designed to emphasize the relationship of chemistry to life. Includes a brief review of general chemistry, a survey of organic and biochemistry, and applications of chemistry to life processes and environmental studies.

200L One Credit

CHEMISTRY FOR LIFE LABORATORY
COREQUISITE: CHM 200
Laboratory demonstrates concrete examples of the concepts.
CHEMISTRY – CHM (continued)

215, 216 Three Credits Each

CHEMISTRY

COREQUISITE: CHM 215L, 216L

Study of the general concepts of chemistry. Emphasis on the relationship between science and society. Required of all science majors. Must be taken in sequence.

215L, 216L One Credit Each

CHEMISTRY LABORATORY

COREQUISITE: CHM 215, 216

Introduction to laboratory techniques in chemistry.

221, 222 Three Credits Each

GENERAL CHEMISTRY I, II

COREQUISITES: CHM 153L; CHM 221L, 222L

Emphasis on the theoretical principles necessary for an understanding of the nature of matter and the physical and chemical changes which it undergoes. High school chemistry is not required but desirable. Good understanding of algebra is desirable. Must be taken in sequence.

221L, 222L One Credit Each

GENERAL CHEMISTRY LABORATORY I, II

COREQUISITES: CHM 221, 222, 223, and 224

Experimental chemistry utilizing methods of separation, identification, and purification of mixtures. Emphasis on thermochromical and chemical equilibria concepts through analysis of experimental data. Must be taken in sequence.

223, 224 Four Credits Each

GENERAL CHEMISTRY I, II

PREREQUISITE/COREQUISITE: MTH 153

General Chemistry for science majors emphasizing theoretical principles necessary for understanding the nature of matter and the changes it undergoes. Good algebra skills are required because of the quantitative nature of much of the work. Includes problem-solving practice and inclusion of special chemistry topics.

312 Three Credits

INTRODUCTION TO ORGANIC CHEMISTRY

PREREQUISITE: CHM 222 or 120L

Study of organic nomenclature, structure of organic compounds, the classes of organic compounds, and the reactions of organic molecules.

312L One Credit

ORGANIC CHEMISTRY LABORATORY

PREREQUISITE: CHM 222L or 120L

Introduction to the techniques of purification, synthesis, and analysis used in the study of organic chemical reactions. Material is chosen to illustrate reactions and theoretical material presented in CHM 312.

317 Three Credits

INTRODUCTION TO BIOCHEMISTRY

PREREQUISITE: CHM 312L

Introduction to the structure of molecules in biochemical systems and the reactions involved in their metabolism.

318L One Credit

BIOCHEMISTRY LABORATORY

PREREQUISITE: CHM 312L

Introduction to biochemical techniques, including spectroscopic analysis, study of enzyme activity, and isolation and characterization of classes of biomolecules.

321, 322 Three Credits Each

ORGANIC CHEMISTRY I, II

PREREQUISITE: CHM 222 or 224

COREQUISITES: CHM 222L, 322L

Introduction to the chemistry of carbon-containing compounds, with emphasis on the relationship between the structure of organic molecules and their chemical reactions. Designed for science majors, including pre-med. Must be taken in sequence.

321L, 322L Two Credits Each

ORGANIC CHEMISTRY LABORATORY I, II

PREREQUISITE: CHM 222

COREQUISITE: CHM 321, 322

Laboratory course designed to teach modern laboratory procedures and techniques and to illustrate the reactions and theoretical material presented in CHM 321, 322. Must be taken in sequence.

323L, 324L Two Credits Each

SYNTHESIS AND ANALYSIS IN ORGANIC CHEMISTRY

PREREQUISITE: CHM 321L

COREQUISITE: CHM 322

Study of techniques of modern organic synthesis and the analysis of reactions and reaction products with emphasis on modern laboratory techniques, including chromatography and spectroscopic analysis. For chemistry majors (others by permission of the instructor).

323L, 324L Three Credits

ANALYTICAL CHEMISTRY I

PREREQUISITES: CHM 222 or 224; MTH 153

COREQUISITE: CHM 331L

Study of volumetric and gravimetric methods of analysis with emphasis on chemical equilibria, including acid-base, precipitation, oxidation-reduction, and complex methods of analysis.

323L, 324L Two Credits

ANALYTICAL CHEMISTRY I LABORATORY

COREQUISITE: CHM 331

Practice of volumetric and gravimetric methods of analysis, including the use of instruments such as pH meters and electroanalyzers.

332 Three Credits

ANALYTICAL CHEMISTRY II

PREREQUISITE: CHM 331; PHY 152

COREQUISITE: CHM 332L

Study of instrumental methods of analysis, including electrochemical, spectroscopic, chromatographic, thermal, and kinetic methods.

332L Two Credits

ANALYTICAL CHEMISTRY II LABORATORY

COREQUISITE: CHM 332

Methods of analysis employing electrochemical techniques, spectrophotometry, chromatography, microprocessor analyzers, and thermal analyzers.

345 Three Credits

MATHEMATICAL METHODS & LOGIC FOR THE PHYSICAL SCIENCES

PREREQUISITE: MTH 252

Application of differential equations, vector analysis, determinants and functions to problems encountered in the physical sciences. Emphasis on practical problem-solving skills.

351, 352 One Credit Each

SEMINAR

Presentation and discussion of current topics in all areas of chemistry. Required of Junior chemistry majors.

361, 362 Three Credits Each

PHYSICAL CHEMISTRY I, II

PREREQUISITES: MTH 251; PHY 153 for CHM 361; MTH 252 for CHM 362

COREQUISITES: CHM 331, 345; MTH 252

Quantitative study of structure and physical properties of matter including study of the laws governing chemical interaction and the foundations upon which these laws are based. Covers energy changes accompanying physical and chemical changes. Must be taken in sequence.

363L Two Credits

PHYSICAL CHEMISTRY LABORATORY

COREQUISITE: CHM 361, 362

Typical physical/chemical measurements which seek to refine computational skills and experimental techniques. Instrumentation associated with spectroscopy, kinetics, mass spectrometry, and molecular characterization regularly employed.

370 Three Credits

INDUSTRIAL CHEMISTRY

PREREQUISITE: Approval of the Chemistry Department

Seminars supervised by visiting industrial chemists as well as the departmental faculty, including internship for cooperative training at an industrial chemical company with co-op assignment opportunities.

397, 398 One Credit Each

INTRODUCTION TO RESEARCH

PREREQUISITE: Approval of the Instructor

Investigation of current problems in chemistry, supervised by one of the members of the Chemistry Department. (5 hours lab per week required for one semester credit hour.)

431, 432 Three Credits Each

BIOCHEMISTRY I, II

PREREQUISITES: CHM 322, 362

In-depth study of the reactions occurring in living systems, designed for science majors (especially students intending advanced study in the health sciences). Topics include molecular architecture, molecular energetics, interactions of biomolecules, intermediary metabolism, mass transport in biological systems, and molecular genetics.

431L, 432L Two Credits Each

BIOCHEMISTRY LABORATORY I, II

PREREQUISITE: CHM 322L or CHM 332L

Emphasis on the procedures and operations of modern instrumentation needed for isolation, purification, and study of biomolecules including modern chromatography techniques, gel and paper electrophoresis, ultra centrifugation, spectroscopic techniques, etc. Techniques are applied to isolation of enzymes, other proteins, nucleic acids, and the study of enzyme kinetics and enzyme-catalyzed reactions in several systems.

433 Three Credits

PATHOLOGICAL BIOCHEMISTRY

PREREQUISITE: CHM 432

Study of the biochemical principles and mechanisms as they apply to the disease state.

451, 452 One Credit Each

SEMINAR

Presentation and discussion of current topics in all areas of chemistry. Required of all senior chemistry majors.

461L Two Credits

CHROMATOGRAPHY

PREREQUISITE: CHM 332L

Problem solving in separation of mixtures using gas, liquid, column and thin-layer chromatography.

462L Two Credits

SPECTROSCOPY

PREREQUISITE: CHM 332L

Problem solving in molecular spectroscopy using common techniques in infrared spectroscopy, nuclear magnetic spectroscopy, and ultraviolet-visible spectroscopy.

471 Three Credits

TOXICOLOGY

PREREQUISITE: CHM 322 or Permission of the Instructor

Survey of effects of poisons, including study of dose-response phenomena, the nature of toxic effects, and the absorption, distribution, metabolism, and excretion of toxic materials.

473 Three Credits

ADVANCED INORGANIC CHEMISTRY

PREREQUISITE: CHM 362

Study of chemical bonding, molecular structure, coordination compounds, and descriptive inorganic chemistry.

476L Two Credits

ADVANCED INORGANIC CHEMISTRY LABORATORY

PREREQUISITE: CHM 332L

Techniques for synthesis and characterization of transition metal coordination complexes. Utilize methods such as ion exchange chromatography, molar conductivity, electronic absorption, infrared, and other magnetic spectral methods. The format is that of a unified project rather than a series of separate, unrelated experiments.

475 Three Credits

ADVANCED ORGANIC CHEMISTRY

PREREQUISITE: CHM 322

In-depth study of organic reaction mechanisms with emphasis on physical measurements as a means of determining structure and mechanisms. The course is designed for students planning advanced study in chemistry, biology, or medical sciences.

476 Three Credits

QUALITATIVE ORGANIC ANALYSIS

PREREQUISITE: CHM 322L or CHM 332L

Introduction to a wider range of laboratory techniques and consideration of classical wet analysis.

477 Three Credits

SCIENTIFIC COMMUNICATION

Comprehensive survey of scientific literature with emphasis on personal record keeping, writing strategies, and appropriate writing styles for scientific writing. This class is open to all seniors interested in improving their writing skills.

478 Three Credits

INTRODUCTION TO INORGANIC SPECTROSCOPY

Introduction to the basic theoretical and practical applications of spectroscopic methods (spectroscopy) in Inorganic Chemistry. Topics include Nuclear Magnetic Resonance Spectroscopy; Electron Spin and Nuclear Quadrupole Resonance Spectroscopy; Mössbauer Spectroscopy; Mass Spectroscopy; and Diffraction Methods.
COMMUNICATION SCIENCES AND DISORDERS PROGRAM - CSD

101 Three Credits
ORAL COMMUNICATION ENHANCEMENT
Orientation course introduces students to various methods and techniques for improving their oral communication (speech) and listening skills. Emphasis on reading and writing skills. Students' speech language patterns and hearing acuity are professionally assessed by certified speech language pathologists and audiologists. 

116 One Credit
ORIENTATION TO COMMUNICATION SCIENCES AND DISORDERS
Introduction to the professions of speech-language pathology and audiology with emphasis on the role of the American Speech-Language Hearing Association and its code of ethics; certification procedures and professional nomenclature. Study of various speech-language and hearing disorders, including a discussion of academic and research aspects of speech-language pathology and audiology. (web-based course).

211 Three Credits
PHONETICS
PREREQUISITES: ENG 101, 102 (with grades of C or better)
Scientific study of English speech sounds, production, reception and symbolic use, including transcribing words and sentences with use of phonetics.

212 Three Credits
SPEECH AND LANGUAGE DEVELOPMENT
PREREQUISITES: ENG 101, 102
Study of the normal processes of speech and language development with emphasis on language universals and the linguistic systems of sound patterns, word combining, meanings and sentence structure. Examines relationship between cognition and language. The latter portion of the course introduces students to some aspects of disordered speech and language development.

213 One Credit
USE OF COMPUTERS AND OTHER INSTRUMENTATION IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: CSC 150 (or equivalent course) and CSD 116 (with grades of C or better).
Study of basic electronics, computer hardware design and software programs germane to the fields of speech-language pathology and audiology.

218 Three Credits
ANATOMY AND PHYSIOLOGY OF THE SPEECH MECHANISM
PREREQUISET: BIO 105, or 165 (with grade of C or better)
Study of the basic structure of the organs that function in the production of speech with emphasis on the processes of respiration, phonation, resonance, and articulation, including neurological aspects of speech and language production. (web-based course)

311 Three Credits
METHODS AND MATERIALS IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: CSD 116, 212 (with grades of C or better).
Introduction to contemporary diagnostic and therapeutic methods and materials used by speech-language pathologists and audiologists in schools, hospitals, clinics and rehabilitation settings. Requirements include construction of a "functional workbook (kit)" consisting of diagnostic and therapy materials, clinical activities, and tests, and demonstration of the use of their materials in clinical practioner activities.

312 Three Credits
PHONOLOGICAL, ARTICULATORY AND RELATED LANGUAGE DISORDERS
PREREQUISITES: CSD 116, 211 and 212 (with grades of C or better).
Comprehensive study of the phonological and articulatory processes of speech, and associative disorders of oral language. Students are required to administer and interpret the results of various tests (i.e., phonological, articulation, oral language, etc.). In addition, students observe diagnostic and therapeutic procedures conducted by certificated speech-language pathologists working with speech-impaired children and adults.

313 Three Credits
INTRODUCTION TO AUDIOLOGY AND HEARING SCIENCES
PREREQUISITES: MTH 105; BIO 105 or 165 (with grades of C or better).
Emphasis on the anatomy and physiology of the hearing mechanism and the disorders that can affect it. Basic audiometric techniques and procedures are taught, as well as the interpretation of hearing test results.

315 Three Credits
NEUROGENIC AND OTHER ORGANIC COMMUNICATION DISORDERS
PREREQUISITES: CSD 116, 218, 312 (with grades of C or better).
Introduction to the basics of neurology as they pertain to the communication processes. Overview of common neurogenic disorders of communication, including aphasia, apraxia, dysarthria, dementia and other linguistic disorders associated with traumatic brain injury, aging, substance abuse, etc.

320 Three Credits
VOICE AND SPEECH SCIENCES
PREREQUISITES: MTH 105; BIO 105 or 165; CSD 116, 218 (with grades of C or better).
Study of the human voice and speech production processes. The physics of sound are explored, as well as the respiratory, laryngeal, resonatory and articulatory aspects of voice and speech. Diagnostic and treatment procedures for voices and speech disorders are also reviewed. Opportunities to conduct supervised field research activities are provided.

413 Three Credits
RESEARCH METHODS IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: MTH 250; ENG 303 (with grades of C or better).
Independent research on a topic selected by the student and approved by the student's departmental advisor and completed under the guidance of that advisor. Study of the appropriate methods and procedures for data collection, analysis, interpretation and reporting. Students are expected to approach this course with the intention of formally presenting their findings (e.g., presenting at a conference or publishing (e.g., professional publication) their research findings.

414 Three Credits
VOICE AND FLUENCY DISORDERS
PREREQUISITES: CSD 116, 212, 320 (with grades of C or better).
Introduction to the etiological, evaluative, or diagnostic and therapeutic procedures used with persons with voice disorders and various types of verbal dysfluency behaviors.

415 Three Credits
CLINICAL PROCEDURES IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: CSD 116, 312, 311, and 313 (with grades of C or better)
Study of the philosophy underlying clinical procedures for speech-language pathology for observing communication behaviors, recording data, establishing effective reinforcement techniques, and therapeutic routines are explored. Students are expected to accumulate 15-20 hours of supervised clinical observations to satisfy the preliminary requirements for ASHA certification.

416 Three Credits
REHABILITATION OF HEARING DISORDERS
PREREQUISITE: CSD 313 (with grades of C or better)
Current procedures in aural rehabilitation, including speech reading, hearing conservation, hearing aid selection and auditory training are studied for both the hard of hearing and deaf populations from both habilitative and rehabilitative perspectives.

417 Three Credits
CLINICAL PRACTICUM IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: CSD 315, 414, and 415 (with grades of C or better).
Clinical Practicum provides majors who have satisfactorily completed all academic prerequisites experience in offering direct supervised clinical services to persons with speech, language and/or hearing disorders. These services are rendered primarily through the NSU Speech, Language and Hearing Center located on campus, although external practicum experiences may also be available. Majors refine their therapeutic skills, as well as report writing skills for diagnostic reports, initial therapy plans, daily therapy plans, and progress reports. Interviewing and counseling procedures are reviewed. Students are expected to accumulate 20-30 hours of supervised clinical observations to satisfy the preliminary requirements for ASHA certification.

418 One Credit
SEMINAR TOPICS IN COMMUNICATION SCIENCES AND DISORDERS
PREREQUISITES: CSD 116 and 415 (with grades of C or better).
Seminars on subjects pertaining to current issues facing speech-language pathologists and/or audiologists are presented. Subjects for discussion and presentation are introduced through collaboration between students and instructors. (web-based course.)

420L One Credit
DIGITAL LOGIC LAB
PREREQUISITES: ELT 212, 212L
COREQUISITE: CIT 204L
Study of combinational logic and sequential logic. Combinational logic includes number systems, Boolean algebra, Karnaugh maps, truth tables, coding, switching circuits analysis and design. Sequential logic portion includes flip flops, latches, sequential circuit analysis and design, counters, and shift registers

420L One Credit
DIGITAL LOGIC LAB
PREREQUISITES: ELT 212, 212L
COREQUISITE: CIT 204L
Practical experience in designing, building, and testing digital circuits and methods.

304 Three Credits
DIGITAL SYSTEM DESIGN
PREREQUISITES: CIT 204, 204L
CIT COREQUISITE: CIT 304L
Study of the building blocks of digital system design: encoders, decoders, comparators, multiplexers, demultiplexers, shift registers, adders, subtractors, arithmetic logic unit, programmable logic devices and an introduction to microprocessors.

304L One Credit
DIGITAL SYSTEM DESIGN
PREREQUISITES: CIT 204, 204L
CIT COREQUISITE: CIT 304L
Practical experience in building, and testing digital systems and methods with emphasis on programmable logic devices programming and applications

305 Three Credits
COMPUTER ORGANIZATION
PREREQUISITES: CSC 150; CIT 204, 204L
Study of microcomputer operating systems with emphasis on M/S-DOS, utility and diagnostic software, virus protection, preventative maintenance, data protection and recovery, computer architecture and design.

305L One Credit
COMPUTER ORGANIZATION LAB
PREREQUISITES: CSC 150; CIT 204, 204L
Practical experience in DOS commands, windows, utility and diagnostic software and data protection and recovery.

315 Three Credits
MICROPROCESSORS
PREREQUISITES: CIT 204, 204L; CIT 305S
Study of the microprocessor as a programmable device. The 8086/8088 family and microcontroller concepts are examined with primary emphasis on the 80826. Examination of the instruction set program to render the microprocessor is covered, and applications using the assembler program will be studied.
COMPUTER INFORMATION TECHNOLOGY - CIT (continued)

334 ELECTRO-MECHANICAL COMPONENTS PREREQUISITE: CIT 150; ELT 113
Introduction to drive relays, cam-operated switches, electro-mechanical clutching mechanisms, recording ‘writing’ mechanisms, accumulating mechanisms, control and timing of electro-mechanical systems.

335 PROGRAMMABLE LOGIC CONTROLLERS (PLC’s) PREREQUISITE: MTH 153
Introduction to electrical control devices, control diagrams, and programmable logic controllers (PLC’s) with emphasis on PLC programming and analysis.

432 COMPUTER INTERFACES AND PERIPHERAL DEVICES PREREQUISITE: CIT 304, 304L, 315
Study of computer interfaces and peripheral devices, the programming, operation, and interfacing of the microprocessor, and the programming/operation of the numeric co-processor, which provide an understanding of applications such as control systems, video graphics, and computer-aided design (CAD) with emphasis on The Advanced Intel Microprocessor Family.

434 COMPUTER NETWORKS TECHNOLOGY PREREQUISITE: CIT 305 or Instructor’s approval
Introduction to the administration of local area networks with emphasis on management users of workstation and other system resources, including the Internet and internets using other techniques.

490 SENIOR PROJECT PREREQUISITE: CIT 314, 314L; Senior standing
Selection and completion of a project under faculty supervision conducted as an individual or small-group design project, including determining customer requirements, considering design alternatives, issuing a formal project proposal, and implementing the proposal. Software scheduling tools are used extensively. The course concludes with a report and demonstration of functionality of individual hardware and software design blocks. Projects are common problems graduates must solve in their field of employment.

COMPUTER SCIENCE - CSC

150 COMPUTER CONCEPTS AND APPLICATIONS
Introduction to computers and information processing. Primary emphasis is placed on three standard applications: Word Processing, Spreadsheet, and Data Base. Extensive laboratory experiences and hands-on exercises using the microcomputer laboratory are mandatory.

151 INTERNETWORKING I PREREQUISITE: Basic computer literacy, and awareness of the Internet (Network Certification Course)
Study of network terminology and protocols, local-area networks (LAN's), wide-area networks (WAN's), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router protocol, Internet, Internet Protocol (IP) addressing, and network standards.

152 INTERNETWORKING II PREREQUISITE: CSC 151 (Network Certification Course)
Study of initial router configuration, Cisco IOS Software management, routing protocol configuration, TCP/IP, and access control lists (ACL's). Develop skills on how to configure a router, managing Cisco IOS Software, configuring routing protocol on routers, and set the access controls to control the access to routers.

160 VISUAL BASIC PROGRAMMING PREREQUISITE: High School Algebra

169 INTRODUCTION TO COMPUTER SCIENCE PREREQUISITE: High School Algebra
Study of the fundamental concepts of the discipline with emphasis on information representation, algorithms and problem solving, computer hardware and software, data representation and the impact of computers in society.

170 COMPUTER PROGRAMMING I PREREQUISITE: MTH 151 or equivalents; CSC 169
Introduction to programming and problem solving in an object-oriented language with emphasis on basic programming constructs, arrays, debugging, software engineering practices, and the fundamentals of file handling.

192 INTRODUCTION TO THE INTERNET PREREQUISITE: Any computer literacy course
Introduction to the concepts, software, data, and issues associated with the use of networked information. Internet topics include local network access, electronic mail, transferring files from other network sites, network news, and network hypermedia (World Wide Web and Netscape).

195 INTERNET PROGRAMMING WITH JAVA PREREQUISITE: CSC 192
Introduction to high level internet programming techniques and Java with emphasis on internet programming basics for creating static Web pages and dynamic Web pages in HTML and XML through the addition of scripts. Utilize the latest Java Development Kit to create Java applets and stand alone Java applications for the Internet deployment.

200 ADVANCED COMPUTER CONCEPTS PREREQUISITE: Any computer literacy course
Advanced study of electronic research and presentations, utilizing the Internet and World Wide Web. Primary emphasis on E-Mail, Search Engines, News Groups, and Presentation Tools. Extensive laboratory assignments and hands-on exercises using the microcomputer laboratory are mandatory. A formal presentation using presentation tools is required.

210 DISCRETE STRUCTURES PREREQUISITE: CSC 260; MTH 251
Introduction to discrete mathematics that are important for computer science. Topics include logic, sets, functions, relations, algorithms, counting methods, and graph theory.

215 THEORY OF COMPUTATION PREREQUISITE: CSC 210
Introduction to the areas of discrete mathematics that are important for computer science. Topics include logic, sets, functions, relations, algorithms, counting methods, and graph theory.

225 JAVA APPLICATIONS PROGRAMMING PREREQUISITE: CSC 210
Introduction to the core JAVA language with emphasis on applications development using the latest JAVA class libraries such as Swing, JavaBeans, Java2D, Java3D. This course is designed for students who are familiar with object-oriented programming in C++ and the fundamentals of the World Wide Web.

230 PROGRAMMING IN C++ PREREQUISITE: CSC 210
Introduction to the techniques used for designing, implementing, and testing human-computer interfaces, implementing user interfaces, techniques and tools for event driven programming, testing and evaluation of user interfaces.

235 SOFTWARE ENGINEERING PREREQUISITE: CSC 260
Survey of programming languages such as FORTRAN, PL/1, AGOL, Pascal, APL, SNOBOL, Ada, Prolog, and LISP with emphasis on data structures and storage, control structures, execution environment, input/output, and the syntax and semantics of the languages.

239 ADVANCED COMPUTER CONCEPTS PREREQUISITE: CSC 260
Survey of computer hardware and software designs, including transmission media, countermeasures, risk analysis, security administration, legality and ethics, and computer forensics.
COOPERATIVE EDUCATION - CED

290 One Credit
CAREER DEVELOPMENT AND LEADERSHIP SEMINAR
Study of resume writing, interviewing, goal setting (Visioning), leadership and job search strategies for internship, co-op and permanent placement. Upon completion, the student is equipped with all the necessary tools required to obtain professional and personal success.

350 One Credit
COOPERATIVE EDUCATION (ACTUAL CO-OP ASSIGNMENT)
Required for all students who have secured a cooperative work assignment on their own, through the department or through the Cooperative Education office to complete the appropriate forms. At this time, the student receives the criteria that must be met to receive academic credit.

350 One Credit
COOPERATIVE EDUCATION (ACTUAL CO-OP ASSIGNMENT)
Required for all students doing their second co-op assignment. Continuation of the previous assignment or a more advanced work experience. The student must also register for this course and come to the Cooperative Education office to complete the appropriate forms. At this time, the student receives the criteria that must be met to receive academic credit.

CRIMINAL JUSTICE - CJS

201 Three Credits
INTRODUCTION TO CRIMINAL JUSTICE
Study of systematic analysis of the functions of the police, courts, and corrections in dealing with lawbreakers with emphasis on basic theories and empirical research findings.

221 Three Credits
JUVENILE DELinquENCY
Systematic analysis of juvenile delinquency as a major social problem in American society with emphasis on the prevention and control of delinquency, the cause of delinquency, and the treatment of juveniles in the juvenile justice system. Introduces and analyzes classical works and empirical findings.

225 Three Credits
LAW ENFORCEMENT
Focuses on the police as an official societal agency of social control. Provides understanding of the role of the police in reducing and promoting crime. Surveys the organization of police departments, as well as the recruitment and socialization of police officers.

253 Three Credits
INTRODUCTION TO CORRECTIONS
Examines various attempts to control crime and delinquency by diverting the potential and actual offender into law-abiding activities. Provides a better understanding of contemporary correctional activities in the United States through historical and cross-cultural information about formal and informal, legal and extralegal, and institutional and community-based programs.

310 Three Credits
CRIMINOLOGY
Focuses on the scientific study of criminal behavior in contemporary industrial-urban societies. Systematic attention is given to social, economic, and cultural factors associated with the causes of crime, prevention and control of crimes, and treatment of criminals. Presents a systematic analysis of classical theories, innovative strategies, and empirical studies.

313 Three Credits
AMERICAN COURT SYSTEMS
Introduction to the operation of the judicial court system with emphasis on the police, agents of the Federal Bureau of Investigation, the Treasury Department, and other agencies, the prosecutor, the courts, and institutions, special treatment programs, and probation and parole offices. Analysis of problems in the administration of justice, such as overcrowding, delays, discrimination, and the role of negotiations in the sentencing process.

315 Three Credits
SOCIology OF DRUG USAGE
Examines facts and theories of drug usage in different cultures, focuses primary attention on contemporary United States. Includes medical aspects of different kinds of drugs and physiological effects; legal aspects of the origins of criminal drug laws and the consequences of drug use; epidemiological aspects of the sociopsychological factors as to why persons use and abuse drugs; and economic aspects including prevention and rehabilitation programs.

BUSINESS SCIENCES - DSC

270 Three Credits
TOTAL QUALITY MANAGEMENT
PREREQUISITES: DSC 270 and Junior Standing
Introduction to quality management in manufacturing and service organizations with emphasis on the evolution of quality movement worldwide, TQM and ‘‘Quality First’’ Paradigm. Students are exposed to quality principles from a global perspective. The case study approach is used to examine quality planning and implementation in all types of organizational, especially those that won the MBNQA.

276 Three Credits
STATISTICS AND QUANTITATIVE METHODS
PREREQUISITES: MTH 132; DSC 270; Junior Standing
Introduction to regression techniques and analysis of variance in decision-making; contingency tables, decision analysis, management science models: decision-making process: linear programming, transportation, assignment and network models; simple waiting line problems and use of simulation.

370 Three Credits
OPERATIONS MANAGEMENT
PREREQUISITE: BAD 376
Analysis of the economic problems of operations management, design of operating systems, forecasting, capacity planning, layout of facilities, materials and project management, planning and scheduling in production systems.

390 Three Credits
ADVANCED TOPICS IN QUALITY MANAGEMENT
PREREQUISITES: DSC 370; Junior Standing
Philosophy of Total Quality management that provides an opportunity for the student to apply theoretical knowledge to real-world situations. Includes an overview of TQM and its impact on contemporary business practices.

DESIGN TECHNOLOGY - MECHANICAL - TMD

145 Three Credits
ENGINEERING MATERIALS TECHNOLOGY
Introduction to the fundamentals of materials science through individualized and group instruction, relating the basic nature and properties of polymer, ceramic, metallic, composite, and electronic materials to processing and design requirements.

150 Three Credits
ENGINEERING GRAPHICS
Introduction to the use of geometric projection and the concepts of computer-aided design and drafting, including geometric construction, multi-view drawing, auxiliary views as well as techniques of lettering and drafting. Hands-on sessions provide practice to reinforce the concepts and to provide practical experience.

151 Three Credits
INTRODUCTION TO CAD
PREREQUISITE: TMD 150
Introduces the concepts of computer-assisted design and drafting, with emphasis on AutoCAD program on microcomputers for engineering graphics.
DESIGN TECHNOLOGY – MECHANICAL – TMD (continued)

225 Three Credits
MECHANICS I: STATICS
PREREQUISITE: MTH 153
Develops analytic abilities of various types of force, with emphasis on systems using algebra and trigonometry, including vectors, centroids, moments and friction.

227 Three Credits
DYNAMICS
PREREQUISITE: MTH 184
Introduction to a vector treatment of the kinematics and laws of motion of particles and rigid bodies, including acceleration, momentum, work, energy and power.

251 Three Credits
ADVANCED CAD
PREREQUISITE: TMD 151
Advanced aspects of CAD using AutoCAD, with emphasis on 3-D techniques, solid modeling, and rendering.

252 Three Credits
TOOL DESIGN
PREREQUISITE: TMD 225
Study of function of a manufacturing environment to design production tools such as fixtures, gauges, dies, and clamping devices. Use of computer-aided design and other types of software for engineering problem solving.

345 Three Credits
MECHANICS II: STRENGTH OF MATERIALS
PREREQUISITE: TMD 225
COREQUISITE: TMD 345L
Analysis of structures, utilizing principles of Hook’s Law; Passions Ratio; shear and moment diagrams, including statically determinate and some statically indeterminate structures.

345L One Credit
MECHANICS II LAB: PROPERTIES OF MATERIALS
PREREQUISITE: TMD 225
COREQUISITE: TMD 345
Experimentation with properties of materials, fabrication characteristics, testing, and inspection. (Meets 2 hrs. per week.)

348 Three Credits
FLUID MECHANICS
PREREQUISITE: MTH 184
Introduction to the principles of hydraulics, fluid properties, hydrodynamics, and methods of fluid circuit analysis with applications directed toward various piping systems. Study of the principles for compressible flows, ideal gas, real gas, nozzle design and kinetic theory.

355 Three Credits
MACHINE DESIGN
PREREQUISITE: TMD 345
Study of designing screws, fasteners, joints, springs, bearings, and rigid machine components.

380 Three Credits
MATERIALS SCIENCE
PREREQUISITE: TMD 145 or Equivalent
Investigation of physics and chemistry of materials as related to their properties and process ability. Incorporates the study of metallurgy, polymers, composites, ceramics, and materials evaluation. Basic competences developed in use of laboratory equipment used to evaluate structure, properties, and processing of engineering materials.

448 Three Credits
THERMODYNAMICS
PREREQUISITE: MTH 184
Study of working ability with first and second laws of thermodynamics, including working fluids and heat engines’ cycles.

450 Three Credits
INSTRUMENTATION
Introduction to a familiarity with the latest developments in measurement, control, calibrations and analysis of instrumentation from basic theory to its applications, with emphasis on operation, procedure, and principles.

455 Three Credits
MECHANICAL DESIGN
PREREQUISITE: TMD 355
Study of design, and selection of beams, gears, clutches, brakes couplings, flexible mechanical elements, including utilization of basic concepts of kinematics.

470 SPECIAL PROBLEMS
Three Credits
Individual problems solving of special problems relating to design, electromechanical and manufacturing technology.

ECONOMICS - ECN

211 Three Credits
PRINCIPLES OF ECONOMICS I
PREREQUISITE: Sophomore Standing
Introduction to microeconomic principles relative to an economic system including supply and demand analysis; types of business organizations; theories of the firm and market models; resource allocation, and factorial distribution.

212 Three Credits
PRINCIPLES OF ECONOMICS II
PREREQUISITE: Sophomore Standing
Introduction to macroeconomic principles relative to an economic system, including economic functions of households, business and government; national income accounting; business cycles; monetary and fiscal institutions and policy as they apply to national economic growth, stabilization goals, and international trade.

220 Three Credits
ECONOMIC AND BUSINESS STATISTICS
PREREQUISITE: Sophomore Standing
Introduction to techniques of gathering, sorting, tabulating, and interpreting statistical data; measures of central tendency; measures of dispersion, and index numbers. Also covers problems of statistical induction; sampling techniques; testing hypotheses; simple linear correlation and regression. Government economic policy, as well as analysis of macroeconomic equilibrium and growth models.

252 Three Credits
ELECTRONICS TECHNOLOGY - ELT

111 Three Credits
CIRCUIT ANALYSIS I
PREREQUISITE: MTH 151
COREQUISITE: ELT 111L
Introduction to direct current circuits with emphasis on voltage, current, resistance, Ohm’s Law, energy and power. Series, parallel, and series-parallel circuits, voltage and current dividers, and Kirchoff’s Law are studied as well as DC network analysis, network theorem and magnetism circuits.

111L One Credit
CIRCUIT ANALYSIS I LAB
PREREQUISITE: MTH 151
COREQUISITE: ELT 111
Experiments on “live” and computer simulated experiments in DC theory with emphasis on breadboarding electric circuits, using meters, and using electronic simulation software. (Meets 3 hrs. per week.)

112 Three Credits
CIRCUIT ANALYSIS II
PREREQUISITE: MTH 153; ELT 111, 111L
COREQUISITE: ELT 212
Introduction to “live” and computer simulated experiments in AC theory with emphasis on breadboarding electric circuits, using meters, and using electronic simulation software. Develops skills in measuring AC circuit parameters. (Meets 3 hrs. per week.)

112L One Credit
CIRCUIT ANALYSIS II LAB
PREREQUISITE: MTH 153; ELT 111, 111L
COREQUISITE: ELT 212L
Experiments on alternating current circuits, with emphasis on alternating current and voltage, capacitors, RC circuits, Inductors, RL circuits, RLC circuits, resonance, AC network analysis, network theorem, and transformers.

115L One Credit
CIRCUIT ANALYSIS II LAB
PREREQUISITE: MTH 153; ELT 111, 111L
COREQUISITE: ELT 212L
Experiments on alternating current circuits, with emphasis on alternating current and voltage, capacitors, RC circuits, Inductors, RL circuits, RLC circuits, resonance, AC network analysis, network theorem, and transformers.

310 Three Credits
DIGITAL ELECTRONICS
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 310L
Study of digital devices and circuits, logic devices, integrated circuits, microprocessor circuits, binary, octal, and hexadecimal.

310L One Credit
DIGITAL ELECTRONICS LAB
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 310L
Experiments on logic gates, circuits, and microprocessors, circuit and device troubleshooting and analysis. (Meets 3 hrs. per week.)

313 Three Credits
DIGITAL ELECTRONICS II
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 313L
Examination of power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

313L One Credit
DIGITAL ELECTRONICS II LAB
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 313L
Experiments with power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

315 Three Credits
ANALOG COMMUNICATION SYSTEMS
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 315L
Introduction to analog communications technology, with emphasis on theory, operation, design of radio frequency amplifiers and receivers, mixers, oscillators, coupling circuits, transmitters, propagation, antennas and sidebands.

315L One Credit
ANALOG COMMUNICATION SYSTEMS LAB
PREREQUISITE: ELT 213, 233L
COREQUISITE: ELT 315L
Construction and testing of analog communications circuits using simulation software and ends with a hardware design project.

413 Three Credits
DIGITAL COMMUNICATION SYST EMS
PREREQUISITE: ELT 310, 315
Theory of communications systems utilizing digital signals. Includes coding, multiplexing, digital modulation, information coding, and error detection codes.

489 Three Credits
SENIOR PROJECT
PREREQUISITE: ELT 313, 313L
COREQUISITE: ELT 489L
Selection and completion of a project under faculty supervision conducted as an individual or small group design project, including determining customer requirements, considering design alternatives, and issuing a formal project proposal then implementing the proposal. The course concludes with a report and demonstration of functionality of the characteristics of various electronic test instruments. Develops skills in calculation, metering, signal tracing, waveform analysis. (Meets 3 hrs. per week.)
individual hardware and software design. Projects are typical of problems which graduates must solve in their field of employment.

499L One Credit

SENIOR PROJECT LAB
PREREQUISITES: ELT 313, 313L
COREQUISITE: ELT 499
Individual or small group electronic design projects.

ELEMETARY EDUCATION - EED

201 Three Credits

THE AMERICAN SCHOOLS AND THE TEACHING PROFESSION
Orientation to contemporary elementary and secondary schools in America with on-site experiences in diverse classrooms in local schools. Emphasis on issues raised in current reform movements, and upon the changing nature of the teaching profession.

274 Three Credits

CRITICAL THINKING AND ASSESSMENT SKILLS
Study and application of theories, methods, and materials used in acquiring critical thinking skills, with emphasis on areas of development and reinforcement include writing, critical thinking, and multiple-stimulus reinforcement.

274L One Credit

THE STUDY OF YOUNG CHILDREN
Comprehensive introduction to the development of children from conception to nine years, with emphasis on the major theories of development with an examination of physical, cognitive, language and social-emotional development for each chronological period. Requirements are twenty scheduled hours observing and participating in programs for children ages three to nine years (Nursery/Kindergarten through grade four), with emphasis on techniques and strategies.

300 Three Credits

CURRICULUM AND INSTRUCTION FOR PRIMARY GRADES (Pre-K – 3rd Grade)
Preparation for teaching preschool and kindergarten-aged children, with emphasis on three major components: Goal Setting, Content and Methodology. Requirements are twenty scheduled hours observation in a preschool, kindergarten or primary classroom, including planning, designing and implementing activities while video-taping lessons, demonstrations, and classroom simulations.

450 Three Credits

TEACHING LITERACY IN THE ELEMENTARY SCHOOL
Preparation for a lifetime of literacy appreciation, and to diagnose, correct and remediate mild to moderately severe reading difficulties among children between the grades of kindergarten through grade six, providing competencies in teaching phonemic awareness, sound-symbol relationships, phonics instruction, decoding skills, work skill activity, and literature appreciation. Study of basic knowledge of ways to utilize various media to support literacy in the classroom, including technological media instruction (i.e., books, software, Internet sites, audiocassettes and other multimedia methodology).

461 Three Credits

CURRICULUM AND INSTRUCTION FOR EARLY SCHOOL
Introduction to first, second, third, and fourth grade curriculum with emphasis on three major components: Goal Setting, Content, and Methodology. Requirements are twenty scheduled hours observation in a first, second, third, or fourth grade classroom, including planning, designing and implementing activities while video-taping lessons, demonstrations, and classroom simulations.

465 Three Credits

METHODS AND MATERIALS FOR TEACHING SCIENCE, MATHEMATICS AND TECHNOLOGY
Study of methods and techniques of teaching mathematics, science and technology to elementary school children, including preparation and practice with materials in classroom situations in design, especially to meet needs of primary and elementary school teachers in grades K-6.

470 Three Credits

METHODS OF TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL
Study of approaches, programs and methods that help pre-service teachers prepare children to accept their roles in the community and in the nation. History, geography, economics, psychology, sociology, and values are to be discussed with emphasis on multisensory, multicultural approach.

490 Three Credits

DIAGNOSTIC READING
PREREQUISITES: EED 450
Preparation for elementary school student teachers to diagnose, correct mild to moderately severe reading difficulties. Perceptual skills, decoding skills, experiences, language background, mind set, and the reasoning ability of the reader influence comprehension of written symbols. Elementary school students anticipate meaning on the basis of what they have just read. Sensory flaw in any major function or part may prevent adequate performance. Emphasis on investigating nature and causes of reading difficulties. Formal and informal instruments and procedures used for early detection and correction of reading problems are investigated.

499A Three Credits

COREQUISITE: ECE 500B
PRACTICUM IN ELEMENTARY EDUCATION
Direct experience in working with children ages 2 to 5 in a child care setting. Fifteen hours per week are required.

499B Three Credits

PRACTICUM IN ELEMENTARY EDUCATION
Emphasis on designing and implementing developmentally appropriate learning experiences for children ages 2 to 5 in a child care setting. Ten hours per week in a child care setting is required.

499E Three Credits

PRACTICUM IN ELEMENTARY EDUCATION
PREREQUISITE: This course is for Child Care Option candidates.
Study of the role of the child care director, with an emphasis on administrative tasks. Ten hours per week in a child care setting is required.

* Enrollment requires completion of requirements for admission to teacher education.

ENGINEERING - EEN

100 One Credit

INTRODUCTION TO ELECTRICAL ENGINEERING
Introduction to basic concepts of electrical engineering, including use of variety of electrical engineering instruments, with emphasis on engineering ethics, elementary design problems.

101 Three Credits

ENGINEERING USE OF COMPUTERS
PREREQUISITE: MTH 184
COREQUISITE: MTH 251
Introduction to use of computers to model systems and to solve engineering problems, including electrical and interdisciplinary problems. Emphasis on numerical methods and methods and using FORTRAN as well as roots of equations, matrix operations, integration, etc.

140 Three Credits

ENGINEERING DRAWING
Study of orthographic, isometric, and perspective drawing, detail and assembly drawing.

200 Three Credits

INTRODUCTION TO ELECTRONICS
PREREQUISITE: MTH 251
COREQUISITE: MTH 252, EEN 200L
Discussions of basic principles of electronics, diodes and transistors, analog circuit and op-amps, digital logic and circuits, electronic instruments, transducer interfaces, data acquisition systems, filtering and processing statistical treatment of data.

200L One Credit

INTRODUCTION TO ELECTRONICS LABORATORY
COREQUISITE: EEN 200
Laboratory experience of basic principles of electronics.

201 Three Credits

ELECTRICAL NETWORK THEORY I
PREREQUISITE: PHY 201
COREQUISITE: MTH 251
Analysis of electrical networks in terms of the forced response and the natural response, methods include nodal and mesh analysis, superposition and Thévenin’s theorem, from DC to steady state sinusoidal responses, and phasor analysis. SPICE. Design project required.

202L One Credit

ELECTRICAL NETWORK LAB I
COREQUISITE: EEN 230
Familiarization with oscilloscope, other instruments and test equipment in the experimental verification of basic electric circuit theory. Modeling and validation of models, documentation of experimental work, report preparation. Introductory design project.

202L Three Credits

ELECTRICAL NETWORK THEORY II
PREREQUISITE: EEN 230
Introduction to the application of unit-step as forcing function, power and energy, polyphase circuits, complex frequency and frequency responses, transformers and other two-part networks, linear network analysis using Laplace transform methods, and Fourier analysis, etc., and SPICE. Design project required.

207L One Credit

ELECTRICAL NETWORK LAB II
COREQUISITE: EEN 232
Familiarization with AC measurements, AC transient circuit use, use of good measurement and data collection techniques. Design procedures are developed as appropriate.

211 Three Credits

MATERIAL SCIENCE
PREREQUISITE: CHM 221, PHY 251
Introduction to mechanics of materials design project, with emphasis on following topics: atomic order and disorder in solids; single phase materials; molecular phases; ceramic composites, conductors and semiconductors, magnetic, dielectric and optical materials.

212 Three Credits

ENGINEERING PROBABILITY & STATISTICS
PREREQUISITE: MTH 252
Applications of random variables and random processes to engineering analysis and design. Cumulative and probability density functions; error function; central limit theorem; finite samples; auto correlation; power spectral density; effect of filters on digital data. Probabilistic and statistical design of systems required.

231 Three Credits

DIGITAL ELECTRONICS LOGIC DESIGN
Study of number systems, binary arithmetic and codes, Boolean algebra, simplification, Quine-McKlusky method, and Karnaugh Maps. Diode and transistor logic flip-flops, sequential networks, state tables, state assignments, etc.

300L Three Credits

ENGINEERING ELECTRONICS I
PREREQUISITE: EEN 232
Introduction to the theory and application of electronic devices: linear equivalent circuits, and bias considerations, frequency response of amplifiers, and integrated circuits, as well as the concept of electronic circuit design to meet prescribed specifications. Computer modeling of this employing SPICE or its equivalent.

301L One Credit

ENGINEERING ELECTRONICS LAB I
COREQUISITE: EEN 309
Laboratory practical examination, project, report preparation, and oral presentation required. Major emphasis is directed toward electronic circuit design.

302L Three Credits

ENGINEERING ELECTRONICS II
PREREQUISITE: EEN 309
Equivalent circuits of devices, “H” parameters, frequency and transient response of small signal amplifiers, multistage amplifiers, feedback in electronic circuits, power amplifiers and a more advanced treatment of linear integrated circuits. Computer modeling of electronic systems using SPICE or its equivalent; project required.

302L One Credit

ENGINEERING ELECTRONICS LAB II
COREQUISITE: EEN 310
Frequency and transient response of amplifiers, feedback amplifiers, oscillators, power amplifiers, and linear integrated circuits, including operational amplifiers, with emphasis on
134
318 Writing Poetry II
Three Credits
Development of an advanced knowledge of self-expression and creativity, as well as the use of poetic devices such as meter, rhythm, imagery, and symbolism in traditional and contemporary forms.

319 Seventeenth Century English Literature
Three Credits
Cultural study of Milton, Donne, the metaphysical and cavalier poets, the Jacobean dramatists, and prose writings of Burton and Brown.

320 The Art of Poetry
Two/Three Credits
Analytical study of poetry with emphasis on meaning, technique, and form.

336 Modern English and American Literature
Three Credits
Study of the major writers of the twentieth century with emphasis on main currents of thought within the century.

341 American Literature I
Three Credits
Survey of American literature from the Colonial Period to the Civil War.

342 American Literature II
Three Credits
Survey of American literature from the Civil War to the present.

383 African-American Literature
Three Credits
PREREQUISITE: Junior Standing or Permission of Instructor. Survey of African-American literature, including selected African-American writers from slavery to the present time.

384 African-American Literature: Poetry
Three Credits
Study of selected works of major African-American poets with emphasis on dominant themes and forms, and attention to the historical and literary background of the poetry.

385 African-American Literature: Fiction
Three Credits
Development of black American fiction from 1850 to the present. Includes social and historical conditions of African-Americans as reflected in their fiction, as well as the major literary trends of the writings.

387 Teaching of English in Secondary Schools
Three Credits
Study of methods and materials in the teaching of English literature, language, composition, and grammar.

400/500 Advanced Placement English in the High School
Three Credits
PREREQUISITE: Senior or graduate level. Study of the Advanced Placement Program in English, with attention to establishing an AP program, designing and implementing an AP curriculum, and designing, developing, and teaching an AP course.

410 History of the English Language
Three Credits
Structure and development of the language in England and America with emphasis on historical grammar and linguistic changes with the cultural factors involved.

412 Chaucer
Three Credits
Designed to provide a general acquaintance with The Canterbury Tales and Troilus and Criseyde and some of Chaucer's minor poems.

413 Shakespeare
Three Credits
General survey of Shakespeare's dramatic career, with readings of a selected number of his plays and their study against the background of Elizabethan social, political, and philosophical ideas.

416 Milton
Three Credits
Study of the chief poems and prose works of Milton with emphasis on Milton's artistic merits and on his religious, scientific, and political ideas.

419/519 Contemporary American English Grammar
Three Credits
Contemporary American English Grammar in modern communication with emphasis on usage, dialectology, stylistics, and aesthetics.

420/520 Black English, Dialects, and Linguistic Universals
Three credits
PREREQUISITE: Senior or graduate level. Introduction and historical overview of linguistic universals and language variations including the structure and development of American speech and language styles, with emphasis on Black English.

421 Eighteenth Century English Literature
Three Credits
Introduction to Addison, Steele, Dryden, Swift, Pope, Johnson, and their contemporaries.

425 African-American Literature
Three Credits

431 Studies in the Novel
Three Credits
Study of selected novels of the nineteenth and twentieth centuries from the continent, England, and the Americas.

432 African and African-American Novel
Three Credits
PREREQUISITES: ENG 383 or Permission of Instructor. Detailed study of selected African and African-American novelists and their works.

433 African and African-American Biography and Autobiography
Three Credits
PREREQUISITES: ENG 383 or permission of instructor. Study of selected biographies and autobiographies of noted Africans and African-Americans, including Richard Wright, Alex Haley, and Wole Soyinka.

435 Victorian Literature
Three Credits
Study of representative British writers from 1837-1901.

440 Seminar in African and African-American Literature
Three Credits
PREREQUISITES: ENG 383 or permission of Instructor. Study of selected works and authors in the African and African-American tradition.

449, COM 549 Teaching of Composition
Three Credits
PREREQUISITES: Senior or Graduate Level. Study of the traditional and contemporary theories, practices, and research that inform the teaching of composition from late elementary school through freshman English.

450 Research Seminar and Senior Thesis
Three Credits
Independent research on a topic selected by the student, approved by departmental advisor and completed under the guidance of the advisor.

455 Literature and Popular Culture
Three Credits
Introduction to the systematic study of popular media, focusing on the development of selected print, film, and video genres.

456 Women's Studies: Myths and Images
Three Credits
Exploration of the universal myths that promote certain images of women that relate to their biological function in modern fiction written by women.

457 Multi-Ethnic Fiction
Three Credits
Introduction to the interracial fiction of various ethnic groups as they relate to the dominant culture in America with emphasis on specific beliefs, attitudes, values, and stereotypes that affirm the myth of the melting pot concept.

458 Southern Black Female Aesthetic
Three Credits
Introduction to the Southern black female aesthetic in black women's oral and written expressions, emphasizing an Afrocentric cultural continuum as well as the criteria identifying their aesthetic and to the racial, sexual politics influencing their cultural expressions.

459 International Women's Literature
Three Credits
PREREQUISITE: ENG 207 or permission of instructor. Examination of fiction, poetry, diaries, journals, letters, interviews, and feminist essays by women writers from the international community, including a study of new conceptual and psychological models of women which provide new frameworks for critical interpretation and judgment.

460/550 Assessment and Evaluation of Writing
Three Credits
Study of writing assessment practices with an emphasis on the variables of composition assessment, scalar measures of composition, large-scale assessment and classroom assessment methods, and alternative assessment techniques. Designed for the student teacher of composition at secondary and post-secondary levels.

465/565 Special Topics in Literature and Language
One, Two, Three Credits
SPECIAL TOPICS IN LITERATURE AND LANGUAGE
Engaging in modern literary or linguistic topics by using a variety of perspectives, disciplines, and related themes.

475/COM 575 History of Rhetoric
Three Credits
PREREQUISITE: Senior or graduate level. Examination of the essential texts that form the Western rhetorical tradition from its origins in Greco-Roman times through Modernity with an inclusive treatment of the contributions of African-Americans and women.

480 American Folklore and Literature
Three Credits
Examination of the subtle and complex relationship between the folklore and the literature of the United States, using a functional and contextual approach, special attention will be given to the kinds of folklore field data.

552 Literature for Children and Adolescents
Three Credits
Introduction to the great wealth of trade books (library literature) which is available to children (0-12) and adolescents (13-16). Survey of selection and utilization of literature in the home and in classroom settings.

ENTREPRENEURIAL STUDIES - ENT

364 Managing the Family Business
Three Credits
PREREQUISITES: MGT 385; FIN 360
Discussion of business management concepts on the family business environment which examines the stages of the family enterprise with emphasis on managing people, change and conflict, as well as strategic planning and organizational tools applicable to the family business, evaluation of situations and problems in a family business through the analysis of causes; and realize the career paths and opportunities.
ENTREPRENEURIAL STUDIES – ENT

NEW VENTURE FINANCE

PREREQUISITES: FNC 360

In-depth analysis of the process of funding an entrepreneurial venture with a critical examination of the decisions and alternatives of the basis on their impact on firm value. Exploration of the techniques used in the areas of evaluation, business plan development, deal structure, and venture harvest. Discussions of seed and growth capital from sources such as individuals, angel funds, venture capital, investment banks, government, and commercial banks. Study of how entrepreneurs identify and commit the necessary resources to create and fund ventures.

INTRODUCTION TO ENTREPRENEURSHIP

PREREQUISITES: MKG 366; FNC 360; MGT 365

Introduction to the important characteristics of entrepreneurs that relate to successful business start-ups, with emphasis on self-evaluation, effective decision-making skills, and practical aspects of a successful business start-up. A requirement is a written assignment on business plans based on a potential future business venture.

SMALL BUSINESS MANAGEMENT

PREREQUISITE: ENT 337

Integration of entrepreneurial topics into comprehensive plans and/or suggestions for starting a business and solving problems. Requirements include completion of the business plans and presentation for approval, participation in a small business computer simulation, and learning more about entrepreneurship and small business management through classroom work.

FRANCHISING

PREREQUISITES: MKG 366; Senior Standing

Introduction to the principles and strategies involved in starting and managing a franchise operation, with emphasis on the knowledge of franchise ability, the merits and demerits of franchising, and the rights and obligations of parties involved in franchising.

MANAGING GROWING VENTURES

PREREQUISITE: ENT 337

Study of the latest concepts, theories, and applications in all aspects of entrepreneurship and small business management.

PATTERNMAKING I

PREREQUISITES: FDM 149, 150

Using draping, flat pattern, and drafting procedures to develop and construct one original muslin garment in half or full size. Emphasis on perfecting sewing skills using more challenging flat fabrics to the human body.

INTRODUCTION TO FASHION INDUSTRY

PREREQUISITES: Completion of all Didactic Course Work

Introduction to the development of rehabilitation as an integral part of comprehensive medical care and its application to restore persons with physical and emotional impairments to the optimal level of functional independence. Consideration of neurological dysfunction/rehabilitation, orthopedic rehabilitation, prosthetics, orthotics, respiratory and cardiac dysfunction.

ADVANCED ATHLETIC TRAINING

PREREQUISITE: EXS 387

Introduction to injury prevention techniques, specific athletic injuries, and on the techniques used to enhance the healing process.

CARE AND PREVENTION OF ATHLETIC INJURIES

PREREQUISITES: PED 287, 287L, 288, 288L, or BIO 165, 166 (Lab Fee: $30)

Study of anatomical terminology and gross human osteology, arthrology, myology, neurology, and angiology.

BIOMECHANICS OF HUMAN MOTION

PREREQUISITES: EXS 355; MTH 153; PHY 152

Analysis of the functions and mechanics of human motion as applied to human movement with emphasis on qualitative movement analysis to improve performance and prevent injury.

ORGANIZATION AND MANAGEMENT OF EXERCISE SCIENCE

PREREQUISITES: EXS 170

Introduction to the basic processes of administration and management in health professions that afford a variety of broad-based managerial functions and detailed administrative actions for students.

ANATOMICAL KINESIOLOGY

PREREQUISITES: PED 287, 287L, 288, 288L, or BIO 165, 166

Study of muscular anatomy and gross human osteology, arthrology, myology, neurology, and angiology.

NEW VENTURE FINANCE

COREQUISITE: EXS 447

Basic laboratory procedures and tests to provide experience in subject recruitment, data collection, and abstract presentation.

PHYSIOLOGICAL BASIS OF EXERCISE LAB

PREREQUISITE: EXS 355, 356

Practical applications of the knowledge with emphasis on physical musculoskeletal function, neurological involvement, goniometry, anthropometry, and gait analysis.

PHYSIOLOGICAL BASES OF EXERCISE

PREREQUISITES: PED 287, 287L, 288, 288L, or BIO 165, 166

Study of physiological responses to the various clinical techniques and therapeutic modalities used in the rehabilitation process.

FASHION DESIGN/MERCHANDISING - FDM

INTRODUCTION TO FASHION INDUSTRY

PREREQUISITES: EXS 387

Survey of marketing processes and procedures as related to the provision of apparel and related items for individuals and their families. Opportunity provided for study of fashion-related careers.

PRINCIPLES OF APPAREL DESIGN AND PRODUCTION

PREREQUISITES: FDM 149 or equivalent

Emphasis on perfecting sewing skills using more challenging patterns and fabrics to create quality garments with an introduction to simple pattern modification techniques.

FRESHMAN REVIEW

PREREQUISITES: FDM 149, 150

Evaluation of mastery of garment construction techniques. Special assignments may be prescribed for persons needing additional skill development.

SOCIO-PSYCHOLOGICAL ASPECTS OF CLOTHING

PREREQUISITES: FDM 149, 150

Survey of socio-psychological and economic factors affecting selection and use of clothing by individuals and families.

PATTERNMAKING I

PREREQUISITE: FDM 149, 150

Using draped, flat pattern, and drafting procedures to develop and construct one original muslin garment in half or full size.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDM 149</td>
<td>Introduction to design research. Completion of</td>
<td>One</td>
<td>Two hundred hours of supervised work experiences in an approved apparel retail agency is required. Faculty approval, plans for this experience may be submitted and the experience completed during summer prior to senior year.</td>
</tr>
<tr>
<td>FDM 499</td>
<td>FASHION DESIGN INTERNSHIP PREREQUISITE: FDM 395</td>
<td>Three</td>
<td>Two hundred hours of supervised work experiences in an approved apparel retail agency is required. Faculty approval, plans for this experience may be submitted and the experience completed during summer prior to senior year.</td>
</tr>
<tr>
<td>FDM 148</td>
<td>TEXTILES PREREQUISITE: FDM 149, 150, 250</td>
<td>Three</td>
<td>Study of factors that influence the tactile behaviors of natural and man-made fabrics during garment design, manufacture and wear with emphasis on fiber/fabric properties, production and finish.</td>
</tr>
<tr>
<td>FDM 148</td>
<td>FASHION DESIGN REVIEW COREQUISITE: FDM 251</td>
<td>One</td>
<td>Evaluation of competency in the application of apparel line development theory.</td>
</tr>
<tr>
<td>FDM 149</td>
<td>PREREQUISITE: FDM 149</td>
<td>Three</td>
<td>Development of visual and verbal precision in the identification, classification, and evaluation of quality in apparel structures.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>LETTERING</td>
<td>Three</td>
<td>Emphasis on how lettering can enhance the career of a professional artist or art educator. Assignments are often in the form of design problems requiring a convergence of skills.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>DESIGN STUDIO I PREREQUISITE: FDM 149</td>
<td>Three</td>
<td>Design studio in the creation and production of original fashion apparel using computer applications.</td>
</tr>
<tr>
<td>FDM 364</td>
<td>PREREQUISITE: FDM 364</td>
<td>Two</td>
<td>Study of merchandising displays and promotion with emphasis on store design, in-store visual display and store windows.</td>
</tr>
<tr>
<td>FDM 366</td>
<td>APPAREL PRODUCTS EVALUATION PREREQUISITE: FDM 149</td>
<td>Three</td>
<td>Study of professional manuals in personal financial planning.</td>
</tr>
<tr>
<td>FDM 364</td>
<td>TEXTILES</td>
<td>Three</td>
<td>Study of various techniques in poster layouts; practice in the creation and production of original fashion apparel using computer applications.</td>
</tr>
<tr>
<td>FDM 366</td>
<td>FASHION HISTORY</td>
<td>Three</td>
<td>Exploration of how lettering can enhance the career of a professional artist or art educator. Assignments are often in the form of design problems requiring a convergence of skills.</td>
</tr>
<tr>
<td>FDM 368</td>
<td>DESIGN COLLECTIONS                PREREQUISITE: FIA 114, 180</td>
<td>Three</td>
<td>Overview of operational, regulatory, and security issues for one of the major industry apparel categories. A minimum of 5 items must be included.</td>
</tr>
<tr>
<td>FIA 140</td>
<td>CERAMICS</td>
<td>Three</td>
<td>Introduction to modeling and sculpturing of tiles, panels, plaques, small figures in high and low relief, and in the round from plastic materials, casting in plaster, coiling, building, pressing and decorating pottery.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>BASIC DESIGN II PREREQUISITE: FIA 160</td>
<td>Three</td>
<td>Exploration of the relationship between form, space, and ideas in three-dimensional design. The sequence of projects begins with basic construction and structures, then evolves to an investigation of complex three-dimensional form.</td>
</tr>
<tr>
<td>FIA 140</td>
<td>DRAWING</td>
<td>Three</td>
<td>Development of ability to see and record through the use of a variety of drawing media, providing knowledge of line, shape, light and shade, texture, composition, and perspective.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>FASHION HISTORY</td>
<td>Three</td>
<td>Exploration of the relationship between form, space, and ideas in three-dimensional design. The sequence of projects begins with basic construction and structures, then evolves to an investigation of complex three-dimensional form.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>INTRODUCTION TO PERSONAL FINANCIAL PLANNING</td>
<td>Three</td>
<td>Development of ability to see and record through the use of a variety of drawing media, providing knowledge of line, shape, light and shade, texture, composition, and perspective.</td>
</tr>
<tr>
<td>FIA 160</td>
<td>PORTFOLIO MANAGEMENT PREREQUISITE: FIA 160</td>
<td>Three</td>
<td>Introduction to modern portfolio theory and management, based on financial techniques for individual and institutional clients, including professional ethics and advanced topics in capital market theory. (Capstone course in investment management.)</td>
</tr>
<tr>
<td>FIA 160</td>
<td>INTERNATIONAL FINANCE PREREQUISITE: ECN 212, FNC 360</td>
<td>Three</td>
<td>Study of the major finance functions of modern corporations, including the need for funds to finance the acquisition of various assets such as receivables, inventories, and plant and equipment. The alternative sources of funding and the analysis of business risks and risk-bearing from the standpoint of risk reaction, risk reduction, risk elimination, and risk evaluation.</td>
</tr>
</tbody>
</table>
FINE ARTS – FIA (continued)

201 Three Credits
BASIC ART APPRECIATION
Survey of the arts (architecture, painting, and sculpture) conducted through a series of lectures, slides, and art films. Emphasis on the elements that go into the making of a work of art, the artist's works related to the world around them, and an explanation of the periods of art.

211 Three Credits
FASHION DRAWING
PREREQUISITE: FIA 114
Introduction to drawing from the live model and other sources.

214 Three Credits
CRAFT DESIGN
Experimentation with basic processes and individual problems in woodworking, ceramics, leather, metal, textiles and plastics. Develops appreciation of artistic craftsmanship, research, lectures, demonstration and participating experiences.

215 Three Credits
CRAFT DESIGN
PREREQUISITE: FIA 214
Experience with various materials related to contemporary and traditional craft forms, related to object making which uses originality of concept and design.

220 Three Credits
LIFE DRAWING
PREREQUISITES: FIA 120 and 121
Drawing from live models in an attempt to familiarize the student with various approaches to the figure.

221 Three Credits
LIFE DRAWING
PREREQUISITES: FIA 120, 121, and 220
Drawing from live models in an attempt to familiarize the student with various approaches to the figure.

234 Three Credits
PAINTING
PREREQUISITES: FIA 120; 121; 114; 115
Introduction to acrylic or oil painting with emphasis on a variety of painting techniques, composition and color mixing. Individual development stressed through class critiques. Museum and gallery visits required.

235 Three Credits
PAINTING
PREREQUISITES: FIA 120; 121; 114; 115; 234
Introduction to acrylic or oil painting with emphasis on a variety of painting techniques, composition and color mixing. Individual development stressed through class critiques. Museum and gallery visits required.

240 Three Credits
SCULPTURE
Introduction to the basic rules and techniques of sculpture, familiarizing them with the various tools and materials peculiar to this area. Emphasis on clay, plaster of par is, wire and plastics, and traditional materials such as wood, stone, and metal, wherever feasible. Elementary sculpture is bas-relief and in the round.

241 Three Credits
SCULPTURE
PREREQUISITE: FIA 240
Introduction to the basic rules and techniques of sculpture, familiarizing them with the various tools and materials peculiar to this area. Emphasis on clay, plaster of par is, wire and plastics, and traditional materials such as wood, stone, and metal, wherever feasible. Elementary sculpture is bas-relief and in the round.

250 Three Credits
INTRODUCTION TO ANIMATION
PREREQUISITES: FIA 114, 115, 120, 121, or Permission of the Instructor
Introduction to the history, careers, and production skills in animation art which provides hands-on knowledge of the various stages of production without recourse to heavy investments in supplies and professional equipment.

251 Three Credits
BASIC ANIMATION
PREREQUISITE: FIA 250
Development of the historical knowledge of animation and the advancement of personal animation production skills through a hands-on studio class.

260 Three Credits
INTRODUCTION TO GRAPHIC DESIGN
Fundamental principles of graphic design, organized as a series of problems in visual communication including a variety of working methods, developing designs from the initial conceptual stage through final production phase. Computer experience recommended.

261 Three Credits
PRINTMAKING WORKSHOP
Fundamental understanding of various printmaking media through the demonstration and execution of basic technical methods combined with discussion of the aesthetic considerations involved in the creation of original prints.

270 Three Credits
HISTORY OF ART SURVEY I
Survey of architecture, painting, and sculpture designed to promote understanding and enjoyment of the fine arts through a series of lectures, slides, and art films. Emphasis on technical, social, historical, and thematic issues from prehistoric art through Gothic.

271 Three Credits
HISTORY OF ART SURVEY II
PREREQUISITE: FIA 270
Study of architecture, painting, and sculpture designed to promote understanding and enjoyment of the fine arts through a series of lectures, slides, and art films. Emphasis on technical, social, historical, and thematic issues from the Renaissance through contemporary.

280 Three Credits
COMPUTER IMAGING
PREREQUISITE: FIA 180
Introduction to the process of involving electronic media in the production of visual images using the computer and its peripheral devices. Emphasis on two-dimensional still images, with attention to animation, web design, and presentations.

314 Three Credits
FINE ARTS AND METHODS
Introduction to a wide variety of creative, problem-solving experiments with art materials for prospective or in-service teachers or students from other professions.

317 Three Credits
ART UNITS WITH OBSERVATION
PREREQUISITE: FIA 314
Extension of the theory and practice of art education to guide art majors in a series of unit and lesson planning activities.

320 Three Credits
INTERMEDIATE DRAWING
PREREQUISITES: FIA 120 and 121
Enhancement of the ability to translate physical and mental stimuli into tangible, visual images engaging in a variety of technical assignments designed to expand the creative thought process.

321 Three Credits
INTERMEDIATE DRAWING
PREREQUISITES: FIA 120, 121, and 320
Enhancement of the ability to translate physical and mental stimuli into tangible, visual images engaging in a variety of technical assignments designed to expand the creative thought process.

322 Three Credits
INTERNATIONAL ANIMATED FILM HISTORY
Survey of the history of the animated feature film from its creation in the late 1930's. Focus on the filmmaking, studios, trends and traditions, and their influence on popular culture worldwide.

334 Three Credits
ART COMPOSITION AND PAINTING
Emphasis on the strengthening of organization principles of good drawing and design within a painting, including the composition of effective painting methods, techniques, and thematic concepts.

335 Three Credits
ART COMPOSITION AND PAINTING
PREREQUISITES: FIA 234, 334
Emphasis on the strengthening of organization principles of good drawing and design within a painting, including the composition of effective painting methods, techniques, and thematic concepts.

340 Three Credits
INTERMEDIATE CERAMICS
PREREQUISITES: FIA 140, 141
Opportunity to execute individual programs, making use of stoneware temperature, reduction, and raku firing.

341 Three Credits
INTERMEDIATE CERAMICS
PREREQUISITES: FIA 140, 141, 340
Opportunity to execute individual programs, making use of stoneware temperature, reduction, and raku firing.

350 Three Credits
INTERMEDIATE ANIMATION I
PREREQUISITES: FIA 250, 251, 220, 221
Development of intermediate skills in character design and animation coupled with computer animation production. Further development of skills in "clean-up," "inbetweening," "layout," "special effects," and "background."

351 Three Credits
INTERMEDIATE ANIMATION II
PREREQUISITES: FIA 250, 251, 220, 221, 350
Develops the intermediate skills in character design and animation, coupled with computer animation production. Further development of the student's skills in "clean-up,." "inbetweening," "layout," "special effects," and "background."

360 Three Credits
TYPOGRAPHY
Introduction to communication problem solving through the visual language. Exploration of the fundamentals of typography and typographic design through a series of experimental and practical projects.

361 Three Credits
ADVANCED PRINTMAKING
PREREQUISITES: FIA 261, 262
Exploration of the art of lithography and either intaglio or relief prints.

362 Three Credits
GRAPHIC DESIGN I
PREREQUISITE: FIA 260
Foundation of commercial art including video and the Web. Emphasis on layout, typography, computer graphics, photography, video and the various processes of reproduction as they pertain to graphic design.

363 Three Credits
GRAPHIC DESIGN II
PREREQUISITE: FIA 362
Study of commercial art including video and the Web. Emphasis on layout, typography, computer graphics, photography, video, animation (such as Flash), and the various processes of reproduction as they pertain to graphic design.

365 Three Credits
ELEMENTARY PHOTOGRAPHY
Fundamental principles and practices of photography necessary for taking and making excellent prints.

366 Three Credits
ADVANCED PHOTOGRAPHY
PREREQUISITE: FIA 365 or equivalent
Study of composition and perspective in the following categories: advertising, copywriting, photographic drawings open and slide making (color). Emphasis on lighting, shadows, shape and form.

370 Three Credits
AFRICAN/AFRO-AMERICAN ART
Survey of African and African-American art from the first millennium B.C. to the present, which examines painting, sculpture, architecture, and the lesser arts of metalwork, design and textiles.

372 Three Credits
INTRODUCTION TO FIBERS
Study of contemporary sculptural forms in the following categories: soft sculpture, body adornments, container forms, and wall hangings. Techniques used are wrapping, coiling, weaving, off-loom weaving, knot forming, raffia, and fabric manipulation.

373 Three Credits
FASHION ILLUSTRATION AND LAYOUT
Study of the mechanics of fashion layouts from the initial sketch to the camera ready design. Emphasis on basic techniques and integrating fashion illustration with typography.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVANCED FIBERS</td>
<td>PREREQUISITE: FIA 372</td>
<td>Three Credits</td>
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<tr>
<td>ADVANCED DRAWING</td>
<td>PREREQUISITE: FIA 120/121, 220/221, 320/321</td>
<td>Three Credits</td>
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<tr>
<td>ADVANCED PAINTING</td>
<td>PREREQUISITE: FIA 334, 335</td>
<td>Three Credits</td>
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<tr>
<td>ADVANCED GRAPHIC DESIGN</td>
<td>PREREQUISITE: FIA 363</td>
<td>Three Credits</td>
</tr>
<tr>
<td>DESIGN IN COMMERCE</td>
<td>PREREQUISITE: FIA 260, 360, 362, 363, 460</td>
<td>Three Credits</td>
</tr>
<tr>
<td>MODERN ART HISTORY</td>
<td>PREREQUISITE: FIA 270, 271</td>
<td>Three Credits</td>
</tr>
<tr>
<td>ENAMELING</td>
<td>Study of master techniques in fusing colored glass to metal surfaces. Experiments conducted with both opaque and transparent enamels on a wide variety of metal surfaces.</td>
<td>Three Credits</td>
</tr>
<tr>
<td>JEWELRY MAKING</td>
<td>Study of the concept of jewelry making with focus on usability and aesthetic quality.</td>
<td>Three Credits</td>
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<tr>
<td>FABRIC PRINTING</td>
<td>Study of basic weaves enhanced by resist dying (ikat) and directly applied painted warps. Experiments conducted with methods of coloring and ornamenting fabrics through dying processes that affect material to be woven into fabric.</td>
<td>Three Credits</td>
</tr>
<tr>
<td>ADVANCED STUDIO PROBLEMS</td>
<td>PREREQUISITE: Senior Standing</td>
<td>Three Credits</td>
</tr>
<tr>
<td>ADVANCED STUDIO PROBLEMS</td>
<td>PREREQUISITE: FIA 491, Senior Standing</td>
<td>Three Credits</td>
</tr>
<tr>
<td>PORTFOLIO PREPARATION AND SENIOR EXHIBITION</td>
<td>PREREQUISITE: To be taken only in the final semester of study.</td>
<td>Two Credits</td>
</tr>
<tr>
<td>FRENCH - FRN</td>
<td>ELEMENTARY FRENCH I</td>
<td>Three Credits</td>
</tr>
<tr>
<td>INTERMEDIATE FRENCH II</td>
<td>PREREQUISITE: FIA 112 or Equivalent</td>
<td>Three Credits</td>
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<tr>
<td>先进 FRENCH</td>
<td>Introduction to fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.</td>
<td>Three Credits</td>
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<tr>
<td>INTERMEDIATE FRENCH II</td>
<td>PREREQUISITE: FIA 111 or Equivalent</td>
<td>Three Credits</td>
</tr>
<tr>
<td>FRENCH CIVILIZATION I</td>
<td>PREREQUISITE: FRN 212 or Equivalent</td>
<td>Three Credits</td>
</tr>
<tr>
<td>SURVEY OF FRENCH LITERATURE</td>
<td>PREREQUISITE: FRN 213 or Equivalent</td>
<td>Three Credits</td>
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<tr>
<td>SURVEY OF FRENCH LITERATURE II</td>
<td>PREREQUISITE: FRN 214 or Equivalent</td>
<td>Three Credits</td>
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<tr>
<td>SURVEY OF FRENCH LITERATURE III</td>
<td>PREREQUISITE: FRN 215 or Permission of Instrutor</td>
<td>Three Credits</td>
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<tr>
<td>SURVEY OF FRENCH LITERATURE IV</td>
<td>PREREQUISITE: FRN 216 or Equivalent</td>
<td>Three Credits</td>
</tr>
<tr>
<td>STUDY OF CONCEPTS OF FRENCH BUSINESS LANGUAGE AND CULTURE</td>
<td>PREREQUISITE: FIA 112 or Equivalent</td>
<td>Three Credits</td>
</tr>
<tr>
<td>LANGUAGE FOR PROFESSIONALS</td>
<td>PREREQUISITE: FRN 315 or Permission of Instructor</td>
<td>Three Credits</td>
</tr>
<tr>
<td>TEACHING OF MODERN LANGUAGES</td>
<td>PREREQUISITE: SED 380</td>
<td>Three Credits</td>
</tr>
<tr>
<td>LANGUAGE FOR PROFESSIONALS</td>
<td>PREREQUISITE: FRN 315 or Permission of the Instructor</td>
<td>Three Credits</td>
</tr>
<tr>
<td>INDIVIDUALIZED LANGUAGE FOR PROFESSIONALS</td>
<td>PREREQUISITE: FRN 315 or Permission of the Instructor</td>
<td>Three Credits</td>
</tr>
</tbody>
</table>
FRENCH - FRN (continued)

450 Two Credits
PHONETICS
PREREQUISITE: FRN 215 or Equivalent
Analysis of the phonetic features of French including systematic exercises in pronunciation, intonation, and reading of prose and poetry.

454 Three Credits
ADVANCED GRAMMAR AND COMPOSITION
PREREQUISITE: FRN 215 or Equivalent
Intensive review and application of French grammar including intensive practice in writing and study of vocabulary and idioms.

485 Two Credits
CONTRASTIVE LINGUISTICS
PREREQUISITE: FRN 215 or Equivalent
Introduction to the principles phonological, morphological, syntactical, and lexical contrasts between French and English. No previous work in linguistics is required.

490 Three Credits
SENIOR SEMINAR
PREREQUISITE: Departmental Permission
Independent research on a topic approved by the departmental advisor, and completed under the guidance of that advisor.

500 One/Two/Three Credits
PRACTICUM IN FRENCH
PREREQUISITE: Senior or Graduate Level
Variable content course in French language, literature, history, or culture for students who wish to study beyond the normal four-semester sequence of foreign language.

FUNERAL SERVICE - FNS

300L One Credit
FUNERAL SERVICE REVIEW LAB
Comprehensive review of all courses in preparation for the National Board Examination.

301 Two Credits
INTRO TO FUNERAL SERVICES
Survey of the history of funeral service, with emphasis on ethic groups that have influenced contemporary funeral principles and practices, as well as the progression of associations and education within funeral service.

322 Two Credits
FUNERAL SERVICE LAW
Preparation for exams to become funeral directors and embalmers. Study of laws, regulations, legislatures, and society as established to ensure the orderly and decent handling of human remains.

330 Three Credits
CONCEPTS & APPLICATIONS
Introduction to computers and information processing. Primary emphasis on three standard applications: word processing, spreadsheets, and data base.

340 Four Credits
EMBALMING FOR FS I
PREREQUISITE: BIO 165
Introduction to the history, purpose and technical aspects of embalming which include signs and tests for death, proper handling of human remains. Different types of chemicals, instruments and disinfectants used to facilitate disinfections, preservation, and restoration of human remains.

345 Four Credits
EMBALMING FOR FS II
Continuation of the history, purpose and technical aspects of embalming which include signs and tests for death, proper handling of human remains, pre- and post mortem changes in the body, government regulation, as it pertains to the preparation room, and handling of human remains, different type of chemicals, instruments and disinfectants used to facilitate disinfections, preservation, and restoration of human remains. Participation is a minimum of 10 embalming procedures is required. (Grades based on proficiency, technique and knowledge of subject matter.)

355 Three Credits
RESTORATIVE ART I
Study of the surface contour, the influence of the bone structure on facial form, and the effect of the facial muscles on the wrinkles, grooves and folds of the face, including wax and non-wax treatments and techniques, such as swellings, feature corrections, and hair restorations.

360 Three Credits
INTRO TO MANAGEMENT I
Introduction to the basic principles of funeral management which apply to the practice of the funeral professions.

365 Three Credits
INTRO TO MANAGEMENT II
PREREQUISITE: FNS 360
The role and function of an effective funeral services management in planning, organizing, motivating, and directing and controlling.

370 Three Credits
FUNERAL HOME MERCHANDISING
Intensive study of display and promotion and advertising as they pertain to caskets, clothing, and cremation items through participation in projects designed to enhance knowledge of layout and design.

375 Three Credits
ETHNICS IN FUNERAL SERVICE EDUCATION
Study of the basic rules governing the everyday activities of funeral service. Emphasis on trustworthy, rapport, and sensitivity to the needs of the bereaved. Study of the ethical standards of ethical behavior in personal and professional conduct as it pertains to funeral service.

GENERAL STUDIES - FRS/GST

FRS 100 Zero Credit
FRESHMAN SEMINAR
Non-credit introduction to university life.

GST 180 Three Credits
CAREER EXPLORATION
Introduction to career trends, values clarification, skills, and techniques necessary for decision making and career assessment.

GST 500 Zero Credit
STUDY SKILLS SEMINAR
Development of skills necessary to enhance academic success in college with emphasis on weekly activities to promote utilization of positive study habits and necessary college survival skills.

GST 345H or 346H Three Credits
HONORS SEMINAR
Interdisciplinary topic-driven research course is designed for qualifying Juniors and Seniors for the NSU Honors Program. Successful completion of the honors seminar course is required to graduate with Parsons Vice-Presidential Scholar or Parsons Presidential Scholar. Students taking the course for the first time should enroll in GST 345H; however, students may choose GST 346H for a second time with a new topic.

GST 445H or 446H Three Credits
Hons Seminar
Interdisciplinary topic-driven research course is designed for qualifying Juniors and Seniors for the NSU Honors Program. Successful completion of the honors seminar course is required to graduate with Parsons Vice-Presidential Scholar or Parsons Presidential Scholar. Students taking the course for the first time should enroll in GST 445H; however, students may choose GST 446H for a second time with a new topic.

GEOGRAPHY - GEO

130 Three Credits
PRINCIPLES OF GEOGRAPHY
Survey of the development of geography principles with emphasis on principles underlying the types of climate, their causes, distribution, and influence, and presents an analysis of man's work in various physical and political regions.

140 Three Credits
WORLD REGIONAL GEOGRAPHY
Survey of the major natural regions of the world according to their common physical characteristics, economic activities, cultural patterns, trends, and problems.

ECONOMIC GEOGRAPHY

331 Three Credits
Study of the distribution, development, and conservation of natural resources; the growth of industrial regions, transportation lines, and trade centers; and interdependence of nations.

GEOGRAPHY OF VIRGINIA

335 Three Credits
Study of the geographic regions of Virginia and the influence of geographic factors on social and economic problems in Virginia, past and present.

POLITICAL GEOGRAPHY

336 Three Credits
Examination of the relationship between politics and territory including how natural environments, distributions of populations and resources, levels of technological developments influence political decisions and the world geographic realms.

GEOGRAPHY OF AFRICA

337 Three Credits
Study of the natural regions of the continent, the physical and human resources and activities, the urban centers and economic and political problems and potentials. Emphasis on the analysis of problems and situations in regions and countries in the Islamic and Subsaharan African Realms.

GEOGRAPHY OF ANGLO-AMERICA

340 Three Credits
Analysis of the relationship of Anglo-America to the development of nations in North America and environs. Focus on the characteristics of place, human interaction with the environment, urban systems, and comparative analysis of subregions and economic systems. Timely subjects reflect approaches to problem solving and the changing role of the geography of Anglo-America in cyberspace and in the world's political, military and economic alliances.

URBAN GEOGRAPHY

410 Three Credits
Focus on structure and pattern in the urban fabric and the processes at work in the contemporary urban milieu. Emphasis on concepts and generalizations relating to the distribution of settlements, their functional specialization, and the spatial interrelations that bind them together into a complex, functional whole.

GERMAN - GRM

111 Three Credits
ELEMENTARY GERMAN I
Introduction to the fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

112 Three Credits
ELEMENTARY GERMAN II
PREREQUISITE: GRM 111 or Equivalent
Introduction to the fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

211 Three Credits
INTERMEDIATE GERMAN I
PREREQUISITE: GRM 112 or Equivalent
Review of grammar, reading moderately difficult prose, oral practice, and written compositions.

212 Three Credits
INTERMEDIATE GERMAN II
PREREQUISITE: GRM 211 or Equivalent
Intensive and extensive study and reading of modern prose, oral practice and composition.

213 Three Credits
SCIENTIFIC GERMAN
PREREQUISITE: GRM 211 or Equivalent
Intensive and extensive reading of scientific German in chemistry, physics, biology, mathematics, psychology, etc. Course may be taken in lieu of GRM 212 by majors in science, mathematics, and psychology to satisfy language requirements.

500 One/Two/Three Credits
SUPERVISED INDEPENDENT STUDY IN GERMAN
PREREQUISITE: Senior or Graduate Level
Variable content course in German language, literature, history, or culture for students who wish to study beyond the normal four-semester sequence of foreign language.
HEALTH EDUCATION - HED

100 PERSONAL AND COMMUNITY HEALTH
Two Credits
Study of a basic knowledge of current personal and community health problems to make informed decisions, to develop more positive attitudes, and to practice a lifestyle of healthful living.

170 PERSONAL AND COMMUNITY HEALTH
Three Credits
Study of a basic knowledge necessary for meeting the state’s approved professional preparation and responsibilities in the area of health.

368A CURRICULUM AND METHODS IN HEALTH EDUCATION
Three Credits
PREREQUISITES: HED 100, 170
Introduction to teaching and learning concepts; curriculum planning and organization; classroom management skills; professional behavior; subject matter delivery, and assessment and evaluation strategies. Successful completion of the course satisfies the state’s endorsement requirements in health education.

442 GENERAL SAFETY EDUCATION
Three Credits
PREREQUISITE: HED 170
Study of safety education including home safety, traffic safety, industrial safety, and pedestrian safety which provides healthy and enjoyable living in an environment that often presents hazards and chances for accidents.

HEALTH INFORMATION MANAGEMENT - HIM

120 MEDICAL TERMINOLOGY
Three Credits
Study of medical terminology including abbreviations, prefixes, suffixes, root words, and technical terms with emphasis on proper spelling and usage.

121 MEDICAL TERMINOLOGY II
Three Credits
Study of the diagnostic and treatment modalities available for clinical management of patient care as well as pharmacy therapy used for diseases of the system of the body.

310 CURRENT TRENDS IN HEALTH-CARE DELIVERY
Three Credits
PREREQUISITE: All Courses Listed Under the Freshman and Sophomore Years
Study of the health-care industry, governmental and voluntary care organizations in health-care, the functions of health-care providers, the organizational patterns of health-care facilities, current issues, and forces impacting on the health-care delivery system.

311 RECORD MANAGEMENT
Three Credits
PREREQUISITE: All Courses Listed Under the Freshman and Sophomore Years
Study of storage and retrieval systems and control techniques for health records; accreditation, certification, and licensure standards applicable to health records; the quantitative and qualitative analysis of health records; techniques of word processing and machine transcription; policies and procedures for the control and use of personal health information; confidentiality; forms design and control; and technical standards for health record practice.

311L RECORD MANAGEMENT LABORATORY
One Credit
PREREQUISITE: All Courses Listed Under the Freshman and Sophomore Years
Projects related to concepts such as storage and retrieval systems, numbering and filing systems, content and format of health records, qualitative and quantitative analysis of health records, and forms design and control.

312 HEALTH INFORMATION MANAGEMENT
Three Credits
PREREQUISITE: HIM 311, 311L
Study of the content, format, maintenance requirements and control of various indexes and registries, nomenclatures, classification systems, data abstracting, and retrieval techniques.

312L HEALTH INFORMATION MANAGEMENT SEMINAR
Two Credits
PREREQUISITE: HIM 311, 311L
Comprehensive review of record management, health information management, management foundations, management technology, resource management, management of human resources, medico-legal aspects, utilization and evaluation of health-care services, research methods and statistics, health-care delivery systems, and computers in health care.

451 COMPREHENSIVE HEALTH PLANNING
Three Credits
History of the development of health planning in the United States with understanding the principles, policies, and tools related to the planning process. Examination of the philosophical foundations of various methodologies of the planning process.

454 LONG TERM CARE ADMINISTRATION
Three Credits
Study of the long-term care health delivery system to gain a working knowledge of the holistic approach to the care of the elderly and long term care individuals. An overview of the emotional and physiological needs of individuals who require long-term care. Emphasis on finances, management, standards, and compliance for quality.
HEALTH SERVICES MANAGEMENT - HSM (continued)

491 Six Credits
HEALTH SERVICES MANAGEMENT INTERNSHIP
PREREQUISITES: HSM 300, 300L, 310, 311, 331
On-the-job experience in selected institutions and agencies
providing first-hand knowledge of the operational world by
devoting full-time effort to observing and participating in
management functions (minimum of 250 work hours).
Routine written reports, a major management project, and
periodic peer-advising are required with faculty direction
provided by telephone and on-site visits.

497 Three Credits
HEALTH SERVICES MANAGEMENT PROBLEMS AND
RESEARCH
PREREQUISITES: HSM 300, 300L, 310, 311, 331
Examination of selected health service management problems
such as the current and emerging challenges in financing,
organizational changes and managerial functions.

HISTORY - HIS

100 Three Credits
HISTORY OF CIVILIZATION
Survey of the development of cultures, societies, and
institutions from the earliest human beings through antiquity to
the European Renaissance.

101 Three Credits
HISTORY OF CIVILIZATION
Survey of the development of cultures, societies, and
institutions from the European Renaissance through the end
of the Cold War.

102 Three Credits
UNITED STATES HISTORY TO 1865
Survey of American History to 1865.

103 Three Credits
UNITED STATES HISTORY 1865 TO PRESENT
Survey of American History from 1865 to the present.

205 Three Credits
INTRODUCTION TO THE STUDY OF HISTORY
PREREQUISITE: HIS 102 and 103, or Sophomore standing
Introduction to the general problems of historical study and to
the skills required for conceptualizing, analyzing, and
synthesizing historical materials. (At the discretion of the
department chair, transfer students may be allowed to
substitute an upper level history course for HIS 205.)

304 Three Credits
PHILOSOPHY AND RELIGION
PREREQUISITES: Junior or Senior standing, or
Sophomore with the permission of the instructor
Survey of the basic ideas of philosophy and religion, affording
students knowledge and understanding of their intellectual
and spiritual heritage.

320 Three Credits
LATIN AMERICAN HISTORY SINCE 1820
Survey of Latin American history since the early nineteenth century.

325 Three Credits
DIPLOMATIC HISTORY OF THE UNITED STATES
Study of the development of American foreign relations from
1776 to the present with special emphasis on the twentieth century.

328 Three Credits
HISTORY OF VIRGINIA
Study of the history of Virginia to appreciate the roles that
Virginia has played in the development of the nation.

330 Three Credits
COLONIAL AMERICA
Study of the Spanish, French, English, Dutch, and Swedish
colonies through the eighteenth century, ending with
the Treaty of Paris (1763). Emphasis on the economic, social,
religious, and political concepts shaping colonial cultures.

331 Three Credits
THE AMERICAN REvolution AND THE FEDERAL ERA, 1763-1800
Survey of the political, economic, diplomatic, and intellectual
themes associated with the American Revolution and post-
Revolutionary era, with particular emphasis upon the drafting
of the U.S. Constitution.

332 Three Credits
THE UNITED STATES: EARLY NATIONAL PERIOD, 1800-
1840
Study of the Jeffersonian and Jacksonian eras, with special
emphasis on economic, political, and social forces shaping
American development.

333 Three Credits
THE CIVIL WAR AND RECONSTRUCTION
Study of nature of sectional conflicts leading to Civil War;
political, military and diplomatic aspects of the war itself;
Reconstruction and its results to 1877.

335 Three Credits
AFRICAN AMERICAN HISTORY
Survey of African American history from its African origins to
1865.

336 Three Credits
AFRICAN AMERICAN HISTORY
Survey of African American history from 1865 to the present.

340 Three Credits
ENGLAND, 1485 TO 1832
Study of the transformation of Tudor and Stuart England into
eighteenth century Great Britain. Emphasis on the making
and maintenance of England's limited monarchy through its
own civil war to the end of the Napoleonic period. Explanation
of the causes and consequences of Great Britain becoming
the leading industrial and commercial power by 1832.

341 Three Credits
ENGLAND SINCE 1832
Study of the rise of liberalism and corresponding rivalry of
conservatism; development of Britain as the leading industrial,
commercial, and financial power; the Victorian Compromise;
colonial expansion and imperialism; and the great reform
movements and English cultural advancement.

343 Three Credits
EUROPE FROM THE RENAISSANCE TO WATERLOO
Study of modern Europe from its beginnings through the final
defeat of Napoleon including Late Renaissance, Commercial
Revolution, religious conflicts, absolute rulers, the Industrial
Revolution, the French Revolution and Napoleon as a son of
the French Revolution.

345 Three Credits
EUROPE, 1815 TO 1914
Study of Congress of Vienna; period of reaction; rise of
liberalism, nationalism, imperialism, democracy, industrialization;
and causes of World War I.

346 Three Credits
TWENTIETH CENTURY EUROPE
Study of the problems of the states of Europe, emphasizing
the impact of World War I, the terrible and unpredicted
consequences of “total” war, the chaotic interwar period, the
effects of the Great Depression, the emergence of totalitarian
ideologies, World War II and the Holocaust, and the
reconstruction of Europe amidst the context of Cold War.

348 Three Credits
ANCIENT HISTORY
Survey of the great civilizations of Mesopotamia, Egypt, Greece
and Rome. Emphasis on political, economic, social, religious,
and cultural life. Assessment of the rise of Christianity and the
Germanic invasions culminating in the end of the Western
Roman Empire.

349 Three Credits
MEDIEVAL HISTORY
Study of invasions of the “barbarians” and the rise of national
states in Europe. Emphasis on the origins and development of
institutions and cultures.

360 Three Credits
LATIN AMERICA: ARGENTINA, BRAZIL, AND CHILE
Analysis of the political, economic, and social histories of
these nations, 1810 to present.

361 Three Credits
LATIN AMERICA: READINGS IN LATIN AMERICAN
HISTORY
Intensive directed reading for exceptionally able students.

362 Three Credits
INTRODUCTION TO THE MODERN NEAR EAST
Study of the foundation and development of the Islamic
civilization to the foundation of the Ottoman Empire providing
close study of the Ottoman Empire in the late 18th century
and throughout the 19th century.

363 Three Credits
INTRODUCTION TO THE MODERN NEAR EAST
Detailed study of the problems attending the creation of the
modern states of the Middle East with special emphasis on the
interwar period and the various independence movements.

365 One to Three Credits
READINGS IN AMERICAN HISTORY
Readings and discussions in selected historical problems.

366 Three Credits
AFRICAN HISTORY AND CULTURE
Survey of African history and culture from the origins of man
and Paleolithic times to the coming of the Portuguese about
1500 A.D. Emphasis on Egyptian Civilization; the kingdoms
along the Nile, the East African Coast, the development of
Christianity in North Africa, the Sudan and Ethiopia, the
Kingdom of Axum, the invasion and influence of Islam, the
Bantu Expansion, and the Western Sudanian kingdoms.

371 Three Credits
AFRICAN HISTORY AND CULTURE
Survey of African history and culture from the origins of man
and Paleolithic times to the coming of the Portuguese about
1500 A.D. Emphasis on Egyptian Civilization; the kingdoms
along the Nile, the East African Coast, the development of
Christianity in North Africa, the Sudan and Ethiopia, the
Kingdom of Axum, the Invasion and influence of Islam, the
Bantu Expansion, and the Western Sudanian kingdoms.

373 Three Credits
EAST ASIAN CIVILIZATION
Study of the civilization of ancient China from the dawn of
history to the collapse of the Qin Dynasty in 206 B.C. Special
consideration given to religion and philosophy and the other
influences on the development of national institutions,
includes brief survey of traditional Japan.

374 Three Credits
EAST ASIAN CIVILIZATION
Study of the civilization of medieval China from the founding
of the Han Dynasty (206 B.C.) to the fall of Yuan Dynasty
about 1368. Special emphasis on the introduction of
Buddhism into China and the rise of Neo-Confucianism,
and the influence of Chinese culture on feudal Japan.

375 Three Credits
CONTEMPORARY ECONOMIC SYSTEM OF CHINA
Study of the agricultural, industrial, commercial, and financial
institutions of the People's Republic of China with emphasis on
the strategic and economic importance of Sino-American
relations to the growth of the world economy and the
preservation of world peace.

376 Three Credits
CONTEMPORARY ECONOMIC SYSTEMS OF JAPAN
Study of postwar Japan's spectacular economic growth, with
emphasis on lessons that Americans can learn from the
Japanese experience.

377 Three Credits
BLACK LEADERS, THEN AND NOW
Survey of the role of Black leaders in American history from
the period of exploration and discovery to the present.

380 Three Credits
AMERICAN MILITARY HISTORY
Study of the development of the American military
establishment, politics, and strategies from the American
Revolution to the present.

410 Three Credits
AMERICAN CONSTITUTIONAL HISTORY
Study of basic principles of the American constitutional system.
Emphasis on the judicial interpretation and application of these
principles in construing the powers of the government and the
rights of persons. Examines the historical background of major federal court decisions.

411 Three Credits
TWENTIETH CENTURY RUSSIA
Study of the background of the 1917 revolution, the
emergence of the USSR, and its impact upon other nations.

418 Three Credits
SOUTHERN HISTORY
Survey of social, political, and economic development of the
Southern United States.
420/520 Three Credits
COMPARATIVE HISTORY OF MINORITIES IN THE U.S.
FROM THE COLONIAL PERIOD TO THE PRESENT
Focus on the diversity of America's population, the factors, which shaped the coming of various people to America, their adjustments to a new homeland, and the contributions various groups have made.

438 Three Credits
THE UNITED STATES FROM THE 1890S TO 1932
Study of the impact of industrialism, urbanization, racial problems, foreign policy, and World War I.

439 Three Credits
THE UNITED STATES FROM 1932 TO PRESENT
Study of social, economic, and political changes, including the Great Depression, the New Deal, World War II, the Cold War, the 1950s and 1960s, to the end of the century. Also includes the Black Revolution and other contemporary developments.

446 Three Credits
LATIN AMERICA: THE COLONIAL PERIOD
Study of the leading Native American cultures of 1500 AD, their conquest by Iberian adventurers, the making of colonial institutions and cultures, and the eventual origins of independence movements.

448 Three Credits
SLAVERY IN THE ATLANTIC BASIN
Study of the development of slavery in the Atlantic Basin from its Western African/Islamic/European origins through the dreaded Middle Passage to the Caribbean, Latin America, and the American South.

451 Three Credits
GERMANY FROM THE RENAISSANCE TO UNIFICATION
Study of German history from the Trans-Alpine Renaissance and the Protestant Revolution through unification under Bismarck, economic, political, social, and cultural forces. Emphasis on the religious struggle, the evolution of Prussia, and the impact of the Napoleonic wars.

452 Three Credits
GERMANY SINCE UNIFICATION
Study of political, cultural, and military development under Bismarck and William II including the First World War, defeat, and republican government; Nazism, the Second World War and defeat; partition, the struggle to regain prestige and reunification.

475 Three Credits
EMERGENCE OF MODERN CHINA (1368-1911) AND MODERN JAPAN (1867-1921)
Study of the interplay of ideology, nationalism, economic ideas, and culture in twentieth century Japan and China.

476 Three Credits
MODERN CHINA AND MODERN JAPAN
Study of the interplay of ideology, nationalism, economic ideas, and culture in twentieth century Japan and China.

490 One to Three Credits
SPECIAL TOPICS IN HISTORY
Opportunities to study and examine historical problems of special interest.

494 Three Credits
INTERNSHIP
PREREQUISITES: Senior with Minimum of 24 Hours of History
Development of knowledge and skills in fields related to history, for example museum work or digital projects. A minimum number of clock hours in an approved placement is required.

497 Three Credits
INTRODUCTION TO HISTORICAL RESEARCH
PREREQUISITES: Minimum of 15 hours lower level (1XX, 2XX) history courses and 9 hours of upper level (3XX, 4XX) history courses. Introduction to historical methodology, research, website application, and writing. Survey of the major types of historical sources and different approaches to historical inquiry. Original research project includes a research paper, and the creation of a website with a searchable database.

501 Three Credits
TOPICS IN AMERICAN HISTORY
Lecture or seminar topics to be selected by course instructor.

502 Three Credits
TOPICS IN EUROPEAN HISTORY
Lecture or seminar topics to be selected by course instructor.

503 Three Credits
TOPICS IN NON-WESTERN HISTORY
Lecture or seminar topics to be selected by course instructor.

516 Three Credits
AMERICA AND THE RISE OF THE CITY: 1650 TO THE PRESENT
Study of population growth, industrialization and urbanization, urban decay, and renewal providing related reading in the economic, political, and governmental development from the Post-Civil War town to the modern megalopolis.

HOTEL AND RESTAURANT MANAGEMENT - HRM

100 Three Credits
PROFESSIONAL DEVELOPMENT I
Study of career development, professional conduct, portfolio development, interviewing, etiquette and social development, customer service, and proper dress.

115 Three Credits
INTRODUCTION TO HOSPITALITY
Overview of various facets of the industry's restaurants, hotels, resorts, travel, tourism, and clubs. Emphasis on general operating procedures and professional management principles with the inclusion of career planning and exposure to role models. Field trips and hospitality executive guest lecturers required.

120 Three Credits
SANITATION PRINCIPLES
Study of sanitation standards for food and beverage establishments, food handling practices, and microorganisms and their control.

150 Three Credits
TOURISM PRINCIPLES
Study of cultural tourism, sociology of tourism, components and supply, tourism development, economic role of tourism demand, the marketing of tourism, and the international scope of tourism.

200 Three Credits
COMPUTERS IN HOSPITALITY
Study of computer applications used in the hospitality industry. Emphasis on the different software packages available and the programs they run.

210 Three Credits
FRONT OFFICE MANAGEMENT
Study of principles and procedures used in effective hotel/motel front office management. Emphasis on operation of specific equipment, planning and forecasting hospitality needs.

220, 220L One /Two Credits
INTRODUCTION TO FOOD PREPARATION/LABORATORY
Introduction to commercial food preparation, nutrition, standard product identification, and storage which includes classroom instruction, demonstrations, and actual cooking experience. Emphasis on explanations of techniques and procedures of quality/quantity food production.

230 Three Credits
HOSPITALITY ACCOUNTING I
Study of the management aspects of accounting and financial statement analysis as they relate to hospitality operations which begins with an introduction to the Generally Accepted Accounting Principles and explains the system of double entry accounting. Emphasis on understanding analysis and interpretation of financial statements, ratio analysis, internal control, pricing and cost management.

240 Three Credits
INTRODUCTION TO GAMING
Overview of gaming; topics include the economics of the gaming industry, its interface with the hotel, organizations and terminology.

242 Three Credits
THE TRAVEL AGENCY
Examination of the services and functions of retail and wholesale travel agencies, including agency administration, procedures, ticketing, accounting, promotion, and travel counseling.

280 Three Credits
DINING ROOM AND BEVERAGE MANAGEMENT OPERATIONS
Introduction to the dining room and beverage service operation found in the Hospitality Industry. Elements of showmanship and techniques for promoting sound guest relations are stressed. Experience in working on campus and off, in addition to attending regular classes.

300 Three Credits
PURCHASING
Exploration of the procedures and practices utilized in purchasing items and services for the hospitality industry. Emphasis on the procurement cycle, legal aspects of purchasing, standards and specifications of items, sources of supplies, and distribution systems.

310 Two Credits
PROFESSIONAL DEVELOPMENT II
Introduction to aspects of the hospitality industry and related areas that are not available in regularly scheduled courses.

330 Three Credits
HOSPITALITY ACCOUNTING II
PREREQUISITES: HRM 230 Examination of various approaches to managerial accounting from the perspective of hospitality operations. Emphasis on the cost-volume-profit approach to decision-making, use and source of working capital, cash flow analysis, investment decision-making, and market, as well as financial feasibility studies.

331 Three Credits
FOOD AND BEVERAGE COST CONTROL
Fundamentals of food, beverage, and labor cost control for hotel and restaurant operations.

340 Three Credits
TRAVEL AND TOURISM MARKETING
Study of marketing principles and practices used to meet the needs of the hospitality industry. Emphasis on the role of advertising and promotion in the hospitality industry and effective use of marketing strategies in the hospitality industry.

342 Three Credits
THE RECREATION INDUSTRY
Study of leisure and the recreation industry, their interrelationships to American lifestyles, and their implications for the hospitality industry.

351 Three Credits
CONVENTION AND EXHIBIT SERVICES
PREREQUISITE: HRM 340 Emphasis on organizing, arranging, and operating conventions, trade shows, and concessions. Examination of methods of sales used in booking conventions and trade shows, and division of administrative responsibility in their operation.

359, 359L One /Two Credits
COMMERCIAL FOOD PRODUCTION/LABORATORY
PREREQUISITES: HRM 220, 220L Principles and practices of large quantity food preparation and service. Topics include Principles and Practices of Large Quantity Food Preparation and Services, Production, Efficient Work Methods, Quality Control, Safety, and Sanitary Food Handling. Laboratory food experiences included.

361 Three Credits
TRAINING FOR THE HOSPITALITY ORGANIZATION
Overview of the key principles of employee training, management training and development, and pre-opening training. Development of a training plan for a hospitality facility.

381 Three Credits
FACILITIES LAYOUT AND DESIGN
Study of hospitality facilities, layouts, and designs, exterior and interior; building systems; space allocations; equipment; and budgets.

382 Three Credits
INCENTIVE TRAVEL
Study of the use of travel as an incentive to help meet marketing objectives, including the organization and marketing of transportation, hotels, restaurants, tour and ground operators, destination, and other creative services.

384 Three Credits
FAIR & AMUSEMENT PARK ADMINISTRATION
Focus on the management and marketing of fairs and amusement parks, including crowd control, concessions, security, and contract negotiations.

391, 391L One/Three Credits
MANAGEMENT INTERNSHIP/LABORATORY
Supervised on-the-job management training at selected facilities. Minimum of 250 clock hours required.
HOTEL AND RESTAURANT MANAGEMENT – HRM (continued)

461 HOSPITALITY PROPERTY MANAGEMENT
Three Credits
Study of the problems of cost and operation of pest control, security, parking, general cleaning and upkeep, laundry, fire prevention, pools, tennis courts, and care of guest rooms and public spaces, with emphasis on equipment, personnel, and modern innovations.

480 SENIOR PROJECT
Three Credits
PREREQUISITES: HRM 391I, HRM 391L
Emphasis on providing the student with the opportunity to engage in a research project designed to showcase competence and developed managerial knowledge.

HUMANITIES - HUM

210 HUMANITIES
Three Credits
Study of the creative expression of the Western world, from the Italian Renaissance to the twentieth century. Emphasis on the philosophical and social matrix out of which these artistic expressions have developed.

HUMANITIES

211 HUMANITIES
Three Credits
Exploration of the Non-Western World. Emphasis on an understanding of the great religious traditions and the world views, which have shaped the values, expressions, and the social structures of the people.

INDUSTRIAL EDUCATION - IED

170 FUNDAMENTALS OF MASONRY I
Three Credits
Study of the historical significance of brick making with emphasis on the importance of design and structural soundness in masonry construction, and opportunities for practical use and care of masonry tools.

171 FUNDAMENTALS OF MASONRY II
PREREQUISITE: IED 170
Three Credits
Study of the different mixtures of mortar, use of tools, and methods of performing unfinished and finished common brickwork; piers and walls of different bonds as examples.

354 COURSE DEVELOPMENT IN VOCATIONAL EDUCATION PREREQUISITES: Four successful semesters in major technical electives or equivalent Journeyman experience. Identification and application of analysis in the development of systematized instruction. Students plan and construct a course of study, including terminal performance objectives, manipulative and information elements arranged in logical sequence, special projects and activities, designated instructional aids and techniques, and appropriate practices for implementing and evaluating instruction.

360 INSTRUCTIONAL MATERIALS PREREQUISITE: IED 364
Two Credits
Introduction to sources, types, and procedures for obtaining, organizing, and evaluating teaching materials for shop and laboratory instruction. Emphasis on locating, appraising, and utilizing a variety of audio visual aids and teaching strategies appropriate for individual and group instruction.

451 METHODS OF LABORATORY INSTRUCTION PREREQUISITES: IED 354; SED 380
Three Credits
Implementation of performance of effective teaching behaviors. Development of competence in writing instructional objectives, planning systematic instruction units, effectively teaching manipulative and informational lessons, and utilizing a variety of instructional aids and techniques.

452 MEASUREMENT IN INDUSTRIAL EDUCATION PREREQUISITE: Senior Standing
Three Credits
Study of the purposes and appropriate uses of standardized and informal teacher-made instruments for appraising student performance. Application of basic principles for constructing various types of test items and measuring instruments, center referencerated objectives, properly administering tests, and interpreting the result.

459 ADMINISTRATION AND COORDINATION OF COOPERATIVE EDUCATION PREREQUISITE: Permission
Three Credits
Development of the special competencies required of teacher coordinators for the selection of students and training agencies, including provision of related instruction and the coordination of in-school and on-the-job activities of cooperative education students in secondary schools.

460 DEVELOPMENT OF RELATED INSTRUCTION FOR COOPERATIVE EDUCATION PREREQUISITE: IED 459
Three Credits
Acquisition of competencies required for identifying and developing the variety of specialized materials needed for related instruction of students in secondary cooperative education programs. Emphasis on techniques needed in developing and organizing materials appropriate for small group and individual instruction.

461 INSTRUCTIONAL LABORATORY MANAGEMENT PREREQUISITE: Permission
Three Credits
Study of plans and layouts peculiar to the school industrial laboratory. Emphasis on competency development for prospective teachers in organizing and executing shop instructional aids and techniques, and appropriate practices for implementing and evaluating.

INDUSTRIAL MANAGEMENT TECHNOLOGY - IMT

205 INDUSTRIAL SAFETY AND MANAGEMENT
Three Credits
Study of the nature, background, importance, and trends in industrial safety. Major emphasis on regulatory aspects of industrial safety, identification and controlling safety hazards, accident and injury analysis, development of safety goals, material handling; and fire prevention and protection.

244 INDUSTRIAL SPECIFICATIONS & TECHNICAL DOCUMENTATION PREREQUISITE: ENG 102
Three Credits
Development of proficiency in writing technical reports through collecting, organizing, and presenting materials in specialized areas.

303 INTERNSHIP IN TECHNOLOGY
Three Credits
Experiences in developing and refining skills that require for a transition into career-related positions relative to specialty programs. The purpose of the internship is to acquire a minimum level of practical application of the theory and content in the specialty program.

340 ENGINEERING ECONOMICS
Three Credits
Evaluation of engineering alternatives by quantitative methods. Application to problems in depreciation of assets, their replacement analysis, breakeven points, increment costs, and production alternatives.

410 FIRST-LINE SUPERVISION AND FOREMENSHIP
Three Credits
Study of a management development for business, industrial, and institutional supervisors. Emphasis on motivation, leadership, decision making, and supervisory skills.

411 INVENTORY MANAGEMENT
Three Credits
Study of inventory classifications, inventory control, optimum inventory, and future trends in inventory management.

415 INDUSTRIAL MAINTENANCE MANAGEMENT PREREQUISITES: IAT 105 and IAT 411
Three Credits
Identification and appraisal of industrial maintenance management functions, organizational problems, and practices. Consideration given to key factors for optimizing maintenance efficiency and effectiveness.

420 LABOR AND INDUSTRIAL RELATIONS
Three Credits
Discussion of individual groups and organizations in unions, management, and government act as they do in industrial relations with emphasis on psychological and sociological factors.
INTERDISCIPLINARY STUDIES - INT

308 Three Credits
INTRODUCTION TO INTERDISCIPLINARY STUDIES
Survey of major concepts and processes that explain interdisciplinarity: the influences of culture, socialization and language on meanings of social interaction and critical thinking, and interdisciplinary research; the consequences of modernism, postmodernism and globalization for contemporary living. Social science paradigms such as feminist and Afro-centric ideas are explored in order to develop analytic and synthetic insights related to beliefs, values, laws and actions of human groups.

322 Three Credits
APPROACHES TO CRITICAL ANALYSIS
Examination of how characteristic logical constructs are employed in reading, writing, and speech acts; modeling and application of modes of analysis that develop critical thinking skills and flexible orientation toward reading and writing. Focus on current themes and issues in globalization.

360 Three Credits
FOUNDATIONS OF RESEARCH IN INTERDISCIPLINARY STUDIES
Exploration of relationships between social theory and the interdisciplinary process; investigates rationales and appropriate applications of qualitative and quantitative research methods; examines techniques for formulating thesis statements and hypotheses; reviews salient factors for developing valid and reliable questionnaires, and constructs researchable proposals.

375 Three Credits
LANGUAGE AND SOCIETY
Examination of the fundamental characteristics of language as a system of signs and symbols used to interpret and influence social and behavioral environments. Exploration of common linguistic and heuristic practices and the underlying assumptions that sustain them; shows language as a medium for understanding the world and highlights contrasts between social and written reality. Topics include the uses of English in globalization vis-à-vis voices of race, gender and other minorities.

411 Three Credits
IDEAS AND THEIR INFLUENCES
Investigation of the origins (historical, social and cultural) of ideas, theories, and paradigms in the Western intellectual tradition; their influences in contemporary globalization; a holistic approach to an analysis, synthesis and interpretation of pre-Platonic, Renaissance, Enlightenment, modern, postmodem and globalization ideas.

412 Three Credits
CONTEMPORARY GLOBALIZATION
Critical survey of issues and forces shaping interdependencies among the world’s nations; their meanings for global wealth management and sharing; global investment, trade, production, the free-market system, Western democratic institutions, technologies and the global telecommunications revolution; their significance for new social groupings, human welfare, cultural and religious diversity, and education. Focus on diminishing national boundaries, migration of labor, world hegemonic powers and the role of the United Nations.
MANAGEMENT - MGT

365 Three Credits
ORGANIZATIONAL BEHAVIOR AND THEORY
PREREQUISITES: PST 210 or Equivalent, Junior Standing
Study of organizational behavior and the various social units—individuals, groups, and of group behavior that constitute organizations. Exploration of relevant theories of the relationship and processes among individuals, in and between groups, and in and between organizations. Through experiential approaches, develops social and analytical skills for leadership and membership in organizations.

368 Three Credits
HUMAN RESOURCE MANAGEMENT
PREREQUISITE: MGT 365
Focus on administering change within organizations through the training and developing of human resources. Experiential activities enhance the development of leadership skills in the training process.

410 Three Credits
LEADERSHIP AND DIVERSITY IN MANAGEMENT
PREREQUISITE: MGT 365
Focus on how individuals and organizations can effectively, efficiently, and productively adapt to the challenges of diversity in the workplace and in the customer base.

415 Three Credits
INTERNATIONAL MANAGEMENT
PREREQUISITE: Junior Standing; MGT 365
Analysis of the operations and the managerial strategies of various types of businesses in the international setting. Focus on the intellectual, political, social, economic, and moral issues that the business and government leaders must face in dealing with international business problems.

420 Three Credits
ORGANIZATIONAL CHANGE AND DEVELOPMENT
PREREQUISITE: MGT 365 and Senior Standing
Study of the knowledge base and competencies to be leaders or effective participants in organizational change efforts. Exposure to various models, determinants, and processes of effective change efforts.

425 Three Credits
ADVANCED SEMINAR IN MANAGEMENT AND TOTAL QUALITY
PREREQUISITES: DSC 370; MGT 365
Examination and analysis of real studies of corporate and public sector management situations and problems, including a review of the strengths, weaknesses, opportunities, threats and how they relate to the problem solution. Development of total-quality-based solutions to the specific case studies.

430 Three Credits
LABOR RELATIONS
PREREQUISITE: MGT 368
Exploration of the evolution and characteristics of union-management relations in America including union structure, government and leadership, social significance of unions, legal aspects of labor relations, contract administration, grievance resolution, and affirmative action.

435 Three Credits
COMPENSATION
PREREQUISITE: MGT 368
Examination of wage and salary administration and fringe benefit management in organizations including wage and salary administration, job evaluation procedures, compensation plans, fringe benefit analysis and planning.

440 Three Credits
COLLECTIVE BARGAINING
PREREQUISITE: MGT 368
Focus on the real world application of collective bargaining negotiations through a simulated activity that integrates the theoretical background of the prerequisite courses.

478 Three Credits
STRATEGIC MANAGEMENT
PREREQUISITES: MGT 365, 366; FNC 360; DSC 476; Senior Standing
Study of formulating and implementing business and corporate strategic plans and evaluating management strategic performance in complex business environments including the corporate mission and objectives, industry analysis, competitive analysis, environmental analysis, business, corporate, and international strategy.
412 MARKETING MANAGEMENT
PREREQUISITE: MKG 366; Senior Standing
Study of the organization and management of marketing with emphasis on strategic decision-making for entrepreneurs and corporate entrepreneurs.

413 STRATEGIES FOR RETAIL BUSINESSES
PREREQUISITE: MKG 366
Study of the organization and management of retail establishments with emphasis on problems and trends in retailing from the point of view of the entrepreneur including such factors as store location, merchandise assortment and budget planning, inventories planning and control, customer support services, advertising and promotions, and other topics.

414 ADVERTISING AND PROMOTION MANAGEMENT
PREREQUISITE: MKG 366
Study of the fundamental principles of communication as they apply to marketing and promotion including management of the promotional mix, advertising, personal selling, sales promotion, publicity, and point of purchase.

415 BLACK PERSPECTIVES IN MARKETING
PREREQUISITE: MKG 366
Study of the economic, social, and psychological characteristics of blacks as they relate to the field of marketing including demographic characteristics, psychological perceptions, shopping patterns, the role of black media, and the black businessperson and the marketing concept.

416 INTERNATIONAL MARKETING
PREREQUISITE: MKG 366
Analysis of marketing principles relating to international marketing organizations, marketing channels, channels of distribution, selling, and pricing.

418 INTERNET MARKETING
PREREQUISITE: MKG 366 or Permission of Instructor
Survey of marketing products on the Internet including such topics as uniqueness of the Internet as a marketing tool; Internet commerce; starting an Internet business; marketing mix and the Internet; and designing an Internet Web site.

476 MARKETING SEMINAR
PREREQUISITE: MKG 366
Discussion of topics related to the field of marketing.

491 MARKETING RESEARCH STRATEGIES AND OPPORTUNITIES
PREREQUISITE: MKG 366; DSC 270; Senior Standing
Focus on problem definition (opportunity analysis) and data analysis techniques and strategies as applicable to small business owners.

MASS COMMUNICATIONS - MCM

211 Three Credits
SOCIETY AND MASS COMMUNICATIONS
Study of the socio-economic developments related to the growth and development of American newspapers, magazines, books, radio, television, motion pictures, cable and satellite communications.

220 Three Credits
RADIO BROADCASTING
PREREQUISITE: MCM 211 or permission of instructor
Introduction to WNSB-FM and radio station duties. Study of the manner in which WNSB-FM conducts its daily operations and the equipment at the station.

250 Three Credits
TELEVISION PRODUCTION
PREREQUISITE: MCM 211
Introduction to the fundamentals, essential tools, and techniques of television and audio operations. Structured laboratory exercises provide an understanding of theory, terminology and crew position responsibilities.

261 Three Credits
INTRODUCTION TO MEDIA WRITING
PREREQUISITE: ENG 102; MCM 250
Introduction to the aural writing style used in broadcast/cable programs. Primary emphasis on news writing for radio and television based on industry formula. Secondary emphasis on applying aural style to more complicated program scripts.

280 Three Credits
HISTORY AND APPRECIATION OF MOTION PICTURES
PREREQUISITE: MCM 211
Summary of motion pictures as a distinctive medium of expression and communication including the techniques, physical basis, and history of the silent films to sound films of the leading genres, and the directors who illustrated selected phases of film evolution.

310 Three Credits
HISTORY OF MASS COMMUNICATIONS
Study of the origin and development of mass media in the United States. Emphasis on the press, radio, television and motion pictures.

315 Three Credits
INTERVIEWING AND INFORMATION GATHERING
Study of the identification and utilization of tools necessary in gathering information, setting up, preparing and conducting interviews for broadcast. Emphasis on organization of the information for use in the media and allied industry.

330 Three Credits
ELEC. FIELD PRODUCTION & EDITING
PREREQUISITES: MCM 250, 261
Introduction to basic shooting, editing and lighting techniques necessary for field production. Experience shooting and editing a variety of news stories will serve as a resume tape upon completion of the course.

350 Three Credits
TV DIRECTING
PREREQUISITE: MCM 250
Development of television program producing and directing with emphasis on leadership skills and advanced audio-visual equipment instruction through specific laboratory exercise.

351 Three Credits
INTRODUCTION TO BROADCAST AND FILM CRITICISM
PREREQUISITES: MCM 211, 260
Analysis of the historical, aesthetic, and critical aspects of broadcast programs and motion picture. Attendance and viewing of films and evaluations required.

352 Three Credits
SPORTS BROADCASTING
PREREQUISITE: MCM 261
Prepares students for live on-air sports broadcasting. WNSB-FM and public access cable channels will serve as laboratories for students who meet the requirements for the course. Lectures and laboratory experience emphasize fundamentals of communications, sports language and rules, interviewing and reporting techniques, and research and preparation for announcing games.

360 Three Credits
BROADCAST NEWS WRITING AND REPORTING
PREREQUISITE: MCM 261
Experience researching, planning, writing, producing and delivering news and public affairs material over campus media. Primary emphasis on television news. Secondary emphasis on radio, internet and new media.

365 Three Credits
AUDIO PRODUCTION
PREREQUISITE: MCM 250
Study of audio principles, practices, and concepts of communication for radio, television, and motion pictures. Proficiency in campus facilities, including studios and remote locations required.

390 Three Credits
COMPARATIVE MASS MEDIA SYSTEMS
PREREQUISITE: MCM 211
Survey of international mass media systems focusing on their development, organization, and operation. Emphasis on the similarities and differences of various systems with a critical view of the effect government has on a nation’s mass media.

391 Three Credits
RADIO AND TELEVISION ANNOUNCING
PREREQUISITE: MCM 261
Emphasis on the style, manner, characteristics and performance of broadcast/cable news anchoring and reporting including in-studio, show and remote producing techniques. Primary focus on the participation in a TV lab environment with selected projects broadcast over the campus TV system. Secondary focus on radio, internet and new media productions.

400 Three Credits
LAW AND MASS COMMUNICATIONS
PREREQUISITES: MCM 211; ENG 203
Examination of the various laws that affect mass communications in the United States including licensing, operations, programming, advertising, defamation, privacy, copyright and other related topics.

445 Three Credits
ETHICS IN MEDIA
PREREQUISITE: MCM 211
Development of a strong sense of ethical responsibility as communications professionals including case studies of ethical decision-making by news and communications organizations and analysis of ethical codes of various professional groups.

450 Three Credits
MASS COMMUNICATIONS THEORY AND RESEARCH
PREREQUISITE: MCM 211
Examination of the theory and principles of communications systems and processes including research methods commonly used by communications professionals and trends in media research.

460 Three Credits
CONTEMPORARY ISSUES AND SPECIAL PROBLEMS
PREREQUISITES: MCM 211, ENG 203
Analysis of current issues and problems in mass media including the roles of media, ethics in media, media criticism, new technology, media market, and the trends of the media industry.

464 Three Credits
ADVANCED TV PRODUCTION
PREREQUISITES: MCM 250, 261, 330, 350
Capstone course builds on writing, producing and directing skills in order to produce a weekly television program. Production of a news/magazine format, dramatic, or comedic program or segment required.

476/570 Three Credits Each
BROADCAST/CABLE PROGRAMMING
PREREQUISITE: Upper-Class Standing
Introduction to the field of telecommunications (broadcast, cable, and satellite) programming as it relates to programming history and development, structure and formats, program strategies, research, regulation and operating practices.

476 Three Credits
BROADCAST SALES PREREQUISITE: Upper-Class Standing
Study of principles, structures, strategies, and practices of broadcast, cable, and satellite programming and sales. Emphasis on mid-management areas, which are crucial to the successful operation of all broadcast properties.

485/585 Three Credits
MEDIA TECHNOLOGIES
PREREQUISITE: Senior Standing or Consent of Instructor; for undergraduates, and advice and/or consent of the graduate coordinator for students seeking graduate credit
Survey of the growth and development of domestic and global broadcasting via cable, satellite systems and the Internet with an emphasis on their development and organization.

489 Three Credits
MEDIA MANAGEMENT
PREREQUISITE: Senior Standing
Exploration of management and administrative principles, roles, functions, structure and goals in the mass media including budget planning, personnel, labor/management relations, and regulation of the print and electronic media.

490 Three Credits
SPECIAL TOPICS IN MEDIA
Opportunities to study and examine media-related and special interest issues in culture, society, history, economy and politics.

491 Three Credits
INTRODUCTION TO THE INTERNET: WEB PAGE DESIGN
PREREQUISITE: CSC 200 or Permission of the instructor
Introduction to HTML, writing and web page design and creation of a multi-page website targeted to a particular audience. Usage of search engines to find relevant information and evaluate similar sites for content, structure, quality of information, purpose, and bias required.
493, 494 Three Credits Each
PRACTICUM (WNSB)
PREREQUISITES: C or better in ENG 101, ENG 102 and MCM 261
Real-world experience in radio at WNSB-FM. Emphasis on developing the ability to become creative writers and producers, along with learning radio production techniques.

496 Three Credit INTERNSHIP
PREREQUISITE: Junior or Senior Standing and Consent of Supervising Instructor
Practical experience in the production departments of radio and television stations, newspapers, film production companies, advertising and public relations agencies, media research organizations, and selected other media-related agencies.

MATHEMATICS - MTH

101 Three Credits ELEMENTARY ALGEBRA
Developmental approach for students whose backgrounds indicate a need for further review of basic algebra. Mathematics Laboratory required. (Credits do not count toward the mathematics requirements of a student's major.)

103 Three Credits CONTEMPORARY MATHEMATICS
PREREQUISITE: MTH 101 or the equivalent
Emphasis on global, applying ideas in mathematics and the connections between contemporary mathematics and modern society. Topics selected from elementary mathematics, logic, probability and statistics, discrete systems, geometry, measurement, and consumer applications. (Satisfies the minimum general education mathematics requirement.)

105 Three Credits INTERMEDIATE ALGEBRA
PREREQUISITE: MTH 101 or the equivalent
Preparation for the precalculus including linear and quadratic equations, graphing, polynomials, roots, radicals, and systems of equations. (Satisfies the minimum general education mathematics requirement.)

131 Three Credits PRECALCULUS FOR BUSINESS MAJORS
PREREQUISITE: MTH 105 (Grade C or higher) or the equivalent
Transition from elementary mathematics to calculus including a review of exponents, factoring, linear and quadratic equations, inequalities, functions, graphs, system of equations, exponential and logarithmic functions.

132 Three Credits CALCULUS FOR BUSINESS MAJORS
PREREQUISITE: MTH 131 or 151 (Grade C or higher)
Introduction to elementary calculus including limits, continuity, differentiation, and integration.

141 Three Credits ELEMENTS OF MATHEMATICS FOR TEACHERS
PREREQUISITE: MTH 101 or the equivalent
Thorough treatment of the modern mathematics curricula for prospective school teachers. Emphasis on sets and logic, number systems, number theory, algebra, geometry and measurement, and probability. Computer-based laboratory component with manipulatives included.

142 Three Credits ELEMENTS OF MATHEMATICS FOR TEACHERS
PREREQUISITE: MTH 101 or the equivalent
Continued treatment of the modern mathematics curricula for prospective school teachers. Emphasis on geometry and measurement.

151 Three Credits COLLEGE ALGEBRA
PREREQUISITE: MTH 105 or the equivalent
Study of basic algebra stressing fundamental concepts and reasoning used in mathematics and the sciences. Emphasis on skills necessary for the calculus sequences.

153 Three Credits COLLEGE ALGEBRA AND TRIGONOMETRY
PREREQUISITE: MTH 151 or equivalent
Extension of algebra topics and a treatment of trigonometry necessary for the study of advanced subjects in mathematics and the sciences. Preparation for the calculus sequence.

170 Two Credits TECHNOLOGY IN THE MATH CURRICULUM
PREREQUISITE: MTH 105 or the equivalent
Introduction to the graphics calculator and other classroom technologies that assist in learning math, science, and business courses.

184 Four Credits CALCULUS I
PREREQUISITE: MTH 153 or the equivalent
Treatment of the essentials of calculus necessary for the study of more advanced subjects in the natural sciences and mathematics including limits, continuity, derivatives and applications, antidrivatives and the Fundamental Theorem of Calculus. Integration of some calculus applications with computer activities included.

242 Three Credits HISTORY OF MATHEMATICS
PREREQUISITE: MTH 184
Study of the history and development of mathematics as a vital and integral part of the history of civilization including the history of numbers and number computation; development of geometry, algebra, trigonometry and calculus, and the development of modern mathematics.

250 Three Credits ELEMENTARY STATISTICS CONCEPTS
PREREQUISITE: MTH 105
Introduction to statistics including graphical data representation, basic probability concepts, sampling and expectation, confidence interval and hypothesis testing for sample mean and proportion.

251 Four Credits CALCULUS II
PREREQUISITE: MTH 184
Applications of definite integrals, the calculus of transcendental functions, infinite series, and integration techniques. Some topics are integrated with computer activities.

252 Four Credits CALCULUS III
PREREQUISITE: MTH 251
Investigation of calculus concepts at the intermediate level including polar coordinates, vectors, and the calculus of several variables.

300 Three Credits LINEAR ALGEBRA
PREREQUISITE: MTH 184
Introduction to the basic concepts, techniques, and elementary applications of linear algebra including matrices, linear systems, gaussian elimination, vector spaces, linear independence, linear transformations, eigenvalues and eigenvectors.

301 Three Credits MODERN GEOMETRY
PREREQUISITE: MTH 184
Re-examination of Euclidean plane geometry as a postulational system. Emphasis on formulating definitions, postulates, and theorems; exploring validity of theorems and construction with ruler and compass.

323 Three Credits NUMBER THEORY
PREREQUISITE: MTH 251
Theoretical study of the properties of the integers including prime numbers, congruences, continued fractions, Euclidean Algorithm, factorization, and Diophantine equations.

331 Three Credits ALGEBRAIC STRUCTURES
PREREQUISITE: MTH 300
An introduction to modern algebra, which deals with, selected algebraic structures (groups, rings, fields, etc.). The course stresses the axiomatic approach and the logic and method of proof.

350 Four Credits PROBABILITY AND STATISTICS I
PREREQUISITE: MTH 251
First of a two-semester sequence of probability and mathematical statistics, primarily for majors. Introduction to probability, univariate and multivariate probability distributions and their properties, distributions of functions of random variables, random samples and sampling distributions.

352 Three Credits PROBABILITY AND STATISTICS II
PREREQUISITE: MTH 351
Second of a two-semester sequence of probability and mathematical statistics, primarily for majors. Applications of probability, random samples, point and interval estimators and their properties, methods of moments, maximum likelihood, tests of hypotheses.

355 Three Credits INTRODUCTION TO REGRESSION ANALYSIS
PREREQUISITE: MTH 251
This course uses regression analysis as a flexible statistical problem solving methodology. Topics include matrix review; variable selection; prediction; multicolinearity; model diagnostics; dummy variables; logistic and non-linear regression. Emphasizes use of computer.

371 Four Credits DISCRETE MATHEMATICAL STRUCTURES
PREREQUISITES: MTH 184; CSC 170
An introduction to the area of discrete mathematics that is important to computer science. Topics include logic, sets, functions and relations, algorithms, counting principles, and graph theory.

372 Three Credits DIFFERENTIAL EQUATIONS
PREREQUISITE: MTH 251
A first course in ordinary differential equations. Topics include first-order equations, linear differential equations, and variable-coefficient equations. Applications include growth/decay models and the vibrational models.

373 Three Credits ADVANCED VECTOR CALCULUS
PREREQUISITE: MTH 252
A one-semester course in the calculus of functions of several variables and vector analysis. Topics include derivatives and integrals of functions of several variables, vector fields, divergence, curl, Green's Theorem, and LaGrange Multipliers. Course includes selected applications to the physical sciences.

382 Three Credits INTRODUCTION TO APPLIED MATHEMATICS
PREREQUISITE: MTH 184
A junior level introduction to applications of mathematics designed for mathematics, computer science, and engineering majors. Topics include difference equations, Laplace transforms, Sturm-Liouville problems, and Bessel functions.

384 Three Credits MATHEMATICAL MODELING IN THE SCIENCES
PREREQUISITE: MTH 184
A one-semester interdisciplinary course integrating mathematics and science investigations in a mathematical modeling setting. Students, working in cooperative groups, investigate real world science problems, formulate model solutions to the problems, and then present their solutions in a classroom setting using various technological aids.

401 Three Credits NUMERICAL ANALYSIS I
PREREQUISITES: MTH 300, and a Programming Language
Introduction to numerical techniques for problem solving involving the use of the computer. Topics include error analysis, solutions of one variable equations, solutions of linear systems, nonlinear systems of equations, iterative techniques in matrix algebra, and approximating eigenvalues.

402 Three Credits NUMERICAL ANALYSIS II
PREREQUISITE: MTH 401, MTH 372
Continuation of MTH 401. Topics include polynomial interpolation and approximation, numerical differentiation and integration, approximation theory, and numerical approaches to ordinary and partial differential equations.

431 Three Credits ABSTRACT ALGEBRA
PREREQUISITE: MTH 331
Continues MTH 331. Topics include a more advanced discussion of groups, rings, fields, homomorphism, isomorphism, and automorphism.
441 Three Credits
INTRODUCTION TO TOPOLOGY
PREREQUISITE: MTH 331 or 373
Introduction to the theory of point-sets including topological spaces, connectedness, compactness, continuity, and metric spaces.

451 Three Credits
STATISTICAL THEORY I
PREREQUISITE: MTH 352
Senior level course in applied statistics, designed especially for majors requiring an emphasis in statistics. Probability tools for statistics include description of discrete and absolutely continuous distributions, expected values, moments, moment generating functions, transformations of random variables, marginal and conditional distributions, independence, order statistics, multivariate distributions, concepts of random sample, derivation of many sampling distributions.

484 Three Credits
EXPERIMENTAL DESIGNS
PREREQUISITE: MTH 351
Topics to be covered include single factor experiments, residuals, randomized block designs, general factorial, blocking, regression models, unbalanced data, confounding blocks, and Taguchi experiments.

457 Three Credits
STATISTICAL THEORY II
PREREQUISITE: MTH 352
General textbook for statistical inference. Point estimators: biased and unbiased, minimum variance unbiased, least mean square error, maximum likelihood and least squares, asymptotic properties of estimators and tests of hypotheses: confidence intervals, power functions, Neyman-Pearson lemma, likelihood ratio tests, unbiasedness, efficiency and sufficiency are covered.

473 Three Credits
INTRODUCTION TO REAL ANALYSIS
PREREQUISITE: MTH 251
A rigorous introduction to the analysis of real-valued functions of a real variable. Provides a theoretical and axiomatic basis for calculus concepts taught in previous courses.

474 Three Credits
COMPLEX VARIABLES
PREREQUISITE: MTH 251
Treats the fundamentals of analytic function theory. Topics include algebra and geometry of the complex numbers, limits, derivatives, Cauchy-Riemann equations, Cauchy's Theorem, Taylor and Laurent series, and contour integration.

484 Three Credits
TOPICS IN APPLIED MATHEMATICS
PREREQUISITE: MTH 382
A senior level course containing advanced topics in mathematical and scientific applications. Topics vary, but may include partial differential equations, Fourier analysis and boundary value problems, with theoretical applications in mathematical physics and fluid dynamics.

491, 492 One To Twelve Credits
INDEPENDENT STUDY
PREREQUISITE: MTH 252 and as Specified by the Instructor
Under the direction of an instructor, this course is designed to give mathematics majors the opportunity to explore a single topic in theoretical or applied mathematics in a one-on-one learning relationship with a faculty member. Special topics must be approved by the department head.

496/497 Two Credits Each
MATHEMATICS SEMINAR
PREREQUISITE: Junior Status and Completion of Core Math Courses
Cumulative sequence designed to review and fortify knowledge of essential mathematics concepts and to synthesize mathematical knowledge and experience through the completion of an approved research to synthesize mathematical knowledge and experience through the completion of an approved research project. Results of the research are presented to peers and other interested members of the academic community. Course includes a comprehensive examination used to assess the objectives of the core mathematics courses.

500 Three Credits
TOPICS IN MATHEMATICS EDUCATION
PREREQUISITE: Nine Semester Hours of College Math Study of selected topics in mathematics curriculum development and methodology. Topics vary from semester to semester.

501 Three Credits
MATHEMATICS FOR COMPUTING
PREREQUISITE: MTH 184
Introduction to the mathematics of computer science including mathematical logic, informal set theory, relations, functions, and networks.

501A Three Credits
GRAPHING CALCULATOR APPLICATIONS
PREREQUISITE: MTH 184
Introduction to the use of graphing calculators as an aid to problem solving in mathematics and science including methods for the use of calculators in classroom instruction.

505 Three Credits
TOPICS IN CONTEMPORARY MATHEMATICS
PREREQUISITE: MTH 184
Emphasis on the connections between mathematics and contemporary real-life problems. Selected topics are drawn from statistics, linear programming, geometry, discrete systems, and consumer applications.

510 Three Credits
DISCRETE MATHEMATICS
PREREQUISITE: MTH 184
Introduction to the basic concepts in discrete mathematics including computer science, graph theory, management science, and applied statistics. Course methodology includes the use of technology, cooperative learning, and manipulatives.

511 Three Credits
ADVANCED TOPICS IN GEOMETRY
PREREQUISITE: MTH 311
Study of selected topics from integral, combinatorial, and algebraic geometries including the geometry of numbers. Independent research project required.

520 Three Credits
MATHEMATICAL LOGIC AND SET THEORY
PREREQUISITE: MTH 310 or 331
Special emphasis on topics in sets and logic. Independent research project on an approved topic in sets and logic required.

531 Three Credits
TOPICS IN ABSTRACT ALGEBRA
PREREQUISITE: MTH 331
Special emphasis on ring and field theory. Independent research project required.

540 Three Credits
MATHEMATICAL MODELS AND APPLICATIONS
PREREQUISITE: MTH 384
Study of the principles of mathematical modeling by way of selected science investigations. Independent research project incorporating mathematical modeling required.

MEDICAL TECHNOLOGY - MDT

306 Two Credits
PHLEBOTOMY
Simulated laboratory and direct clinical experience in blood collection techniques including venipuncture, capillary sticks, special test procedures, and isolation. Emphasis on patient handling, nursery patients, and safety. (1 hr. lecture/2 hrs. laboratory)

307 Two Credits
SEROLOGY
Study of "in vitro" antigen-antibody reactions and the serological procedures used in the diagnosis of disease states. (1 hr. lecture/2 hrs. laboratory)

308 Two Credits
URINALYSIS/BODY FLUIDS
Study of the theory and principles of chemical, physical, and microscopic clinical analysis of human urine and other body fluids. Emphasis on correlation of data obtained to diagnose disease states. (1 hr. lecture/2 hrs. laboratory)

315 Four Credits
CLINICAL HEMATOLOGY
Introduction to the study of blood cells and blood forming organ cells in the peripheral blood, bone marrows, and reticuloendothelial tissue; hematopoiesis; normal physiology and metabolism of blood cells; abnormal red and white cell morphology and associated pathological findings with emphasis on the classification of the anemia. (3 hrs. lecture/2 hrs. laboratory)

325 Four Credits
CLINICAL CHEMISTRY I
Study of the theory and principle of biochemical procedures performed in the clinical laboratory to analyze various body fluid constituents (proteins, enzymes, carbohydrates, electrolytes, acid-base balance, blood gases, and buffer systems) to aid in the diagnosis of diseases including the theory, operation, and maintenance of instruments used in the clinical laboratory; quality control and laboratory mathematics. (3 hrs. lecture/4 hrs. laboratory)

373 Five Credits
CLINICAL MICROBIOLOGY I
Clinical applications and interpretation of the principles of Medical Bacteriology, including historical and epidemiological significance, specimen collection, growth requirements, cultural characteristics, identification and pathogenicity. Laboratory exercises emphasize techniques, methods, and differential media used to isolate and identify pathogenic bacteria. (3 hrs. lecture/4 hrs. laboratory)

395 Four Credits
HEMATOLOGY/COAGULATION PRACTICUM
Rotation in the clinical hematology laboratory which incorporates instruction and examinations in routine hematology, special hematology, and coagulation under the supervision of a clinical specialist.

396 Four Credits
IMMUNOHEMATOLOGY PRACTICUM
Rotation in the clinical serology laboratory which incorporates instruction and examinations in routine blood banking and transfusion therapy under the supervision of a clinical specialist.

398 One Credit
SEROLOGY PRACTICUM
Application of the immunological and serological procedures utilized in the clinical laboratory under the direction of a proficient technologist. Animations required.

410 Three Credits
IMMUNOLOGY
Introduction to the study of antigens, antibody reactions, basic immune mechanisms, and their manifestations. Presentations on current immunological concepts and their application in the diagnosis, prevention, and treatment of infectious and noninfectious disease processes. (3 hrs. lecture)

425 Four Credits
CLINICAL CHEMISTRY II
PREREQUISITE: MDT 325
Study of the theory and principle of biochemical procedures performed in the clinical laboratory to analyze various body fluid constituents and organ functions (lipids, vitamins; NPN and renal functions; liver, heart, and skeletal muscle, thyroid, pancreas, and GI system; endocrinology; toxicology, and TDM) to aid in the diagnosis of diseases including the theory, operation, and maintenance of instruments used in the clinical laboratory; quality control in computer applications, and laboratory calculations. (3 hrs. lecture/4 hrs. laboratory)

450 Four Credits
CLINICAL HEMATOLOGY II
PREREQUISITE: MDT 315
Study of interpretative hematology through the classification and pathogenesis of hematologic white blood cell disorders associated with leukemia and leukemoid reactions, plasma cell and plasma protein abnormalities, myeloproliferative disorders, and lymphoproliferative disorders. Hemostasis and coagulation disorders will be presented. Laboratory exercises to diagnose disorders of hemostasis included. (3 hrs. lecture/2 hrs. laboratory)

455 Four Credits
IMMUNOHEMATOLOGY
PREREQUISITE: MDT 410
Clinical application of the principles of blood banking and transfusion therapy. Emphasis on the clinical manifestations of the blood group system, their antigens and antibodies; blood donation, blood processing component preparation, apheresis, exchange transfusions and transfusion reactions. Emphasis on quality control, FDA mandates, and blood bank policies for emergency transfusions. Simulated laboratory sessions introduce the general conditions and problems of the modern blood bank service. (3 hrs. lecture/4 hrs. laboratory)

473 Four Credits
CLINICAL MICROBIOLOGY II
PREREQUISITE: MDT 373
Study of clinically significant fungi, parasites, and viruses. Emphasis on historical and epidemiological significance, specimen collection, growth requirements, cultural characteristics, identification, and pathogenicity. Laboratory sessions emphasize techniques, methods, and media used to
MEDICAL TECHNOLOGY – MDT
(continued)

isolate and identify these microorganisms. (3 hrs. lecture/2 hrs. laboratory)

479
MEDICAL TECHNOLOGY SEMINAR
Preparation and presentation of a seminar on an approved topic in clinical laboratory science. Critiques will be done on the seminar. Comprehensive examination in all areas of medical technology required.

Two Credits

480
CLINICAL LABORATORY ADMINISTRATION
Overview of the medical technology profession including accreditation, licensure, certifying procedures; laboratory safety; principles of laboratory management and organization; educational methodologies; and professional responsibility and ethics.

Four Credits

485
CLINICAL MICROBIOLOGY PRACTICUM
Rotation through the clinical microbiology laboratory, incorporating instruction and examinations in bacteriology, mycology, parasitology, and virology under the supervision of a clinical specialist.

Four Credits

490
CLINICAL CHEMISTRY PRACTICUM
Rotation through the chemistry laboratory incorporating instruction and examinations in routine chemistry and special chemistry under the supervision of a clinical specialist.

One Credit

497
URINALYSIS PRACTICUM
Rotation through the urinalysis laboratory incorporating instruction and examinations in urinalysis and other body fluids under the supervision of a clinical specialist. Qualitative and quantitative chemical and microscopic analysis of urine, gastrics, and feces for the detection of substances associated with pathology included.

Three Credits

MILITARY SCIENCE - MSL

101
FUNDAMENTALS OF LEADERSHIP/MANAGEMENT
Study of the role of the U.S. Army, U.S. Army Reserve, and the U.S. Army National Guard including customs and traditions of the service, basic land navigation, leadership, problem analysis, and decision-making skills.

Two Credits

102
BASIC DRILL & CEREMONY MODULE
Prerequisite: MIS 101
Practical application of drill and ceremony procedures, squad and platoon drill, land navigation training, practical exercises, first aid training, and Army tactical communications equipment training. (One semester of 100 level Basic Leadership Laboratory required for continued advancement in ROTC.)

One Credit

105
ADDITIONAL LEADERSHIP/MANAGEMENT
Study of leadership skills relating to the treatment and prevention of personal injury. Extensive concentration in the area of first aid and cardiopulmonary resuscitation (CPR).

One Credit

106
BASIC DRILL & CEREMONY MODULE
Prerequisite: MIS 101 or 102
Practical application of drill and ceremony procedures, squad and platoon drill, land navigation training and practical exercises, first aid training and Army tactical communications equipment training. (One semester of 100 level Basic Leadership Laboratory required for continued advancement in ROTC.)

One Credit

201
APPLIED LEADERSHIP/MANAGEMENT
Study of the fundamentals of leadership and management including communication skills required in both the military and civilian environment. Emphasis on the utilization of subordinates, establishing a physical readiness program, inspection of personnel, equipment, and productivity.

Two Credits

202
BASIC DRILL & CEREMONY MODULE
Prerequisite: MIS 201
Practical application of drill and ceremony procedures, squad and platoon drill, land navigation training and practical exercises, first aid training, and Army tactical communications equipment training. (One semester of 200 level Basic Leadership Laboratory required for continued advancement in ROTC.)

Two Credits

202D
APPLIED LEADERSHIP/MANAGEMENT
Study of leadership management and productivity in a military environment. Emphasis on practical instruction in military skills to include land navigation, first aid, and related skills.

One Credit

202D
BASIC DRILL & CEREMONY MODULE
Prerequisite: MIS 202
Practical application of drill and ceremony procedures, squad and platoon drill, land navigation training and practical exercises, first aid training, and Army tactical communications equipment training. (One semester of 200 level Basic Leadership Laboratory required for continued advancement in ROTC.)

One Credit

301
ADVANCED LEADERSHIP/MANAGEMENT
Prerequisites: MIS 101, 102, 201, and 202 or Placement Credit
Study of land navigation, physical training, marksmanship, small arms training, and squad and platoon tactics.

Three Credits

301D
ADVANCED DRILL & CEREMONY MODULE
Prerequisite: MIS 301
Practical application of land navigation, physical training, marksmanship, and small arms training, and squad and platoon tactics. (Leadership Laboratory is required for continued advancement in ROTC.)

One Credit

302
ADVANCED LEADERSHIP/MANAGEMENT
Prerequisite: MIS 301
Study of land navigation, physical training, marksmanship, small arms training, and squad and platoon tactics.

Three Credits

302D
ADVANCED DRILL & CEREMONY MODULE
Prerequisite: MIS 302
Practical application of land navigation, physical training, marksmanship, and small arms training, and squad and platoon tactics. (Leadership Laboratory is required for continued advancement in ROTC.)

One Credit

400
THEORY AND DYNAMICS OF MILITARY TEAM
Prerequisites: MIS 301, 302
Study of the branches of the Army, drafting military commissions, counseling of personnel on job performance, and personal problems. Emphasis on planning meetings and conferences; planning, conducting, and evaluating personnel training; and writing information and decision papers.

Three Credits

400D
ADVANCED DRILL & CEREMONY MODULE
Prerequisite: MIS 400
Practical application of the development of leadership skills to ensure the successful transition from Cadet to Second Lieutenant. Successful completion of 411D is required for commissioning.

One Credit

401
THEORY AND DYNAMICS OF MILITARY TEAM
Prerequisite: MIS 401
Study of ethics and professionalism as it pertains to U.S. Army Personnel Management System, the principles and laws of war, military justice, intelligence and combat information, command and staff functions.

Three Credits

402
THEORY AND DYNAMICS OF MILITARY TEAM
Prerequisite: MIS 402
Practical application of development of leadership skills to ensure the successful transition from Cadet to Second Lieutenant. (Successful completion of 412D is required for commissioning.)

One Credit

421
INDEPENDENT STUDIES
Military research and/or professional reading and military book review designed to develop a cadet’s professional reading list and prepare for future military service.

One Credit

MUSIC - MUS

MINOR COURSE (Open to non-majors by permission of department only.)

479
Preparatory course for students who do not qualify (on audition) for MUS 121, PRIVATE INSTRUCTION. Available in each of the following media: brasswind, percussion, strings, woodwind, organ, piano, voice, harpsichord. (Meets one-half hour weekly.)

One Credit

MAJOR COURSE (Open to non-majors by permission of department only.)

479
Preparatory course for students who do not qualify (on audition) for MUS 125, PRIVATE INSTRUCTION (2). Available in each of the following media: brasswind, organ, percussion, piano, strings, voice, woodwind. (Meets one hour per week.)

One Credit Each

110, 111
Ensembles available, Instrumental: University Bands; University/Community Orchestra; Small Ensembles: brass, jazz, percussion, saxophone, string, guitar, woodwind; Vocal: Concert Choir and Jazz Choir.

One Credit Each

112, 113
PERFORMANCE WORKSHOP
Hands-on experiences in performing individual works.

One Credit Each

121, 122A
VOICE
Prerequisite: Placement or MUS 100
Emphasis on correct vocal production and exploration of a variety of representative vocal literature.

One Credit Each

121, 122B
PIANO
Prerequisite: Placement or MUS 100
Study of major scales; technical exercises and studies chosen from Schmitt, Hanon, Czerny/Liebling, Burgmuller, Op. 100 Oxford Piano Course for Older Beginners, or the equivalent; selected short compositions in various keys and rhythms; sight-reading.

One Credit Each

121, 122C
ORGAN
Prerequisite: Placement or MUS 100
Plan of study to be followed will be similar to the foregoing outline, but the expected rate of completion will be about one-half that of the organ major. To receive credit for MUS 121 (Organ), for instance, the student would be required to complete approximately one-half of the material outlined for MUS 125 (Organ). Completion of MUS 122 (Organ) would require the completion of all material outlined for MUS 125 (Organ).

One Credit Each

121, 122D
BRASS
Prerequisite: Placement or MUS 100
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

One Credit Each

121, 122E
WOODWIND
Prerequisite: Placement or MUS 100
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

One Credit Each

121, 122F
STRINGS
Prerequisite: Placement or MUS 100
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

One Credit Each

121, 122G
PERCUSSION
Prerequisite: Placement or MUS 100
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

One Credit Each

123, 124
PERFORMANCE CLASS
Seminars for Music Education students.

One Credit Each
125, 126A Two Credits Each

**VOICE**

**PREREQUISITE:** Placement or MUS 101

Mastery of vocal exercises for the development of breath control, legato singing, tone placement, diaphragmatic support and agility; emphasis on building musicianship, compositions of moderate difficulty, English text.

125, 126B Two Credits Each

**PIANO**

**PREREQUISITE:** Placement or MUS 101

Study of major scales (2-4 octaves), hands together, minor scales, hands separate; selected studies of Czerny, Hanon, Burgmuller, sonatinas of Clementi, Kuhlau, Beethoven; seventh arpeggio.

125, 126C Two Credits Each

**ORGAN**

**PREREQUISITE:** Placement or MUS 101

Study of organ techniques as outlined in Gleason's "Methods of Organ Playing," or David Johnson's "Instruction Book for Beginning Organists"; pedal scales; hymn tunes; selected compositions of the level of Bach's "Eight Little Preludes and Fugues," "the Organbuechlein," and pre-Bach compositions.

125, 126D Two Credits Each

**BRASS WINDS**

**PREREQUISITE:** Placement or MUS 101

Study of fundamentals of trumpet playing including: breath control, preparatory scales, minor scales, and arpeggios; elementary exercises from Arban, Complete Conservatory Method, Henna, 40 Progressive Etudes, Clark Technical Studies, and Cox. Lip flexibility, Book I: major and minor scales and arpeggios, chromatic scale. Solo literature: Haydn, Trumpet Concert in Eb, 2/174 Movement; Kennan, Sonata for Trumpet and Piano; Contest Album, etc; Trombone studies: Stamagga Studies, Rochut Melodius Studies, Remington Warm-ups; Arban's Complete Method, Solos on the level of Sorabte & Allegro by Baret; scales and technical exercises as listed for trumpet. Tuba studies: scales and technical exercises as listed for trumpet; Foundation of Tuba Playing by Bell, solos on the level of "Honor and Arms" by Handel. French Horn: Foundation of French Horn Playing by Farces; solos on the level of "Paris Angelicas" by Franck.

125, 126E Two Credits Each

**WOODWINDS**

**PREREQUISITE:** Placement or MUS 101

Emphasis on basic problems of embouchure, fingering, breathing and tonguing facility, and control; selected studies from Kloze, Method, Books 2 and 3; Rose, 40 Studies; Pierer, Etudes de gretes et interpretation; Cavallini Caprices; Recital Literature For Clarinet, Stubbins, Volts, I, II, and III; all major, pure minor, harmonic minor, and melodic minor scales, also chromatic; scales in 3rds; dominant seventh arpeggios.

125, 126F Two Credits Each

**STRING**

**PREREQUISITE:** Placement or MUS 101

Study of basic violin technique, left-hand position, and bow arm techniques; exercises in first position; two octave major scales in first position; exercises from Wohlfahrt Method, Opus 38, and Whistler's Introduction to the Positions, Book I; Rayser Etudes; Simandl Etudes; solo literature from Vivaldi, Bach, Corelli.

125, 126G Two Credits Each

**PERCUSSION**

**PREREQUISITE:** Placement or MUS 101

Fundamentals of percussion methods in the percussion family; selected drum solos from the Haskell-Harr Collection; major scales on marimba with alternating sticks; study of other instruments of the percussion family.

131, 132 Two Credits Each

**MUSIC LITERATURE**

**PREREQUISITE:** Placement or MUS 140

Foundation in the materials and history, to identify music styles and genres, major composers and their works, and familiarity with historical periods in music.

140 Three Credits Each

**MUSIC FUNDAMENTALS**

Study of the fundamentals of music and elementary theory. Does not count toward graduation. (For students who do not pass the Theory Placement Test)

141, 142 Two Credits Each

**SIGHT-SINGING AND EAR TRAINING**

Study of Theory I, II including sight-singing; melodic and harmonic dictation; scales, intervals, chords; and the analysis of melodies.

143 Three Credits Each

**PROGRESSIVE HARMONY**

Practice in writing and analyzing contemporary chord progressions with emphasis on keyboard skills, ear-training, and creative writing. Exploration of the use of chords of the ninth, eleventh, and thirteenth. Special emphasis on voice leading and chord sonorities.

145, 146 Two Credits Each

**HARMONY AND KEYBOARD**

Study of Theory I, II including part-writing, keyboard harmony, and harmonic analysis from triads and their inversions through non-harmonic tones, the dominant seventh chord and its inversions, secondary dominant, and other chords. (Meets three hours per week.)

151 Two Credits Each

**ELEMENTARY CONDUCTING**

**PREREQUISITES:** MUS 141, 145

Introduction to the art of conducting with emphasis on mastery of fundamental beat patterns.

161 One Credit

**STRING CLASS**

Development of the skills necessary for teaching instruments of the string family on the elementary and intermediate levels through practical experience. (Meets two hours per week.)

210, 211 One Credit Each

**ENSEMBLES**

Ensemble; available, Instrumental: University Bands; University/Community Orchestra; Small Ensembles; brass jazz, percussion, saxophone, string, guitar, woodwind; Vocal: Concert Choir and Jazz Choir.

212, 213 Two Credits Each

**PERFORMANCE WORKSHOP**

Hands-on experiences in performing individual works. (Meets one hour per week.)

221, 222A One Credit Each

**VOICE**

Emphasis on correct vocal production and exploration of a variety of representative vocal literature.

221, 222B One Credit Each

**PIANO**

Study of major and minor scales; arpeggios, technical exercises and studies continued; selected compositions; sight-reading, transposition, harmonization of simple melodies; folk and patriotic songs. Passing of the Piano Facility Examination required.

221, 222C One Credit Each

**ORGAN**

Plan of study to be followed will be similar to the foregoing outline, but the expected rate of completion will be about one-half of that of the organ major. To receive credit for MUS 121 (Organ), for instance, the student would be required to complete approximately one-half of the material outlined for MUS 125 (Organ); completion of MUS 122 (Organ) would require the completion of all material outlined for MUS 125.

221, 222D Two Credits Each

**BRASS**

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

221, 222E One Credit Each

**WOODWINDS**

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

221, 222F One Credit Each

**STRINGS**

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

222, 222G One Credit Each

**PERCUSSION**

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

223, 224 One Credit Each

**PERFORMANCE CLASS**

Once a week seminar for Music Education students.

225, 226A Two Credits Each

**VOICE**

Continuation of technical development; repertoire including English songs (Purcell, Haydn, Handel Carpenter, Quilter, Head); songs from the Anthology of Italian Song (Schirmer) or Classic Italian Song (Ditsu).

225, 226B Two Credits Each

**PIANO**

Study of major scales (4 octaves); minor scales (2-4 octaves), hands together, studies of the level of Czerny, Hanon, Heller, sonatinas or sonatas of Haydn, Mozart, or Beethoven; studies from Bach's Little Preludes and Fugues or Two-Part Inventions; selected compositions of other periods. Passing of the Piano Facility Examination required.

225, 226C Two Credits Each

**ORGAN**

Continued technical study; pedal scales through all minor scales; composition selected from shorter works by the composers of Bach, "Bach Preludes and Fugues" (G. Schirmer, ed., Vol. II), the sonatas of Mendelssohn, works by major composers such as Franz and Vieme and shorter contemporary works.

225, 226D Two Credits Each

**BRASS WINDS**

Further development of fundamentals; use of song literature to develop style and phrasing; continued work in Artan, Clark, Coin and Hering, 32 Progressive Etudes; Introduction to Transposition; whole tone scales; dominant seventh and diminished; selected compositions from various periods; easy sight-reading; harmonization using primary triads; melodic transposition.

225, 226E Two Credits Each

**WOODWINDS**

Emphasis on technical development, finger all tone control; Giampiuri Caprices; Kropensch Daily Studies, major scales in thirds.

225, 226F Two Credits Each

**STRINGS**

Bow and finger exercises; two-octave major and melodic minor scales up to and including third position; selected works from Wohlfahrt's Foundation for the Violin; solo literature using the first three positions.

225, 226G Two Credits Each

**PERCUSSION**

Continued study of rudiments; further study of other percussion instruments; major and minor scales in octaves on marimba; major and minor arpeggio and two-stick marimba solos. Selected snare drum solos from Haskell-Harr.

234 Three Credits

**AFRICAN-AMERICAN MUSIC**

Survey of the music created and performed by African-Americans as an ethnic group and as individuals from the period of slavery to the present. Emphasis on the types and elements of African-American folk music including evidences and psychological factors that have impinged upon the development of African-American Music in the United States and other American cultures.

241/242 Two/One Credit

**SIGHT-SINGING AND EAR TRAINING**

**PREREQUISITE:** MUS 142

More advanced keyboard harmony and part-writing including modulation, the augmented sixth chords, and the Neapolitan 6th chord. Harmonic and formal analysis; writing for various combinations of instruments in the second semester. (Meets three hours per week.)

245, 246 Two Credits Each

**HARMONY AND KEYBOARD**

**PREREQUISITE:** MUS 146

Survey of the analytical and historical aspects of music written in the twentieth century. Emphasis on various compositions used in the composition of twentieth-century music including the socio-historical influences relating to the outstanding composers of this time.

247 Three Credits

**MUSIC IN THE TWENTIETH CENTURY**

Study of the analytical and historical aspects of music written in the twentieth century. Emphasis on various compositions used in the composition of twentieth-century music including the socio-historical influences relating to the outstanding composers of this time.

260 One Credit

**BAND INSTRUMENT SURVEY**

Introduction to the principles of playing musical instruments including the rudiments of tone production and performance techniques of woodwind, brasswind, and percussion instruments. (Meets two hours per week.)

269 One Credit

**PERCUSSION CLASS**

Development of the skills necessary for teaching instruments of the percussion family on the elementary and intermediate
MUSIC – MUS (continued)

levels through practical experience. (Meets two hours per week.)

265 Three Credits
PRACTICAL APPLICATION IN ELECTRONIC MUSIC
Introduction to various computer software used in electronic music including hands-on instruction on synthesizers. Emphasis on MIDI, sequencing and composition with computer software.

271 One Credit
VOCAL DICTION
Drill on English phonetics with application to singing. General survey of basic Italian, German, and French phonetics with emphasis on usages in music literature. (Meets two hours per week.)

272 One Credit
VOICE CLASS
Study of vocal techniques and survey of solo and choral literature designed to prepare students in training voices in the public schools. (Meets two hours per week.)

273 One Credit
VOICE CLASS
Study of vocal techniques and survey of solo and choral literature designed to prepare students in training voices in the public schools. (Meets two hours per week.)

301 Three Credits
MUSIC APPRECIATION
Survey of the major forms and styles of music with emphasis on developing awareness and understanding of representative music literature including the relation of music to other aspects of history and the culture of western civilization.

310, 311 One Credit Each
Ensembles available, Instrumental: University Bands; University/Community Orchestra; Small Ensembles: brass jazz, percussion, saxophone, string, guitar, woodwind; Vocal: ConcertChoir and Jazz Choir.

312, 313 One Credit Each
PERFORMANCE WORKSHOP
Hands-on experiences in performing individual works (Meets one hour per week)

321, 322A One Credit Each
VOICE
Emphasis on correct vocal production and exploration of a variety of representative vocal literature.

321, 322B One Credit Each
PIANO
Major and minor scales; arpeggios, technical exercises and studies continued; selected compositions; sight-reading, transposition, harmonization of simple melodies; folk and patriotic songs. Passing of the Piano Facility Examination required.

321, 322C One Credit Each
ORGAN
Plan of study to be followed is similar to the foregoing outline, but the expected rate of completion is about one-half that of the organ major. To receive credit for MUS 121 (Organ), for instance, the student is required to complete approximately one-half of the material outlined for MUS 125 (Organ); completion of MUS 122 (Organ) requires the completion of all material outlined for MUS 125 (Organ).

321, 322D One Credit Each
BRASS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

321, 322E One Credit Each
WOODWINDS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

321, 322F One Credit Each
STRINGS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

321, 322G One Credit Each
MUSIC HISTORY
PREREQUISITES: MUS 132, 242, 246
Chronological survey of the development of music in the Western world from its beginnings through contemporary idioms including illustration and analysis of styles, forms, and techniques characteristic of major periods in the history of music. (Meets three hours per week)

335 Three Credits
JAZZ LITERATURE AND CRITICISM
Introduction to basic performance in the field of jazz and its derivatives including popular music, tunes from musical stage shows, themes from motion pictures and television shows, as well as jazz classics. Emphasis on a critical analysis of the compositions and artists’ performances. Knowledge of structural aspects of musical theory required.

336 Three Credits
JAZZ HISTORY
In-depth study of jazz from the musical, historical, and social points of view, giving recognition to the artists responsible for innovations within each historical era.

346 Three Credits
FORM AND ANALYSIS
PREREQUISITES: MUS 242, 246
Study of the formal processes and styles of selected larger works of the eighteenth and nineteenth centuries including analysis and writing of music of the twentieth century.

351 Two Credits
ADVANCED CONDUCTING
PREREQUISITES: MUS 151, 242, 246
Study of conducting techniques with particular attention to interpretation, technique of choral or instrumental conducting, tempo, diction, articulation, nuance, seating of choral or instrumental groups, testing voices, and auditions. Conducting experience with laboratory group required.

352 One Credit
WOODWIND CLASS
Practical development of the skills necessary for teaching instruments of the woodwind family on the elementary and intermediate levels. (Meets two hours per week.)

360 One Credit
BRASSWIND CLASS
Practical development of the skills necessary for teaching instruments of the brasswind family on the elementary and intermediate levels. (Meets two hours per week.)

365 Three Credits
RECORDING AND MUSIC PRODUCTION
Study of the operations of consoles, tape machines, microphones, and signal processing equipment including extensive in-studio experience in recording and mixing music as well as commercial quality production and editing.

366 Three Credits
MUSIC VIDEO
Study of music video making through shooting with the camera and editing videotapes to recorded music. Extensive video editing suite experience resulting in the creation of a high quality production.

383 Two Credits
METHODS IN PUBLIC SCHOOL MUSIC
PREREQUISITES: Completion of all Music Courses in the Freshman and Sophomore Years; PSY 225, 230; Admission to Teacher Education. Study of methods and materials to be used in the development of the grade school instrumental program. (Meets three hours per week.)

384 Two Credits
METHODS IN PUBLIC SCHOOL MUSIC
PREREQUISITES: Completion of all Music courses in the Freshman and Sophomore Years; PSY 225, 230; Admission to Teacher Education. Study of the principles and procedures for conducting a music program in elementary school including organization, administration, and supervision of the music program; motivation and techniques of teaching; methods and materials. Special emphasis on multicultural content and appreciation; developing competencies in identifying and referring special students. (Meets three hours per week.)

394 Two Credits
METHODS IN PUBLIC SCHOOL MUSIC
Study of the principles and procedures for conducting music program in the secondary school including curriculum organization and planning; instruction in general music and specialized classes; organization and direction of instrumental and vocal ensembles. (Meets three hours per week.)

410, 411 One Credit Each
Ensembles available, Instrumental: University Bands; University/Community Orchestra; Small Ensembles: brass jazz, percussion, saxophone, string, guitar, woodwind; Vocal: ConcertChoir and Jazz Choir.

412 One Credit
PERFORMANCE WORKSHOP
Hands-on experiences in performing individual works (Meets one hour per week.)

412, 422A One Credit Each
Emphasis on correct vocal production and exploration of a variety of representative vocal literature.

412, 422B One Credit Each
PIANO
Study of major and minor scales; arpeggios, technical exercises and studies continued; selected compositions; sight-reading, transposition, harmonization of simple melodies; folk and patriotic songs. Passing of the Piano Facility Examination required.
421, 422C 
ORGAN
Plan of study to be followed is similar to the foregoing outline, but the expected rate of completion is about one-half that of the organ major. To receive credit for MUS 121 (Organ), for instance, the student is required to complete approximately one-half of the material outlined for MUS 125 (Organ); completion of MUS 122 (Organ) requires the completion of all material outlined for MUS 125 (Organ).

421, 422D 
BRASS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

421, 422E 
WOODWINDS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

421, 422F 
STRINGS
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

421, 422G 
Percussion
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular minor instrument.

423 
Performance Class
Seminar for performing on major instrument (or voice or keyboard).

425, 426A 
Voice
Demonstration of sufficient technical mastery to permit the performance of an extensive repertoire of various schools and nationalities including art songs and selections from oratorio or operatic literature, preparation of senior recital or senior examination.

425, 426B 
Piano
Study of all major and minor scales, arpeggios, and studies executed with good technical mastery at approximately 100 to 120 MM–quarter note; advanced sight-reading; compositions representative of advanced literature from different periods; preparation for senior recital or senior examination.

425, 426C 
Two Credits Each

425, 426D 
Brass Winds
Continued emphasis on style, technique, range, transposition, exercises from Arban, Coin, Brandt, Caffarel, and Charlier. 26 Etudes Transcendantes; orchestra literature from Bartold, Orchestral Excerpts, Vol. 15, Solo literature: Trumpet Tune; Clark; Trumpet Voluntary; etc. Preparation for senior recital or senior examination.

425, 426E 
Woodwinds
Preparation of senior recital or senior examination; transportation at major 2nd up and minor 2nd down; major and minor pure scales in 3rds, 7ths, dominant seventh, and diminished arpeggios; review of previous scales and other technical requirements; transposition at major 2nd up; finished performance of compositions from MUS 325, 326 and other compositions of different styles in preparation for senior recital, sight-reading of advanced literature.

425, 426F 
Strings
Studies from Kreutzer Etudes 24-42; Schradieck's Technical Violin School; preparation for senior recital or senior examination.

425, 426G 
Percussion
Three or four-stick marimba solos from Haskell-Harr. Marimba solos; timpani solos using three and four timpani; difficult snare drum solos; preparation of senior recital or senior jury examination.

440 
Legal Protection for Music and Musicians
Survey of the field of music law including performance and recording royalties, contract, performing rights organizations, musical copyright procedures, and publication.

448 
Arranging
Prerequisites: MUS 242, 246 or permission of the Instructor
Scoring for small ensembles and for full band and orchestra involves practical application of the knowledge of transposing instruments as well as applied knowledge of the purpose and the range of each band and orchestral instrument.

*Piano Facility Examination*
All students majoring in Music must pass a Piano Facility Examination as a requirement for the Bachelor's Degree. This examination is a prerequisite to Directed Teaching. The Facility Examination must demonstrate the students' ability to use the piano as a tool within the framework of his/her professional application. The examination is scheduled at the end of each semester and during the summer session. The passing of this examination is required for successful completion of MUS 222 and MUS 226.

NAVAL SCIENCE - NSC

101 
Naval Orientation
Introduction to sea power and the naval service, with emphasis on organization, regulations, and broad warfare components of the Navy, including an overview of officer and enlisted rank and rating structures, procurement and recruitment, training and education, promotion and advancement, and retirement policies.

102 
Seapower and Maritime Affairs
Study of the general sea power (including the merchant marine), the role of various warfare components of the Navy in supporting the Navy's mission, the implementation of sea power as an instrument of national policy, and a comparative study of U.S. and Soviet naval strategies.

201 
Naval Ship Systems I (Engineering)
Introduction to the purpose of naval ships including ship compartmentation, propulsion systems, auxiliary power systems, interior communications, and ship control. Examination of ship design to achieve safe operations and ship stability.

202 
Naval Ships Systems II (Weapons)
Introduction to the theory and principles of weapons systems including coverage of types of weapons and fire control systems, capabilities and limitations, theory of target acquisition, identification and tracking, trajectory principles, and basics of naval ordnance. Knowledge of algebra and trigonometry recommended.

301, 302 
Six Credits
Navigation and Naval Operations I and II
Comprehensive study of the theory, principles, and procedures of ship navigation, movements, and employment including the use of charts and publications, dead reckoning, piloting and electronic navigation techniques, voyage planning, and a survey of celestial navigation. Operations topics include communications, sonar-radar search, and screening theory. Tactical formations and dispositions, relative motion, maneuvering board, and tactical plots are analyzed for force effectiveness and unit; rules of the road, lights, signals, and navigational aids, including inertial systems, are also covered.

310 
The Evolution of Warfare
Exploration of the forms of warfare employed by great leaders in history in order to formulate a sense of historical flow or to demonstrate alternative military actions, the impact of historical precedents on military thought and actions as practiced by the great leaders and military organizations. (Marine Corps Option Students Only).

311 
The Evolution of Warfare
Exploration of the forms of warfare employed by great leaders in history in order to formulate a sense of historical flow or to demonstrate alternative military actions, the impact of historical precedents on military thought and actions as practiced by the great leaders and military organizations. (Marine Corps Option Students Only).

401 
Leadership and Management
Prerequisite: Advanced Program Status
Development of effective managerial and leadership competence through functional, behavioral, and situational approaches. Focus on the officer-manager as an organizational decision maker and leader.

402 
Leadership and Ethics
Advanced Program Status
Capstone course in the NROTC curriculum builds and focuses on managerial and professional competencies developed during prior at sea training and naval science courses.

410 
Amphibious Warfare
Historical survey of the sea power with emphasis on the evolution of amphibious warfare in the twentieth century including the concept of amphibious warfare, its doctrine and decision making processes, and its origins, and its evolution and development as an element of national naval policy.

111, 112, 211, 212, 311, 312, 411, 412 
One Credit Each

NAVAL LABORATORIES
Prerequisite: Acceptance into NROTC Program
Study of basic military formations, drills movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.

NURSING - NUR

144 
CNA-RN Bridge
Prerequisite: Admission to the LPN-RN Bridge Program
Successful completion of challenge processes Focus on identified nursing content that is included in nursing theory and practice basic to preparation of the Associate Degree Program.

150, 150L 
Fundamental Concepts of Nursing
Prerequisite: Admission to the Associate Degree Program
Introduction to general concepts of health and nursing and their applicability to clients of all ages located on the wellness portion of the wellness-illness continuum. Focus on stages of development and maturation and the cultural influence on all age groups as a means of understanding how individuals meet their basic needs. Development of basic skills of nursing assistance to individuals striving to maintain relative states of health as they perform their activities of daily living. (4 hours lecture/9 hours laboratory)

151, 151L 
Fundamental Pharmacological Skills
Prerequisite: Admission to the Associate Degree Program
Development of skills necessary for the safe preparation and administration of drug dosages. Focus on the metric, apothecary, and household systems of measurements providing practice in determining proper dosages for both adults and children.

160, 160L 
Clinical Nursing
Prerequisites: NUR 150, 150L, 153; BIO 165
Introduction to the design and implementation of systems of nursing assistance for individuals experiencing potential and actual difficulties in maintaining physiological homeostasis. Development of plans of care based on biopsychosocial-cultural assessment of individuals throughout the life span and implementation of nursing interventions designed to restore homeostatic equilibrium. (5 hours lecture/12 hours laboratory)

170 
CARE OF THE INDIVIDUAL WITH EMERGENT AND CHRONIC DISORDERS
Prerequisites: NUR 150, 150L, 153; BIO 165, 166L
Focus on nursing assistance to individuals of all ages, and their significant others, experiencing self-care deficits associated with emergent and chronic disorders. Emphasis on the application of the nursing process for clients experiencing ongoing deviations from wellness.

199 
LPN-RN Bridge
Prerequisite: Admission to the LPN-RN Bridge Program
Focus on identified nursing content that is included in nursing theory and practice basic to preparation of the Associate Degree Program.

272 
One Credit
Contemporary Trends in Nursing Practice
Prerequisites: All Freshman Level Courses and NUR 285, 287
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implications including licensure, current legislation regarding health-care, and nursing practice.

275, 275L
Nine Credits

CLINICAL NURSING II
PREREQUISITES: NUR 160, 160L; BIO 165, 166; PSY 210, 215 or 220
COREQUISITE: BIO 163
Focus on nursing assistance to individuals of all ages with increasingly complex self-care deficits. Emphasis on the application of the nursing process to clients experiencing altered self-concept, altered body image, loss, and selected situations of chronicity. (4 hrs. lecture/15 hrs. laboratory)

285, 285L
Nine Credits

CLINICAL NURSING III
PREREQUISITES: NUR 275, 275L; BIO 163, 165, 166; PSY 210, 215 or 220
COREQUISITES: NUR 272, 287
Focus on nursing assistance to individuals of all ages experiencing self-care deficits associated with major states of homeostatic disequilibrium. Emphasis on the application of the nursing process for clients experiencing complex multiple stressors. (4 hrs. lecture/15 hrs. laboratory)

287
Two Credit

SEMINAR
PREREQUISITES: Completion of all Freshman Level Nursing Courses and NUR 275.
COREQUISITES: NUR 272, 287
Small group work in which common nursing problems are identified and solutions are devised. Must pass comprehensive examinations covering the entire nursing curriculum.

321
Three Credits

MULTICULTURAL BIO ETHICS
PREREQUISITE: Admission to the baccalaureate degree program or as approved by the Department Head
Study of the differences and similarities of culturally diverse people with regard to health and illness. Emphasis on clarification of personal values and appreciation for the values that underpin health decisions made by the consumers of health care.

362, 362L
Four Credits

ESSENTIALS OF NURSING: SKILLS AND RELATED CONCEPTS
PREREQUISITE: Admission to the Second-degree LPN-BSN Tracks
Study of cognitive and psychomotor skills related to basic nursing assistance of the well individual through the provision of health promotion strategies and care of the individual experiencing minor deviations from wellness resulting in self-care deficits which necessitate the application of beginning and intermediate nursing skills. (2 hrs. lecture/8 hrs. laboratory)

415
Three Credits

HEALTH ASSESSMENT
PREREQUISITE: Open to all Registered Nurses; others by permission; and admission to the second-degree LPN-BSN tracks
Development of expertise in obtaining nursing histories and performing physical assessments on clients throughout the life span experiencing varying levels of wellness. Opportunity for application and refinement of skills in the on-campus laboratory. (2 hrs. lecture/2 hrs. laboratory)

418
Three Credits

CONCEPTUAL MODELS FOR NURSING
PREREQUISITE: Admission to the baccalaureate program; completion of Junior level courses; others as approved by Department Head
Introduction to concepts underpinning the practice of professional nursing, including concepts of self-care, nursing process, systems theory, theories of family development and crisis.

419, 419L
Ten Credits

PROVIDING NURSING SYSTEMS FOR INDIVIDUALS AND SMALL GROUPS
PREREQUISITES: NUR 362, 362L, 415, 418
Focus on designing systems of nursing assistance for clients experiencing significant life cycle events which have a major impact on the lifestyles and activities of the individual and small groups including child-bearing and child-rearing. Also, discussed is the client with selected alterations in psychological homeostasis. (5 hrs. lecture/15 hrs. laboratory)

429, 429L
Eight Credits

PROVIDING NURSING SYSTEMS FOR INDIVIDUALS AND LARGE GROUPS
PREREQUISITES: NUR 321, 362L, 415, 418, 419L, 444
Focus on the design and implementation of systems of nursing assistance for individuals, families, and large groups in community and tertiary care settings including clients throughout the life span and of diverse cultural backgrounds experiencing self-care deficits with multiple etiologic factors and/or have a potential for multiple risk factors. (3 hrs. lecture/15 hrs. laboratory)

435, 435L
Eight Credits

PROVIDING NURSING SYSTEMS FOR FAMILIES, GROUPS AND COMMUNITIES
PREREQUISITES: NUR 321, 415, 454, 461; Statistics; COREQUISITE: NUR 462
Focus on the design and implementation of systems of nursing assistance to families, groups and communities, specifically high-risk populations, throughout the life cycle. Usage of selected conceptual models in assessing, planning, implementing and evaluating nursing care, and analyzing the management of care delivery by others in a variety of settings. (3 hrs. lecture/15 hrs. laboratory)

444
Three Credits

PLANNING NURSING SYSTEMS FOR ADULTS
PREREQUISITES: NUR 362, 415, 418
Design of systems nursing assistance for diverse groups of individuals and/or aggregates experiencing acute and/or chronic alterations. Physiologic homeostasis, which has a major and significant impact upon the life-style and activities of the individual aggregate. Specific attention to analyzing self-care deficits and planning appropriate nursing assistance based on this analysis.

454
Three credits

GROUP INTERVENTIONS
PREREQUISITES: Upper-level students: Admission to the program, and completion of Second-degree LPN-BSN students: NUR 321, 362L, 415, 418, 419L, 444
Study of research skills used in making inferences relating to nursing practice, understanding the research process, critiquing research articles, utilizing research findings in enhancing, and identifying researchable questions.

461
Three credits

NURSING RESEARCH DIMENSIONS
PREREQUISITES: Upper level students: Admission to the program and completion of junior level courses. Second-degree LPN-BSN students: NUR 321, 362, 415, 418, 419L, 444
Study of knowledge and basic skills needed to conduct group work used as a modality for selected nursing interventions.

465
Three credits

NURSING LEADERSHIP AND MANAGEMENT
Examination of theory and concepts concerning the leadership process, organizational structure, and management strategies. Analysis of complex health-care delivery systems, coordinate efforts for consumer health and nursing service, and as colleagues with other health professionals, evaluate the quality and direction of health and nursing, and encourage change as appropriate.

470
Three Credits

SEMINAR ON PROFESSIONAL DEVELOPMENT
Attention to forces, which affect health-care delivery and the impact of these changes on the scope of nursing practice. Emphasis on professional accountability, political involvement, and strategies for enhancing the image of the profession with other health professions and the lay public.

475
ThreeCredits

NURSING PROCESS SEMINAR
Integration of knowledge and concepts obtained in previous nursing and other discipline-related courses into the design and implementation of nursing systems for groups of individuals and/or aggregates throughout the life span with complex deviations from wellness including an intensive preceptorship and clinical experience. Must pass comprehensive examinations.

499 Two Credits

NURSING ELECTIVE
PREREQUISITES: Upper level students: NUR 321, 415, 418, 454, 461; Statistics, or by permission of Department Head
Study of a variety of interest areas of nursing including selected topics for independent study, complete research projects, special nursing topics courses, or lower level graduate courses in nursing.

OPTICAL ENGINEERING - OEN

100
Three Credits

INTRODUCTION TO ENGINEERING
Introduction to electronics and optical engineering and qualitative and quantitative tools necessary.

200
Three Credits

GEOMETRIC AND INSTRUMENTATION OPTICS I
PREREQUISITES: PHY251; MTH251
COREQUISITE: OEN 200L
Study of basic principles of geometric optics, refraction and reflection including Gaussian optics of axially symmetrical systems and other related topics, as well as simple optical instruments, such as magnifying lenses, compound microscopes, refracting telescope and other simple optical systems.

200L
One Credit

GEOMETRIC AND INSTRUMENTATION OPTICS I LABORATORY
PREREQUISITE: PHY251L
COREQUISITE: OEN 200
Study of intermediate geometric optics using state-of-the-art laboratory exercises and equipment to do fundamental experiments using lasers, fiber optic systems and diodes.

201
Three Credits

GEOMETRIC AND INSTRUMENTATION OPTICS II
COREQUISITE: OEN 201
Detailed discussion of topics such as interference and interferometers, Fresnel and Fraunhofer diffraction, spectroscopic instrumentation, electro-optic effects and elements of quantum and non-linear behavior.

201L
One Credit

GEOMETRIC AND INSTRUMENTATION OPTICS II LABORATORY
COREQUISITE: OEN 201L
Study of intermediate geometric optics using state-of-the-art laboratory exercises and equipment to do fundamental experiments.

320
Three Credits

OPTICAL SYSTEMS ANALYSIS
PREREQUISITE: OEN 201
Development of tools and techniques for engineering of optical systems. Study of specifications, system design and analysis, tradeoffs and optimization, manufacturing.

340
Three Credits

LASERS AND PHOTONICS
PREREQUISITE: OEN 200L
COREQUISITE: OEN 340L
Discussion of condensed matter physics including issues in solid state physics, laser physics, laser light, laser components and systems and measurements.

340L
One Credit

LASER AND PHOTONICS LABORATORY
COREQUISITE: OEN 340L
Study of laser and photonicics in a laboratory setting.

360
Three Credits

INTRODUCTION TO OPTICAL MATERIALS
PREREQUISITE: EEN 257; OEN 201
Introduction to the optical properties of III-V and II- VI semi-conducting compounds that are used in optical systems.

380
Three Credits

INTRODUCTION TO QUANTUM MECHANICS
PREREQUISITES: EEN 257; PHY 251; PHY 320
Introduction to the uncertainty principle, the differences between quantum and classical systems, Schroedinger’s Equation, free particle wave functions, square well and simple harmonic oscillator potentials, the hydrogen atom, and other general quantum concepts.
460

OPTICAL COMMUNICATIONS I

Three Credits

PREREQUISITES: OEN 340, 360

COREQUISITE: OEN 450L

Study of optical communication components and applications to communications systems including fiber attenuation and dispersion, laser modulation, photodetection and noise and coherent communications.

460L

One Credit

OPTICAL COMMUNICATIONS I LABORATORY

COREQUISITE: OEN 460

Study of optical communication components and applications to communications systems in a laboratory setting.

461

Three Credits

OPTICAL COMMUNICATIONS II

PREREQUISITE: OEN 450L

Further discussion of coherent communications.

490

One Credit

SENIOR SEMINAR

PREREQUISITE: Senior Status and Permission of the Instructor

Discussion of related topics with invited speakers.

498

Three Credits

SENIOR PROJECT (Stage I)

PREREQUISITE: Senior Status and Permission of the Instructor

Topics selected by the student and his/her research advisors.

499

Three Credits

SENIOR PROJECT (Stage II)

PREREQUISITE: OEN 498 and Permission of the Instructor

Continuation of selected topic resulting in a paper of publishable quality in a refereed research journal.

PHYSICAL EDUCATION - PED

100

One Credit

FUNDAMENTALS OF FITNESS FOR LIFE

Development of knowledge and appreciation for total fitness as an individualized lifetime goal including the improvement in current levels of fitness and the development of positive lifestyle.

101, 102

One Credit Each

MODIFIED PHYSICAL EDUCATION

Individualized programs of instruction for students with handicapping conditions. Medical excuse required.

107

One Credit

AEROBICS

Introduction to the understanding of basic body alignment and the use of proper posture. Participation in a choreographed exercise regimen geared towards safely raising the heart rate to burn calories.

109

One Credit

WATER AEROBICS

Development of elements of physical fitness including muscle tone, strength, flexibility, and cardiovascular endurance through participation in full rhythmic and aerobic exercises done in water. Emphasis on the role of nutrition, weight control, stress management, and consumerism as basic components of a health fitness lifestyle. No swimming skills required.

131

One Credit

BEGINNING SWIMMING

Introduction to levels I, II and III of the American Red Cross Learn to Swim Program including water safety, water acclimation, reaching assists, breath control, prone floating and analysis of movement.

134

One Credit

ADVANCED BEGINNING SWIMMING

PREREQUISITE: Ability to swim 25 yards of front crawl stroke, back crawl stroke and experience in deep water or permission of instructor.

Study of levels IV and V of the American Red Cross Learn to Swim Program with review of Levels I, II, and III including water safety, improvement in prone swimming (front crawl), back swimming (back crawl and elementary backstroke), introduction to side stroke, analysis of movements and scientific flaws.

151, 152

One Credit Each

RHYTHM AND FOLK DANCES

Orientation to fundamental skills for basic rhythms, folk and square dance.

158, 159

One Credit Each

FUNDAMENTALS OF PHYSICAL EDUCATION

Orientation to selected seasonal team sports (soccer, speed ball, hockey, flag football, baseball, softball, track and field). Emphasis on the development of psychomotor skills, physical fitness, and knowledge and appreciation of the selected activities. Above average proficiency required.

179

Two Credits

FIRST AID

Study of the proper techniques and procedures for administering first aid and CPR.

200

Two Credits

BEGINNING FITNESS THROUGH WEIGHT TRAINING

Near individualized personal fitness program utilizing the following apparatus and equipment: the variable resistance machines, Olympic free weights, and the pull-up trainer.

201

One Credit

TENNIS I

Development of basic skills in the game of tennis including techniques, rules, and strategies.

204

One Credit

TENNIS II

Development of performance skills at the beginning level, the knowledge of rules, terminology, equipment, and safety techniques in tennis.

209

One Credit

BOWLING

Development of skills and appreciation for bowling, both as a fitness and leisure time activity.

210

One Credit

GOLF

Development of performance skills at the beginning level, the knowledge of rules, terminology, equipment, and safety techniques in golf.

235

One Credit

INTERMEDIATE SWIMMING

PREREQUISITE: PED 134; ability to swim 25 yards of the front crawl, back crawl, elementary back stroke.

Study of levels V, VI, VII of the American Red Cross Learn to Swim Program with a review of Levels I through IV including endurance swimming and fitness activities. Preparatory course for Lifeguard Training and Water Safety Instructor.

251, 252

One Credit Each

MODERN DANCE

Orientation to techniques and principles of modern dance.

253

One Credit

GYMNASTICS

Development of performance skills and the knowledge of rules, terminology, equipment, safety techniques, and the learning procedures for apparatus work.

254

One Credit

JAZZ DANCE

Introduction to basic and intermediate dance techniques. Exploration of the cultural and historical contributions of jazz dance including social dances, period dances, and rhythmic dances that engage syncopate and accented rhythmic phrases.

261, 262

One Credit Each

TEAM SPORTS

PREREQUISITES: PED 158, 159

Development of performance skills at an intermediate level, the knowledge of rules, terminology, equipment, safety techniques in the sports of flag football, football, soccer/speedball, volleyball, and team handball, and to assess the students' fitness.

271, 272

One Credit Each

INDIVIDUAL SPORTS

PREREQUISITES: PED 158, 159

Development of skills in archery, golf, tennis, badminton, bowling, racquetball, pickleball, and fitness testing.

280

Three Credits

INTRODUCTION TO PHYSICAL EDUCATION

Introduction to historical, philosophical, educational, psychological, biological, sociological, and career emphasis related to the field of physical education.

287, 287L

Four Credits

HUMAN ANATOMY

PREREQUISITES: BIO 100, 100L

Introduction to the structure and function of the organ systems of the human body.

288, 288L

Four Credits

HUMAN PHYSIOLOGY

PREREQUISITES: PED 287, 287L

Introduction to the function, regulation, and the integration of organs and organ systems of the human body.

300

Two Credits

ADVANCED FITNESS THROUGH WEIGHT TRAINING

PREREQUISITE: PED 200

Advanced experiences while working with the pull-up trainer, Olympic free weights, and the variable resistance machines.

325

Three Credits

LIFEGUARD TRAINING

Study of the American Red Cross Senior Life Saving course outline. Satisfactory completion leads to Red Cross certification.

335

Three Credits

TECHNIQUES FOR TEACHING SKILLS IN SPORTS

Study of skills used to identify development sequences for learning skills and teaching techniques in individual/dual and team sports that can be used to develop effective lesson and unit plans.

350

Three Credits

METHODS OF TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS

PREREQUISITES: PED158, 159, 253, 261, 262, 271, 272, 356, 365, 477; Students must pass PRAXIS I.

Study of methods and techniques of presenting physical education to elementary school children.

356

Three Credits

KINESIOLOGY

PREREQUISITES: PED 287, 287L, 288, and 288L

Study of the basic anatomical kinesiology and mechanical principles of movement as they apply to the human body including anatomical details and neuromuscular function of the body, equilibrium and motion, and how these principles are influenced by various environmental mediums.

357

Three Credits

ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION PROGRAMS

PREREQUISITES: PED 158, 159, 253, 261, 262, 271, 272, 350, 356, 365, 477

Study of the structure and operations of a physical education program based on the philosophies, aims, objectives, policies, and procedures that provide maximum contributions to the total school program.

358

Three Credits

METHODS AND MATERIALS OF TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOL

PREREQUISITES: PED 158, 159, 253, 261, 262, 271, 272, 350, 356, 365, 477; Students must pass Praxis I.

Study of methods and procedures for designing unit plans and lesson plans for physical education theory and activity classes in a secondary physical education program.

361

One Credit

ATHLETIC COACHING AND OFFICIATING

PREREQUISITES: PED 158, 159, 261, 262

Study of the fundamentals, techniques, and strategies of coaching and officiating team and individual sports.

362

One Credit

PREREQUISITES: PED 158, 159, 261, 262, and 361

Opportunities to acquire knowledge of various sports, rules, and regulations (baseball or softball, basketball, track and field, soccer, football, volleyball, field hockey, tennis, wrestling, and swimming) and the development of beginner level skills in officiating individual and team sports.

365

Three Credits

ADAPTED PHYSICAL EDUCATION

PREREQUISITES: PED 287, 288 or equivalents

Study of principles and practices of Physical Education with emphasis on the nature, needs, and abilities of challenged individuals. Activities modified to meet the needs of these individuals.

369

Three Credits

MEASUREMENT AND EVALUATION

PREREQUISITE: General Math Course

Analysis of test and measurements commonly used in physical education. Introduction to basic statistical procedures for test selection, construction, and administration.
PHYSICAL EDUCATION – PED (continued)

441 DRIVER EDUCATION: FOUNDATIONS OF TRAFFIC SAFETY
PREREQUISITE: PED 440
Study of methods used for teaching driver education in public schools.

444 THREE CREDITS
PRINCIPLES AND METHODS OF CLASSROOM AND IN-CAR INSTRUCTION
Hands-on experiences in the understanding and application of principles and methodologies for teaching evasive maneuvers of driving. Practicum includes both simulation and in-car experiences.

447 THREE CREDITS
PHYSIOLOGICAL BASIS OF EXERCISE
Study of physiological responses, adjustments, and adaptations to the acute stress of exercise and physical activity, and the chronic stress of physical training.

450 THREE CREDITS
MOTOR LEARNING
Study of theories of motor learning and their respective relevance to planning of programs for school age children and a theoretical basis for developing effective strategies for teaching motor skills.

451 THREE CREDITS
PSYCHOLOGICAL ASPECTS OF SPORTS
Study of both the psychological factors that influence participation in sports and exercises and the psychological effects derived from that participation including motivation, personality, aggression, violence, and leadership through group dynamics of exercise and well-being.

477 THREE CREDITS
PHYSIOLOGY OF MUSCLE EXERCISE
PREREQUISITES: PED 287, 287L, 288, 288L, and 356
Study of physiological responses, adjustments, and adaptations to the acute stress of exercise, physical activity, and the chronic stress of physical training.

480 THREE CREDITS
PRINCIPLES OF PHYSICAL EDUCATION
PREREQUISITE: PED 280
Study of the scope and significance of physical education through the development of a basic philosophy of education. Discussion and reflection on issues relevant to contemporary physical education, including multiculturalism, aggression in sport, women in sports, and physical activity promotion for girls and minority populations. Emphasis on resume building and interviewing skills for careers in physical education.

490 THREE CREDITS
DIRECTED TEACHING SEMINAR
PREREQUISITES: Completion of All Coursework
Forum for continuous self-analysis and evaluation of the experiences encountered in student teaching, including special readings, activities, and discussion from the professional literature.

*Enrollment requires completion of requirements for admission to teacher education.

PHYSICS - PHY

100 THREE CREDITS
PHYSICAL SCIENCE
PREREQUISITES: ENG 101, MTH 103
Survey of the unity of the physical sciences (astronomy, physics, chemistry, and geology) rather than arbitrary divisions. Emphasis on knowledge of selected facts, principles and methods of science, and the place of science in our modern world.

150, 151 THREE CREDITS
GENERAL PHYSICS
PREREQUISITE: MTH 151 or equivalent
COREQUISITE: PHY 150L, 151L
Study of the fundamentals of mechanics, heat, light, sound, electricity, and magnetism with emphasis on principles and their application in industry. (1 hour lecture and demonstration/2 hours recitation and quiz)

150L, 151L ONE CREDIT EACH
GENERAL PHYSICS LABORATORY
PREREQUISITES: MTH 153 or Permission of Instructor
COREQUISITE: PHY 150, 151L
Emphasis on observational techniques and observations.

152, 153 THREE CREDITS EACH
GENERAL PHYSICS
PREREQUISITE: MTH 153
COREQUISITE: PHY 152L, 153L
Study of mechanics, heat, and sound during the first semester, electricity, magnetism, light, and modern physics during the second semester. (2 hours lecture/1 hour recitation)

152L, 153L ONE CREDIT EACH
GENERAL PHYSICS LABORATORY
PREREQUISITE: PHY 152, 153L
Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analysis.

154 THREE CREDITS
PHYSICS OF MUSIC
PREREQUISITE: MTH 153
Team-taught study of mechanical vibrations, sound, acoustics of halls and musical instruments, electroacoustics, electronic music, musical scales, waveform analysis, recording and reproduction of musical sounds. (1 hour lecture, 2 hours experience, project recitation)

160, 161 FOUR CREDITS EACH
UNIVERSITY PHYSICS
COREQUISITES: MTH 184, PHY 160L, PHY 161L
Study of mechanics, heat, sound, light, electricity and magnetism, and modern physics. Emphasis on analytical methods with application of calculus and problem solving.

160L, 161L ONE CREDIT EACH
UNIVERSITY PHYSICS LABORATORY
COREQUISITES: PHY 250, 251
Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analysis.

241 ONE CREDIT
SEMINAR
PREREQUISITES: PHY 160, 161
Presentation and discussion of current topics in all areas of physics. Required of sophomore physics majors.

260 FOUR CREDITS
UNIVERSITY PHYSICS III
PREREQUISITES: PHY 160, 161
Study of basic concepts and principles oscillatory motion, mechanical waves, electromagnetic waves, geometrical optics, optical physics, and special relativity. Calculate us and vector methods used throughout the course.

297 THREE CREDITS
INTRODUCTION TO RESEARCH
PREREQUISITE: Sophomore Status and Permission of Instructor
Acquisition of fundamental skills in experiment design, data analysis, and other research skills. Undergraduate research supervised by a faculty member.

320 THREE CREDITS
WAVES
PREREQUISITES: PHY 160, 161; MTH 252
COREQUISITE: MTH 372
In-depth study of mechanical and electromagnetic wave phenomena including traveling waves, standing waves, reflection and transmission, interference, diffraction, polarization, and wave packets. Applications of calculus and differential equations to physical phenomena and emphasized.

346 THREE CREDITS
Mathematical Methods for Physical Sciences I
PREREQUISITES: PHY 160, 161; MTH 252
Introduction to advanced mathematical topics including complex numbers, vectors matrices, series, and differential equations with special emphasis on applications to physics.

346 THREE CREDITS
Mathematical Methods for Physical Sciences II
PREREQUISITES: PHY 160, 161; MTH 252
Study of advanced mathematical topics including Fourier series, calculus of variations, series solutions of differential equations, and partial differential equation, with special emphasis on applications to physics topics.

350 THREE CREDITS
MODERN PHYSICS
PREREQUISITE: PHY 160, 161; MTH 251
COREQUISITE: MTH 252
Introduction to modern physics including relativity, atomic structure, nuclear structure, radioactivity, nuclear reactions, and elementary particles.

351 TWO CREDITS
EXPERIMENTAL CONCEPTS IN MODERN PHYSICS
PREREQUISITES: PHY 350; MTH 252
Emphasis on experimental techniques, including G.M. counters, flow counters, absorption of radiation, half-life, range of alpha particles spectroscopy, selected experiments in neutron physics and selected experiments in radiochemistry. (One hour lecture, three hours laboratory per week)

353 THREE CREDITS
INTRODUCTION TO SOLID STATE PHYSICS
PREREQUISITES: MTH 252; PHY 350
Introduction to the theory of solids, including introductory wave mechanics; electronic energy levels in atoms and molecules; wave mechanics of the hydrogen atom; motion of electron in a periodic lattice; structure, elastic properties, and dynamic properties of crystals; motion of electrons in solids; energy bands and the band theory of solids; theory and application of semiconductors, Hall effect, p-n junctions; semiconducting rectifiers and semiconducting devices, and electrical and magnetic properties of solid superconductors.

356 THREE CREDITS
HEAT AND THERMODYNAMICS
PREREQUISITES: PHY 250, 251; MTH 252
COREQUISITE: MTH 372
Examination of thermal equilibrium and the concepts of temperature, thermodynamic systems, work, heat, and the Laws of Thermodynamics, thermal properties of materials, heat engines, reversibility, Carnot's theorem, enthalpy, and the Helmholtz and Gibbs functions. Applications are made to surfaces, pure substances, magnetic materials in a magnetic field, flow processes, chemical reactions, mixture of gases and fuel cells, steam engines and turbines.

365, 366 THREE CREDITS EACH
PHYSICAL MECHANICS I
PREREQUISITES: PHY 320, 350; MTH 372
Study of elements of vector analysis, laws of dynamics and statics of particles, cables and rigid bodies, central forces and celestial mechanics, theory of vibrations, and special relativity. Survey of mechanics comparable to the classical Newtonian approach utilizing topics such as generalized coordinates.

375 THREE CREDITS
ELECTRICITY AND MAGNETISM I
PREREQUISITES: PHY 350; MTH 252, 372
Introduction to classical electromagnetism theory. Topics include elements of vector analysis, static and time-dependent electric and magnetic fields, electric and magnetic properties of matter, electromagnetic induction, and Maxwell's equations.

380 THREE CREDITS
QUANTUM MECHANICS I
PREREQUISITES: PHY 320, 350; MTH 372
Introduction to Schrodinger's equation and topics, including free particle wave functions, the well and simple harmonic oscillator potentials, the hydrogen atom, and identical particles.

397 THREE CREDITS
INTRODUCTION TO RESEARCH
PREREQUISITE: Junior Status and Permission of Instructor
Development in the skills of research, including preparations, fabrication, design and execution of experiments, data analysis. Undergraduate research supervised by a faculty member.

399 TWO CREDITS
ADVANCED LABORATORY
PREREQUISITES: PHY 350, 351, 365
Introduction to techniques of advanced experimentation, developing research skills and skills in technical writing. Experiments in mechanics, heat, electronics, optical spectroscopy, and atomic and nuclear physics.

468 THREE CREDITS
OPTICS
PREREQUISITES: PHY 350; MTH 252
Focus on topics from geometrical and physical optics including circular and elliptical polarization, thickness equations, Fresnel and Fraunhofer diffraction, interference and dispersion of electromagnetic waves, fiber optics, and optical pumping.

475 THREE CREDITS
ELECTRICITY AND MAGNETISM II
PREREQUISITE: PHY 375
Advanced treatment of classical electromagnetic theory including electrostatic and magnetostatic fields, electric and magnetic properties of matter. Maxwell's equations and time-dependent electric and magnetic fields, electromagnetic...
waves, and radiation.

490 QUANTUM MECHANICS II
PREREQUISITE: PHY 368
Three Credits
Advanced treatment of Schrödinger equation and topics including free particle wave functions, square well and simple harmonic oscillator potentials, the hydrogen atom, identical particles, perturbation theory, and collision theory. Emphasis on applications to nuclei, atoms, molecules, and solids.

490 PHYSICS DEMONSTRATIONS
PREREQUISITE: Permission of Instructor
Presentation and discussion of classical and modern demonstration experiments used in the teaching of general and intermediate physics. Exercises in mechanics, heat, optics, electricity, magnetism, and modern physics.

491 EXPERIMENTAL CONCEPTS IN PHYSICS
PREREQUISITE: Permission of Instructor
Three Credits
Introduction to the techniques of intermediate and advanced experimentation and skills in technical writing. Experiments in mechanics, heat, optics, electricity, magnetism, and modern physics.

495 PHYSICS EDUCATION RESEARCH
PREREQUISITE: Senior Status and Permission of Instructor
One Credit
Supervised investigation of a physics education research problem, including planning, execution, and analysis. Report preparation, oral presentation, and completion of senior assessment examination required.

498 SENIOR PROJECT I
PREREQUISITE: Senior Status and Permission of Instructor
Two Credits
Preparation and presentation of Senior Project proposal planned with a faculty mentor. Oral report describing the plan is required. A faculty review panel offers suggestions for revisions needed.

499 SENIOR PROJECT II
PREREQUISITE: PHY 399
Two Credits
Supervised investigation of a research problem, including planning, execution, and analysis. Preparation of report, oral presentation, and completion of senior assessment examination required.

590 PHYSICS DEMONSTRATIONS
PREREQUISITE: Permission of Instructor
Three Credits
Introduction to the techniques of intermediate and advanced experimentation and skills in technical writing. Experiments in mechanics, heat, optics, electricity, magnetism, and modern physics.

591 EXPERIMENTAL CONCEPTS IN PHYSICS
PREREQUISITE: Permission of Instructor
Three Credits
Introduction to the techniques of intermediate and advanced experimentation and skills in technical writing. Experiments in mechanics, heat, optics, electricity, magnetism, and modern physics.

POLITICAL SCIENCE - POS

100 AMERICAN NATIONAL GOVERNMENT
Three Credits
Coordinated study of the development of American government including the historical development of the United States and the organization and functions of government.

180 INTRODUCTION TO POLITICAL SCIENCE
Three Credits
Introduction to the basic concepts and fundamental substantive divisions of the field of political science.

230 AMERICAN PUBLIC POLICY
Three Credits
Introduction to the basic theories and concepts of policy analysis, with particular emphasis on the policy-making process at the federal level; examines such selected policy issues as welfare, health insurance, and housing; and seeks to assess the impact of policy decisions on various groups in American society.

231 AMERICAN STATE AND LOCAL GOVERNMENT
Three Credits
Intensive study of the legal and political processes of the subsystems of state and local government. Detailed emphasis on federal-state, interstate, and state-local relations.

250 INTRODUCTION TO PUBLIC ADMINISTRATION
PREREQUISITE: POS 230
Three Credits
Focus on the organization, responsibility, personnel management, fiscal processes, functions and problems of public administration.

310 METROPOLITAN AND REGIONAL DEVELOPMENT
Three Credits
Analysis of the impact of metropolitan growth on municipalities, with focus on revenues, public services and political empowerment.

315 AFRICAN-AMERICAN POLITICS
Three Credits
Systematic examination of the African-American in the American political system covering various periods of the African-American political experience.

320 THE AMERICAN PARTY SYSTEM
Three Credits
Study of the nature, function, evolution, and organization of political parties in the United States. Special emphasis on the relation of pressure groups to the party system.

323 COMPARATIVE GOVERNMENT
Three Credits
Study of the organization, structure, and politics of the major European governments. Special emphasis on the political systems of Great Britain, France, West Germany, and the Soviet Union.

325, 326 AMERICAN FOREIGN POLICY
Three Credits Each
Study of the background, responsibilities, and consequences of United States foreign policy from 1787 to present. Special emphasis on the diplomatic origins of the major wars, the peacemaking efforts which followed each war, and assessment of the role of diplomacy and the diplomat in a democratic society.

332 INTRODUCTION TO JURISPRUDENCE
Three Credits
Intensive examination of the schools and theories of jurisprudence, historical development of legal systems, legal reasoning, and juristic processes.

333 METHODS OF RESEARCH
Three Credits
Focus on the problems of methodology in empirical research, emphasizing hypothesis testing and the quantification of data. Provides experience in the use of the public documents, aggregate data, and survey data in research designs and policy evaluation.

334 AMERICAN POLITICAL IDEAS
Three Credits
Critical analysis of American political ideas in the area of law, government, and the enduring political problems of liberty and authority, oligarchy and democracy, from Puritanism to the present. Emphasis on Hamilton, Jefferson, Marshall, Jackson, Calhoun, Lincoln, Thoreau, Bellamy, Henry George, Wilson, Hoover, Roosevelt, Holmes, Dewey, and others.

337, 338 AMERICAN CONSTITUTIONAL LAW
Three Credits Each
PREREQUISITE: Must be Taken in Sequence
Study of the basic principles of the American constitutional system. Emphasis on the judicial interpretation and application of these principles in construing the powers of the government and the rights of persons. Examines the historical background of major federal court decisions.

340 URBAN BEHAVIOR SYSTEMS
Three Credits
Examination of beliefs, values, and attitudes relevant to political processes in urban areas relative to development, change, and distribution.

345 STATISTICS AND DATA PROCESSING FOR POLITICAL ANALYSIS
Three Credits
Examination of parametric and nonparametric statistics in terms of data description and hypothesis testing in political research and policy analysis, including the capabilities of the computer in data storage, management, and statistical analysis applied to research problems.

350 ORGANIZATION THEORY AND BEHAVIOR
Three Credits
Examination of the structure and functioning of public organizations, with emphasis on theories of administrative hierarchies and evaluation of bureaucracy.

360 INTERNATIONAL RELATIONS
Three Credits
Focus on man as a part of nature, acting in his political environment over time. Examines relationships among nations.

422 PUBLIC OPINION AND PROPAGANDA
Three Credits
Intensive study of the nature, measurement, and function of public opinion. Special emphasis on the problem of symbol manipulation and its relation to the formation of public policy in a democratic society.

438 VIRGINIA GOVERNMENT AND POLITICS
Three Credits
Basic study of Virginia's constitution, political parties, election laws, legislative, executive, and judicial functions, economic services, social services and social welfare.

430 POLITICAL THEORY
Three Credits
Study of the political theories of Plato, Aristotle, selected Greek, Roman, and medieval writers from Machiavelli. Critical analysis of enduring political problems.

431 MODERN THEORY
Three Credits
Critical analysis of enduring political problems in the writings of European theorists from Machiavelli to the present.

435 MUNICIPAL GOVERNMENT
Three Credits
Study of the organizations, functions, problems, and approaches in the solution of problems of urban areas.

442 INTERNATIONAL LAW
Three Credits
Intensive study of the substantive content of the law of international relations. Special emphasis on problems of enforcement.

443 ADMINISTRATIVE LAW
Three Credits
Introduction to the American legal system using a case study approach.

453 PUBLIC PERSONNEL ADMINISTRATION
Three Credits
Focus on the recruitment, examination, placement, remuneration, morale, retirement, training, and other issues that impact the public service.

461 INTERNATIONAL ORGANIZATION
Three Credits
Study of the organization, functions, structure, and problems of the United Nations and other international organizations.

462 THE NEAR (MIDDLE) EAST IN INTERNATIONAL AFFAIRS
Three Credits
Survey of the Near East, focusing on its relation to the struggle for international ascendency of the Western powers. Emphasis on the nineteenth and early twentieth centuries, as well as the contemporary period.

463 POLICIES OF AFRICAN NATIONS
Three Credits
Examination of the resolution of conflict and promotion of survival of the independent nations south of the Sahara through comparison of political ideologies and through case studies of individual nations. Analysis of traditional African systems and the various colonial systems of the new governments.

466 READING IN GOVERNMENT AND PROBLEMS IN GOVERNMENT
One/Three Credits
PREREQUISITE: Permission of Department for non-Political Science Majors
Independent reading and analytical reporting on works outside the immediate scope of formal courses. Special emphasis on depth of perspective.

467 INTRODUCTION TO NON-WESTERN POLITICS
Three Credits
Introduction to the general patterns of politics in the areas of Latin America, Middle East, Far East, and areas of Africa north of the Sahara. Analysis of political instability, political groups and ideologies, organizations of political authority, and the problems of political integration.
and factors involved in the prevention and treatment of mental disorders.

250 Three Credits
SOCIAL PSYCHOLOGY
PREREQUISITE: PSY 210
Study of the influence of social factors on behavior of individuals and small groups. Emphasis on interpersonal behavior. Exploration of theories concerning social interaction, social influence, aggression, prejudice and attitude change, and socialization.

270 (370) Three Credits
PSYCHOLOGICAL STATISTICS
PREREQUISITES: MTH 103; PSY 210, 211
Study of the basic principles and techniques employed in the fields of descriptive and inferential statistics, as well as the fundamental laws of probability. Emphasis on techniques of summarizing and standardizing data; correlation and regression; sampling distribution; analysis of variance; hypotheses testing using parametric as well as nonparametric tests, and probability.

280 Three Credits
ABNORMAL PSYCHOLOGY
PREREQUISITE: PSY 210
Introduction to the various descriptions and classifications of psychopathology and the theories of the origin of mental disorders including different approaches to the treatment of abnormal behavior.

311 Three Credits
EDUCATIONAL TESTS AND MEASUREMENTS
PREREQUISITE: Consent of Instructor
Study of the general field of tests and measurements, including the application of statistics. Introduction to factors involved in the selection and administration of group tests of achievement, aptitude, mental ability, and personality.

312 Three Credits
BEHAVIORAL ANALYSIS
PREREQUISITE: PSY 210
Opportunities to develop skills in the systematic observation and analysis of behavior in an academic situation through classroom observation and videotaped school behavior. Emphasis on behavioral task analysis of academic behavior.

313 Three Credits
BEHAVIORAL MANAGEMENT STRATEGIES IN EDUCATIONAL SETTINGS
PREREQUISITES: PSY 210, 312
Study of learning and behavioral programs for students in educational settings. Emphasis on social learning theory including contingency contracting, token economic, modeling, and similar techniques.

322 Three Credits
PSYCHOLOGY OF EXCEPTIONAL CHILDREN
PREREQUISITE: Consent of Instructor
Study of the unique and typically abnormal psycho-social characteristics and stresses encountered by the handicapped child. Analysis of a child's behavior responses and personality development, ranging from normal adjustment mechanisms to the most serious pathological conditions.

331 Three Credits
PERSONALITY
PREREQUISITE: PSY 210
Introduction to the nature of personality, its development, and its functioning. Examination of classical and contemporary theories and data.

340 Three Credits
PSYCHOLOGY OF THE AFRICAN-AMERICAN
PREREQUISITE: PSY 210
Examination of the critical effects and derivations of the African-American slavery and contemporary American racial social experiences on the mental developments and current functioning of the African-American person.

360 Four Credits
EXPERIMENTAL PSYCHOLOGY
PREREQUISITES: PSY 210, 211, 270
Introduction to the application of experimental methods and techniques to psychological problems. Emphasis on experimental design, data collection and analysis, and fundamentals of report writing. (3 hours lecture/ 1 hour lab.)

380 Three Credits
PHYSIOLOGICAL PSYCHOLOGY
PREREQUISITES: BIO 100; CHM 100; PHY 100, 360
Study of the physiological processes underlying behavior, with emphasis on the role that the major systems of the body, in particular the nervous system, play in behavior.
and theological perspectives. Examination of ethical issues confronting society and the present. Study of the historical legacy of events, personalities and institutions. Analysis of African-American religious thought through critical approaches. HISTOLOGY AND THEOLOGY OF THE BLACK CHURCH 330 Three Credits Study in the religious dimension of the Judaic culture, with political, religious and social influences, which emerged as relevant in modern society. Research and theological findings presented in a seminar format.

RELIGION - REL 110 Three Credits INTRODUCTION TO THE BIBLE: OLD TESTAMENT Examination of the writings, culture and personalities in the ancient literature known as the Old Testament. Survey of both literary and historical perspectives and the possible structures, functions, and meanings of this literature for its original community.

111 Three Credits INTRODUCTION TO THE BIBLE: NEW TESTAMENT Survey of the ancient literature of the New Testament section of the Bible. Examination of historical, cultural and theological issues. Exploration of literary and historical perspectives given the possible structures, functions, and meanings of the literature for its original community.

115 Three Credits HISTORY/THEOLOGY OF PROTESTANTISM Examination of selected religious movements and problems in the historical development of Protestantism as a cultural, philosophical and religious influence. Key personalities and time periods reviewed.

200 Three Credits MAJOR WORLD RELIGIONS Survey of major world religions and selected topics involving theological and cultural developments. Investigation of basic religious structures and the relationship of religious phenomena to their cultural context. The historical, theological and modern impact of the religions studied highlighted.

210 Three Credits MAJOR WORLD RELIGIONS Intensive research pertaining to a selected area of religious thought and expression, either contemporary or ancient.

220 Three Credits SYNOPSIS GOSPELS Examination of the critically designated documents of the ancient New Testament literature. The historical and modern developments pertaining to dissemination, interpretations and cultural influences reviewed. Emphasis on structures, personalities, and institutional usage within the varied cultural contexts.

310 Three Credits LIFE AND LITERATURE OF PAUL Examination of the life and literature associated with the Saul/Paul of ancient biblical and cultural history and the political, religious and social influences, which emerged as relevant in modern society. Research and theological findings reviewed.

320 Three Credits HISTORY AND THEOLOGY OF JUDAISM Study in the religious dimension of the Judaic culture, with emphasis on historical, social, and theological perspectives.

330 Three Credits HISTORY AND THEOLOGY OF THE BLACK CHURCH Analysis of African-American religious thought through critical study of the historical legacy of events, personalities and institutions which helped shape black religion from Africa to the present.

340 Three Credits SOCIETY AND CHRISTIAN ETHICS Examination of ethical issues confronting society and the Christian responses. Consideration given to philosophical and theological perspectives.

341 Three Credits PSYCHOLOGY OF RELIGION Introduction to selected themes, issues and problems in the interaction of religion and psychology. Differing points of view considered.

420 Three Credits SOCIOLOGY OF RELIGION Study of the treatment of religion as a social institution. Examination of the influence of society on religion and the influence of religious ideas and organizations on other social institutions, and cultures.

440 Three Credits BASIC ISSUES OF RELIGIOUS THOUGHT Cross-disciplinary analysis of modes of human awareness through religious meaning and expression. Critical study of writings of selected figures who have helped shape identified religious movements and events across the ages.

SECONDARY EDUCATION AND LEADERSHIP - SED 201 Three Credits THE AMERICANS SCHOOLS AND THE TEACHING PROFESSION PREREQUISITE: Sophomore Standing Orientation to contemporary elementary and secondary schools in America with on-site experiences in diverse classrooms in local schools. Emphasis on issues raised in current reform movements and on the changing nature of the teaching profession.

233 Two Credits SEMINAR IN ASSESSMENT AND EVALUATION Study and application of theories, methods, and materials used in assessing thinking skills. Emphasis on developing critical thinking in specific contexts such as the Core Battery Tests of the National Teacher Examinations.

380 Three Credits FOUNDATIONS OF SECONDARY SCHOOL METHODS AND MANAGEMENT OF INSTRUCTION PREREQUISITE: Successful completion of all lower level courses Study of concepts related to teaching and learning, classroom management, student-teacher relationships, presentation of subject matter, and testing and evaluation.

381 Three Credits SCIENCE FOR TEACHERS PREREQUISITE: PHY 100 or BIO 100 Extension of the fundamental concepts of the biological and physical sciences, special emphasis on content material in the physical sciences. Also provides special consideration of selecting methods and applications appropriate to the program of elementary school science. Emphasis on meteorology, astronomy, geology, physics, and biology.

382 Three Credits PSYCHOLOGY OF SOCIAL PROCESSES PRACTICUM IN PSYCHOLOGY 495, 496 Three Credits Each Purpose of the practicum is to provide opportunity for community field experience, and exploring means by which to involve various components of the community in the educative process.

499 Three Credits DIRECTED TEACHING IN SECONDARY SCHOOLS PREREQUISITE: Completion of all Courses Required for Secondary Majors Observation and participation at the secondary level, including off-campus, field-oriented activities (five days per week) under the supervision of cooperating public school/college personnel. Following observation and orientations under the direction of cooperating teachers, students will teach assigned classes. They also attend weekly sessions of discipline specific instructional method conducted by professors associated with the various disciplines.

* Enrollment requires completion of requirements for admission to teacher education.

SOCIAL WORK - SWK 200 Three Credits INTRODUCTION TO SOCIAL WORK Introduction to the profession of social work which exposes to social work history, values and ethics, intervention methods, fields of practice and organizational settings. Special emphasis on the nature and functions of social work and the diversity of roles for the generalist practitioner.

207 Three Credits SOCIAL WELFARE POLICIES AND SERVICES I PREREQUISITE OR COREQUISITE: SWK 200 Study of social problems and social work commitment to diversity, social and economic justice and populations at risk. Specific emphasis on the historical background of social welfare and the emergence of the social work profession.

220 Three Credits HUMAN BEHAVIOR AND SOCIAL ENVIRONMENT PREREQUISITES: SWK 207, PSY 210; SOC 110 or 111; HED 100; BIO 105 Examination of the dynamics of multi-level social systems, as they have an impact on the development and well-being of individuals from preconception through childhood. Study of the interaction between and among human biological, social, psychological and cultural systems as they affect and are affected by human behavior. Emphasis on the functions of human behavior, social environment theory and research as they inform social work practice.

300 Three Credits SOCIAL WELFARE POLICIES AND SERVICES II PREREQUISITE: SWK 207 COREQUISITES: SWK 312 Study of social problems and social work commitment to diversity, social and economic justice and populations-at-risk. Emphasis on the institutional nature of social welfare, the relationship to other institutions, and social welfare policies implemented into social welfare programs.
SOCIAL WORK – SWK (continued)

309 Three Credits
HUMAN BEHAVIOR AND SOCIAL ENVIRONMENT II
PREREQUISITES: SWK 220; PSY 210; BIO 105 or 165; HED 100; SOC 110 or 101;
Examination of the dynamics of multi-level/social systems, as they have an impact on the development of individuals from adolescence through dying and death. Study of interaction between and among human biological, social, psychological and cultural systems as they affect and are affected by human behavior.

312 Three Credits
INTRODUCTION TO GENERALIST PRACTICE
PREREQUISITE: SWK 220
COREQUISITE: SWK 300
Study of the foundation knowledge, values and skills that form the holistic conceptual framework of generalist social work practice. Emphasis on generalist practice, development of the professional relationship, promotion of client well being, and social work interviewing skills.

313 Three Credits
GENERALIST PRACTICE: INDIVIDUALS/FAMILIES
PREREQUISITE: SWK 312
Study of appropriate application of the General Method of Social Work Practice with individuals and families from diverse populations including generic skills of engagement, data collection, assessment, intervention, evaluation, and termination for effective practice with individuals and families.

314 Three Credits
NATURE AND MEANING OF CHILD WELFARE
PREREQUISITE: SWK 300
Study of historical and contemporary issues and developments relative to the status, rights, opportunities, and circumstances of children in American society. Detailed examination of the range, content, policies, and objectives of a myriad of societal initiatives aimed at strengthening and preserving the institution of the family.

315 Three Credits
SOCIAL WORK WITH FAMILIES
PREREQUISITE: SWK 312
Introduction to the knowledge of family dynamics and the intervention skills and techniques necessary to serve families efficiently and effectively, especially low-income families. Emphasis on family intervention based upon systems concepts and ecocultural thinking.

316 Three Credits
GENERALIST PRACTICE: GROUPS, ORGANIZATIONS AND COMMUNITIES
PREREQUISITE: SWK 313
Examination of theories and methods of social work in macro and mezzo practice. Emphasis on the development of skills related to engagement, data collection, problem identification/assessment, intervention, termination and evaluation in working with groups, organizations and communities.

317 Three Credits
HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II
PREREQUISITE: SWK 313
Examination of the dynamics of multilevel/social systems as they have an impact on the formation and development of the diverse contemporary American family. Emphasis on the interactions between and among family diversity, biological, social, psychological and cultural systems as they relate to the family unit.

321 Three Credits
SOCIAL WORK AND THE AGED
PREREQUISITE: SWK 312
Study of the social needs of the aged population, policies required, and the implementation of social services to meet these needs.

324 Three Credits
HEALTH CARE AND SOCIAL SERVICES
PREREQUISITE: SWK 313
Overview of health care and its social services delivery system in America. Examination of the value orientation, socio-cultural, racial/ethnic, political, economic, research, and policy aspects of health care. Emphasis on the roles of several health-care deliverers, and the impact of illness, environment, ecology, and nutrition.

326 Three Credits
TECHNIQUES OF COUNSELING
PREREQUISITE: SWK 312
Review of the theories of personality and basic concepts of counseling. Development of principles of counseling, the nature and problems of individuals, and the tools and techniques utilized to counsel individuals and groups. Several approaches will be studied in as much depth as time allows. Opportunities to practice will be provided.

327 Three Credits
INTERVIEWING TECHNIQUES
Study of the general principles and techniques of interviewing and recording, which may be applied not only in social work but also in other occupations.

328 Three Credits
CONTEMPORARY SOCIAL POLICY ISSUES
PREREQUISITE: Open to senior Social Work majors
Exploration of the current and controversial problems in social work, unmet needs, and the potential policies and programs designed to deal with them.

346 Three Credits
GENERALIST PRACTICE: EVALUATION
PREREQUISITES: SOC 344, 355; SWK 318
Focus on understanding and refining skills in the application of the techniques for evaluation of generalist practice. Emphasis on understanding and refining practice skills that center on evaluation of social work practice. Research procedures and designs studied as a means of objectively assessing the efficiency and efficacy of social work practice intervention. Ethical issues of practice and evaluation practices addressed relative to oppresssed populations.

490, 491 Ten Credits
PRACTICUM SEMINAR
PREREQUISITE: All previously required courses and concurrent enrollment in practicum
Opportunity to integrate theory with field practice, also assists in evaluating practice performance while exploring personal and professional values and ethics.

493, 494 Ten Credits
PRACTICUM IN SOCIAL WORK
PREREQUISITES: All previously required courses and concurrent enrollment in seminar
Internship in a social welfare agency. 225 hours per semester while engaged in a supervised practice experience where generalist skills are utilized required.

495, 496 Ten Credits
MACRO AND MICRO PERSPECTIVES ON INTERNATIONAL SOCIAL WELFARE
PREREQUISITE: Open to senior Social Work majors
Opportunities to engage in student and/or faculty-initiated special projects which explore some dimension of social work practice and/or theory.

522 Three Credits
SOCIETY - SOC
INTRODUCTION TO THE SOCIAL SCIENCES
Introduction to contemporary and historical perspectives of the social sciences, including the general methods and special techniques used by social scientists to acquire an understanding of how human beings to behave. Emphasis on the United States as well as a global context.

525 Three Credits
INTRODUCTION TO SOCIOLOGY
Introduction to the basic theories, concepts, and principles of sociology, with emphasis on basic social processes such as social organization, culture, socialization, deviance, and inequality. Study of the functioning and influences of major social groups, such as the family and government. Application of the principles to understanding the everyday life.

537 Three Credits
SOCIAL PROBLEMS
Study of current social issues such as poverty, race and ethnic relations, unemployment, crime, drug use, the elderly, population problems. Examination of various explanations, consequences, and suggested solutions for each problem.

542 Three Credits
HUMAN SEXUALITY
Examination of the sociocultural, psychological and physiological factors related to human sexual behavior. For a forum for a scientific examination of the various processes by which humans develop and manifest their sexual identity and sexual behavior.

225 Three Credits
SOCIAL SCIENCE RESEARCH SKILLS
PREREQUISITE: Sophomore Standing
Development of knowledge of using a large number of library resources to enhance skills in choosing a research topic, using the literature, writing, data collection, collecting primary data, interpreting tables and graphs, and writing research papers and abstracts.

228 Three Credits
DEMOGRAPHIC PRINCIPLES
PREREQUISITE: SOC 110 or Consent of Instructor
Study of the relationship between population and society; the historic growth of population and its causes; the composition and historic growth of population in terms of age, sex, race, occupation, education, and health; factors influencing birth and death rates; and trends and problems in world population.

229 Three Credits
URBAN SOCIOLOGY
PREREQUISITE: SOC 110 or Consent of Instructor
Study of origin and development of urban life with emphasis on the family, housing, health, education, poverty and dependency, crime and the treatment of the criminal.

237 Three Credits
RACIAL AND ETHNIC MINORITIES
Examination of problems and issues characterizing interaction patterns among different racial, ethnic, and religious groups. Study of the concepts of race, nationality, prejudice, and discrimination, including racism, intergroup conflict, segregation, unemployment, crime and juvenile delinquency, education and the subculture of poverty in contemporary industrial-urban societies. Focus on psychological, social, and cultural factors that influence interaction between dominant and minority groups, as well as the issues and problems related to blacks in the United States.

242 Three Credits
INTRODUCTION TO ANTHROPOLOGY
Study of human evolution, racial origins, prehistoric cultures, modern races and their classifications, problems of race, nationalities, language, migrations, cultural patterns, growth and spread of religion and culture. Special emphasis on the nature and diversity of culture.

250 Three Credits
SOCIAL USES OF NATURAL RESOURCES
PREREQUISITE: SOC 110 or Equivalent
Study of social implications of environmental issues, including the current energy situation. Examination of how societies depend on and interact with the natural environment, how they distribute and use natural resources, and how they create and react to pollution problems. Emphasis on social behavior, attitudes, and public policy issues. Evaluation of alternative strategies for solving environmental and energy problems.

301 Three Credits
DEMOGRAPHIC METHODS I
Study of the measurement of population size, distribution and age/sex structure, including fertility, mortality, migration, nuptial patterns, and population growth. Emphasis partly on derivation of demographic measures and the interpretation and real-world applications of these measures.

302 Three Credits
MIGRATION
Study of migration with emphasis on its measurement, causes and consequences. Discussion of internal and international migration, including the consequences of migration on the "donor" and "host" areas. Examination of migration patterns within the United States, with emphasis on the migration patterns of African-Americans since the turn of the twentieth century. Study of the United States immigration policy with particular reference to refugee and immigration legislation.

303 Three Credits
FERTILITY AND FAMILY PLANNING
Survey of fertility concepts, measurement techniques, trends, levels, and explanations. Evaluation of the biological and social components of fertility. Fertility control is discussed with emphasis on the interplay of contraception, demographic and government variables. Social issues related to fertility are highlighted.

304 Three Credits
MORTALITY
Discussion of the components of mortality (life span and longevity). Examination of the causes of death and mortality differentials by gender, occupation, income/education, race/ethnicity, marital status, and urban/rural areas.
### Norfolk State University 2004-2005 University Catalog

**Emphasis on infant mortality in developing societies and among the urban poor of industrialized societies.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>325</td>
<td>3</td>
<td>SOCIOLGY OF BUSINESS AND INTERNATIONALISM Study of the relationship between businesses and society, which involves multicultural and international approach, and takes into account the impact of changes in society, business practices and technology on societal structure. Special emphasis on the roles of industrial revolution, modern technology and information science. Analysis of the current international environment, the interconnectedness of businesses, societies and economic processes. Examination of the effect of business practices on environmental problems and possible solutions. Discussion of the ethical issues and business practices that contribute to the development of societies and people’s lives.</td>
</tr>
<tr>
<td>331</td>
<td>3</td>
<td>SOCIAL PSYCHOLOGY Examination of human social behavior at the individual and interpersonal level. Discussion of socialization, power, altitude formation and change, conformity, and language to provide an understanding of how persons are influenced by interaction with other persons as members of social groups. The focus is primarily basic social science, emphasizing major theoretical ideas and research findings. Applications to everyday life are also considered.</td>
</tr>
<tr>
<td>335</td>
<td>3</td>
<td>SOCIOLOGY OF FAMILIES PREREQUISITE: SOC 110 or Consent of Instructor Study of the family and its function among primitive peoples; the different types of family organizations; history of marriage and divorce in Europe and the United States; changing idea of family life; the functions of the family in the modern world; and contemporary problems.</td>
</tr>
<tr>
<td>344</td>
<td>3</td>
<td>METHODS OF SOCIAL RESEARCH This course introduces students to the basic principles and procedures involved in social science research. The major purpose is to assist students in becoming competent consumers of research. Thus, emphasis is placed on understanding the research process, noting the reasons for particular procedures and the errors and limitations inherent in any research project. Topics covered include the scientific method, conceptualization, formulation of hypotheses, research design, analysis and interpretation of research findings, theoretical basis of research, application and evaluation of research, and the nature of science. Students participate in research projects and prepare reports.</td>
</tr>
<tr>
<td>355</td>
<td>3</td>
<td>ELEMENTARY SOCIAL STATISTICS Introduction to the parametric and non-parametric techniques of summarizing data, including measures of central tendency and dispersion, measures of association, correlation and regression, and statistical inference. Emphasis on mastering skills needed to apply statistics rather than on theoretical concerns.</td>
</tr>
<tr>
<td>356</td>
<td>3</td>
<td>INTERMEDIATE SOCIAL STATISTICS PREREQUISITE: SOC 355 Study of the solid statistical foundations necessary to develop competence in the analysis and interpretation of sociological data. It assumes knowledge of basic statistical principles, including measures of central tendency, measures of dispersion and normal curve probability distribution. Emphasis on hypothesis testing, logic, application, and interpretation of test statistics. Graphical and tabular presentation of data are highlighted. Parametric and nonparametric tests of significance and tests of correlation are discussed. Special attention is given to regression analysis, with emphasis placed on the derivation and interpretation of coefficients. Extensive use is made of statistical packages, thereby enabling the student to explore complex survey and demographic (Census) data.</td>
</tr>
<tr>
<td>391</td>
<td>6</td>
<td>INTERNSHIP COREQUISITE: SOC 394 Various duties in agencies and organizations active in the fields of gerontology, urban affairs, and criminal justice. An agency supervisor and the internship supervisor direct each student in mastering relevant skills to complete the tasks associated with a significant position in the internship agency.</td>
</tr>
<tr>
<td>394</td>
<td>0</td>
<td>INTERNSHIP SEMINAR COREQUISITE: SOC 393 Opportunity to relate intern experiences to a systematic, theoretical body of knowledge. Identifies and discusses common problems and possible solutions.</td>
</tr>
</tbody>
</table>
SPANISH – SPN (continued)

320 Three Credits
LATIN-AMERICAN CIVILIZATION II
PREREQUISITE: SPN 215 or Permission of the Instructor
Survey of the most important elements of contemporary Latin-American culture. Conducted in Spanish.

321 Three Credits
SURVEY OF SPANISH LITERATURE I
PREREQUISITE: SPN 216 or Equivalent
Study of representative works of Spanish literature from the beginning to the end of the 17th century. Conducted in Spanish.

322 Three Credits
SURVEY OF SPANISH LITERATURE II
PREREQUISITE: SPN 216 or Equivalent
Study of representative works of Spanish literature from the beginning of the 18th century to the middle of the 20th century.

All literature courses beyond this level are conducted in Spanish.

324 Three Credits
SPANISH-AMERICAN LITERATURE
PREREQUISITE: SPN 216 or Equivalent
Comprehensive study of the main currents of Spanish-American literature from its origins to the contemporary period. Lectures, discussions, and assigned reports are required.

326 Three Credits
NON-DRAMATIC LITERATURE OF THE GOLDEN AGE
PREREQUISITE: SPN 321
Critical study of the poetic, novelistic, and didactic styles of the period 1550-1650, exclusive of the works of Cervantes.

332 Three Credits
LITERATURE OF THE 18TH CENTURY
PREREQUISITE: SPN 322
Includes Romanticism in poetry and drama, Costumbrismo, the regional novel, and the beginning of the modern theatre. Analysis of texts and literary theories in class discussion.

333 Three Credits
LITERATURE OF THE 19TH CENTURY
PREREQUISITE: SPN 321
Study of Cervantes as dramatist and novelist. Includes study of Don Quixote and of Cervantes' purpose and plans in the presentation.

382/383 Three Credits
THE TEACHING OF FOREIGN LANGUAGES IN SECONDARY SCHOOLS
PREREQUISITE: SED 380
Study of methods and materials in the teaching of modern foreign languages.

412 Three Credits
LANGUAGE FOR PROFESSIONALS
PREREQUISITE: SPN 315 or Permission of the Instructor
Intensive and extensive practice in the language of technical, vocational, and professional areas. All four language skills (comprehension, speaking, reading, and writing) are stressed. Special emphasis upon the student's secondary area of concentration.

413 Three Credits
INDIVIDUALIZED LANGUAGE FOR PROFESSIONALS
PREREQUISITE: SPN 315 or Permission of the Instructor
Intensive practice in the language of technical, vocational or professional area.

450 Two Credits
PHONETICS
PREREQUISITE: SPN 215 or Equivalent
Analysis of the phonetic features of Spanish. Systematic exercises in pronunciation, intonation, and reading of prose and poetry.

454 Three Credits
ADVANCED GRAMMAR AND COMPOSITION
PREREQUISITE: SPN 215 or Equivalent
Intensive review and application of Spanish grammar. Intensive practice in writing and study of vocabulary and idioms.

469 Two Credits
CONTRASTIVE LINGUISTICS: SPANISH-ENGLISH
PREREQUISITE: SPN 215 or Equivalent
Introduction to the study of the principal phonological, morphological, syntactical, and lexical contrasts between Spanish and English. No previous work in linguistics is required.

490 Three Credits
SENIOR SEMINAR
PREREQUISITE: Departmental Permission
Intensive readings and oral and written reports required. Student will complete a senior thesis, that is, do independent research on a topic selected by the student, approved by the student's department and advisor, and completed under the guidance of that advisor.

500 One/Two/Three Credits
PRACTICUM IN SPANISH
PREREQUISITE: Senior or Graduate Level
Variable content course in Spanish language, literature, history, or culture for students who wish to study beyond the normal four-semester sequence of foreign language.

SPECIAL EDUCATION - SPE

EDU 101 Three Credits
COLLEGIATE COMMUNICATION LITERACY SKILL
Introduction to the integrated communication skills required for academic success at the university. Emphasis on basic college survival skills and progressives to specific strategies for reading, writing, note-taking, and exam-taking.

105 Three Credits
COLLEGE SEMINAR
PREREQUISITE: Two Credits
Reinforcement of basic skills in quantitative literacy and general mathematics, including numerical concepts, algebra, as well as Internet essentials to aid in solving real world problems. Emphasis on study tips and math anxiety reducing strategies.

106 Three Credits
OVERVIEW OF INCLUSION EDUCATION AND SERVICES
PREREQUISITE: Two Credits
Overview of the planning and delivery of education in inclusive classrooms, including an update on relevant legislation, the functions of the multidisciplinary team, as well as the role and responsibilities of the paraprofessional in the classroom.

108 Three Credits
HUMAN RELATIONS SKILLS AND ETHICS
PREREQUISITE: Two Credits
Development of human relations skills associated with personal and career success. Examination of ethical principles to guide performance in the workplace.

109 Three Credits
GUIDING CLASSROOM BEHAVIORS OF LEARNERS
PREREQUISITE: Two Credits
Overview of approaches to promoting positive behaviors and managing challenging behaviors in the classroom. Focus on application of practical strategies.

111 Three Credits
LEARNING THROUGH LITERATURE
PREREQUISITE: Two Credits
Overview of the use of literature for instruction. Varied genres are explored and storytelling is described as a mechanism to increase literacy.

113 Three Credits
FACILITATING READING INSTRUCTION
PREREQUISITE: Two Credits
Study of some basic understanding of the dynamic involved in the complex activity of reading for the paraprofessional. Emphasis on tips, hints, and strategies for supporting students with reading instruction.

115 Three Credits
FACILITATING LEARNING MATHEMATICS AND SCIENCE CONCEPTS
PREREQUISITE: Two Credits
Study of some basic strategies for supporting students with their mathematics and science instruction. Emphasis on an historical approach to understanding the role of mathematics and science in today's classroom.

199 Three Credits
PRACTICUM FOR PARAPROFESSIONALS
PREREQUISITE: Complete Practicum Application
Departmental Endorsement

Educational experiences in supervised off-site observation and participation with opportunities to interact with individuals from diverse populations.

210 Three Credits
AMERICAN SCHOOLS AND THE TEACHING PROFESSION
Orientation to contemporary elementary and secondary schools in America with on-site experiences in diverse classrooms. Emphasis on educating exceptional learners about the changing nature of the teaching profession.

213 Three Credits
CRITICAL THINKING AND ASSESSMENT SKILLS
Development of test taking skills on standardized examinations of education majors. Emphasis on reading, writing, mathematics, and critical thinking skills.

295 Three Credits
PRACTICUM IN VOLUNTEER COMMUNITY SERVICE
Experience in guided leadership development in community service volunteering. Participation in a community service project sponsored by a recognized community agency in this geographic region. Sixty-five clock hours of service learning experience required.

311 One Credit
PRINCIPLES AND PRACTICES IN MULTICULTURAL EDUCATION
Introduction to cultural differences among children, youth and adults in a pluralistic society. Opportunity to study and to critically examine differences related to institutional racism, classism, sexism, ageism, and homophobia. Examination of historical and contemporary perspectives of the multicultural competencies required for a teacher to function successfully in today's pluralistic society.

312 Three Credits
EDUCATIONAL PSYCHOLOGY AND BEHAVIOR MANAGEMENT
Study of basic concepts of behavioral conditioning principles and management of behavior in the classroom. Emphasis on practical applications of learning theories to the teaching-learning situation for individuals in home, school, and community environments. (A twenty-hour clinical experience required).

321 Three Credits
CHARACTERISTIC, MEDICAL AND LEGAL ASPECTS IN SPECIAL EDUCATION
Study of the medical and environmental etiologies of disabling conditions that can occur prenatally, perinatally, and postnatally. Emphasis on preventive, diagnostic, and prescriptive/treatment procedures and the impact of etiologies on learning potential. (A twenty hour clinical experience required).

332 Three Credits
UNDERSTANDING AND TEACHING LEARNERS WITH MENTAL RETARDATION
Focus on the nature of and strategies for teaching learners with mental retardation, including terminology and etiological factors, historical perspectives, legal parameters, assessment techniques, influence of cultural variables, current issues, and effective methods of instruction. (A twenty hour clinical experience required).

334 Three Credits
UNDERSTANDING AND TEACHING LEARNERS WITH EMOTIONAL DISTURBANCE
Experience in the field of emotional disturbance, including historical and theoretical perspectives, definitions and characteristics, legal and ethical considerations, assessment processes, program planning, and implementation of instruction for expanding the academic performance of individuals with emotional disturbance. Learning experiences focus on multicultural influences, emotional adjustment, and social development. (A twenty hour clinical experience required).

336 Three Credits
UNDERSTANDING AND TEACHING STUDENTS WITH LEARNING DISABILITIES
Experience in the field of learning disabilities, including historical and theoretical perspectives, definitions and characteristics, related effects, legal and ethical considerations, assessment procedures, program planning, and implementation of instruction for expanding the academic performance of individuals with learning disabilities and subject area performance. Learning experiences focus on teaching linguistically and culturally diverse individuals with learning disabilities.

344 Three Credits
TEACHING READING TO EXCEPTIONAL LEARNERS
Study of comprehensive active learning designed to provide a foundation in literacy instruction and content area reading.
Emphasizes on language acquisition and the interrelated nature of reading, writing, speaking, listening, and thinking to promote the exceptional learner's use and understanding of language. Field experiences facilitate student mastery of developing a balanced reading program.

395H Three Credits PRACTICUM IN VOLUNTEER COMMUNITY SERVICE
Experience of leadership development through community service volunteering. Participation in a project sponsored by a community agency as well as forty-five hours of volunteer and service learning required.

440 Three Credits COLLABORATION, INCLUSION, TRANSITION AND OTHER CURRICULAR ADJUSTMENTS
Study of curricular adjustment procedures for exceptional learners, utilizing curriculum materials, assessment techniques, and instructional approaches to remedial learning and behavioral problems. (Twenty hour clinical experience required).

451 Three Credits PSYCHOEDUCATIONAL DIAGNOSTIC PROCEDURES
Study of a foundation for understanding the psychoeducational diagnostic process and the skills necessary for conducting meaningful assessments. Emphasis on the testing domains of intelligence, language, perception, academics, overt behavior, affective competence, and vocational assessment. Educational experiences focus on teaching linguistically and culturally diverse learners. (Twenty hour clinical experience required).

461 Three Credits TEACHING SIGN LANGUAGE
Introduction to American Sign Language (ASL) and its application within the deaf community. Emphasis on developing receptive and expressive skills for everyday interaction of effectively communicating with deaf/hard of hearing individuals and other non-verbal persons with severe disabilities.

490 Three Credits ASSESSMENT OF EXCEPTIONAL STUDENTS
Introduction to components and procedures for educational assessment of exceptional learners. Emphasis on purpose, history, terminology, and basic educational/evaluation concepts. Orientation to formal and informal instruments for measurement and evaluation. (Evaluation twenty hour clinical experience required).

490A Six Credits DIRECTED TEACHING – EMOTIONAL DISTURBANCE
Supervised teaching experience with emphasis on increasing responsibility for a given group of individuals with emotional disturbance for a definite period of time. Students plan and write instructional interventions, deliver instruction, monitor and document student progress, and assume all other classroom duties of the cooperating teacher. Opportunities to interact with individuals from diverse populations.

490B Six Credits DIRECTED TEACHING - LEARNING DISABILITIES
Supervised teaching experience with emphasis on increasing responsibility for a given group of individuals with learning disabilities for a definite period of time. The candidate will assess students, plan and write instructional interventions, deliver instruction, monitor and document student progress, and assume all other classroom duties of the cooperating teacher. Opportunities to interact with individuals from diverse populations.

490C Six Credits DIRECTED TEACHING - MENTAL RETARDATION
Supervised teaching experience with emphasis on increasing responsibility for a given group of individuals with mental retardation for a definite period of time. The candidate will assess students, plan and write instructional interventions, deliver instruction, monitor and document student progress, and assume all other classroom duties of the cooperating teacher. Opportunities to interact with individuals from diverse populations.
TECHNOLOGY EDUCATION – TED

274 INSTRUCTIONAL FOUNDATIONS FOR TECHNOLOGY EDUCATION
Three Credits
PREREQUISITE: Sophomore Standing
Study of recent curriculum developments and practices affecting the design and implementation of technology education programs, including model curriculum development approaches to educational accountability, and individualized instruction. Emphasis on problem-solving activities related to communication, production, energy, power, and transportation have altered man’s environment.

275 TECHNOLOGY EDUCATION IN THE ELEMENTARY SCHOOL
Two Credits
Introduction to technology, existing processes, and trends in industry. Emphasis on hands-on activities which aid understanding of how the technological developments associated with communications, production, energy, power, and transportation have altered man’s environment.

330 COMMUNICATION TECHNOLOGY
Three Credits
Preparation for teacher trainees to combine graphic reproduction, computers, electronics, drawing and design, and photography as a total integrated system in studying the technology used to collect, disseminate, store and use information. Learning activities using materials, processes, and equipment are used in developing useful products. (2 hrs. lec./2 hrs. lab)

350 TRANSPORTATION TECHNOLOGY
Three Credits
Preparation for teacher trainees to teach the interrelationship of mechanical, electrical, and fluid power within transportation systems of land, sea, air, and space. Emphasis on energy conversion, transmitting power, and controlling power. (2 hrs. lec./2 hrs. lab)

351 ENERGY AND POWER
Three Credits
Systems-oriented study of energy sources, forms of energy, converting energy, methods for converting and transforming energy, and systems for transmitting, measuring, controlling and utilizing useful power. (2 hrs. lec./2 hrs. lab)

371 CURRENT TRENDS IN TECHNOLOGY
Three Credits
PREREQUISITE: Permission
Examination of recent curriculum development and practices in the design and implementation of technology and technology education programs.

485 TEACHING IN TECHNOLOGY EDUCATION
Three Credits
PREREQUISITE: SED 360
Exploration of instructional approaches and delivery systems appropriate for technology education, focusing on unique approaches and techniques required in contemporary technology learning environments.

THEATRE - DRM

113 THEATRE MOVEMENT I
Three Credits
Development of performer’s physical conditioning and awareness of expressive artistic movement.

114 INTRODUCTION TO THEATRE
Three Credits
Survey of theatrical forms, techniques, and practices. Reading of selected plays. Attendance at Norfolk State Player’s productions required. Lab included.

120 STAGECRAFT I
Three Credits
Study of practical and theoretical knowledge of scenery, lighting, and sound design for the theatre. Lab included.

123 THEORY AND TECHNIQUES OF ACTING
Three Credits
Study of actor’s resources including body, mind, and voice. Emphasis on Aristotle’s elements of plot, character, diction, thought, rhythm, and spectacle. Focus on play analysis, study of stage practices, gestures, movements, timing, pointing a line, sustaining, and effective characterizations.

200 INTERMEDIATE ACTING
PREREQUISITE: DRM 123
Three Credits
Study of the physical and vocal demands involved in the creation of a role for the stage.

211 COMMUNITY THEATRE
Three Credits
Study of the history, organization, and production strategies for operating a community theatre.

212 IMPROVISATION FOR THE THEATRE
Three Credits
Development of the performer by encouraging spontaneity, including group ensemble work through improvisation.

213 THEATRE MOVEMENT II
Three Credits
Study of the physical demands involved in various acting styles. Emphasis on movements for classical acting style.

219 AFRICAN-AMERICAN DRAMA
Three Credits

220 STAGE CRAFT II
PREREQUISITE: DRM 120
Three Credits
In-depth studies of technical direction, scenery, lighting, properties, sound, welding, and special effects. Advanced study of technical theatre.

226/526 CHILDREN’S THEATRE
Three Credits
Study of theories and methods of children’s theatre with concentration on educational goals. Study of literature and production techniques. Practical work in production of Children’s Theatre.

230 CREATIVE DRAMATICS
PREREQUISITE: DRM 226/526
Three Credits
Study of theatre principles and creative process with young children. Emphasis on reading comprehension, positive self-concept, awareness of the aesthetic dimension, and vocabulary and problem-solving skills of young children.

238 STAGE MANAGEMENT
Three Credits
Study of guidelines and practical techniques for effective stage management. Emphasis on the planning, staging, rehearsing, and performing process. Study of Actor’s Equity Standards.

240/540 THEATRE MANAGEMENT
Three Credits
Study of principles and techniques of organizing and managing theatre production programs in educational, community, and commercial settings.

310 STAGE MAKE-UP
Three Credits
Study of stage make-up techniques/designs, practices and equipment. Demonstration of make-up design for an experimental production required.

315/515 HISTORY OF THEATRE I
Three Credits
Study of history of the theatre from beginning to 1650.

316/516 HISTORY OF THEATRE II
PREREQUISITE: DRM 315/515
Three Credits
Study of history of theatre in Europe and America 1650 to the present.

320/520 LIGHTING DESIGN
Three Credits
Emphasis on sources and control of light, equipment, and light design.

321/521 SCENERY DESIGN
PREREQUISITE: DRM 120
Three Credits
Experience with floor plans, elevations, models, and perspective designs for theatrical events. Lab included.

324/524 ADVANCED ACTING THEORY
PREREQUISITE: DRM 200
Three Credits
Focus on acting, theories, advanced techniques in acting, and styles of acting.

328 CONTEMPORARY DRAMA
PREREQUISITE: DRM 219
Three Credits
Detailed study of the plays, playwrights, and dramatic movements of the post World War II period.

400/500 COSTUME HISTORY
Three Credits
Study of costume history of Egyptian to modern times. Emphasis on design and construction of costumes for shows. Lab included.

410/510 COSTUME DESIGN
PREREQUISITE: DRM 400
Three Credits
Study of elements of design in relationship to planning and construction of production design concepts. Lab included.

415 THEATRE DESIGN WITH COMPUTER
Three Credits
Study of computer aided drafting and design specifically aimed at the theatre. Emphasis on a series of projects in research, analysis, and drafting on the computer.

418/518 INTERPRETERS THEATRE
Three Credits
Emphasis on script analysis, voicing and staging characters, compiling scripts, and literature as theatre.

425/525 DIRECTION OF PLAYS
PREREQUISITE: DRM 123 and 200
Three Credits
Emphasis on the origin and development of play direction, basic principles of composition, picturization, movement, rhythm, and pantomimic dramatization. Experience in directing a laboratory production with a cast of three or more.

430/530 PLAY WRITING
Three Credits
Script development with emphasis on material, characters, conflict, unity, dramatic action, suspense, and dialogue in relation to plot, character, thought, diction, music, and spectacle.

435/535 ADVANCED TECHNICAL THEATRE
PREREQUISITE: DRM 320/520, 321/521
Three Credits
Advanced design theory and stage practice. Design of stage lighting, scenery, and sound.

436 SOUND DESIGN
Three Credits
Exploration of sound equipment: principles, practices, and uses as applied to today’s theatre. A series of projects in recording, mixing, editing, and analysis.

450/550 RESEARCH SEMINAR
PREREQUISITE: Senior or Graduate Level
Three Credits
Research course in which each student completes an independent research project on some aspect of the theatre, such as a playwright, a theatrical movement, or a historical period.

460/560 DRAMATIC THEORY AND CRITICISM
PREREQUISITE: DRM 324/524
Three Credits
Major critical theories from Aristotle to present.

URBAN PLANNING - URP

191 INTRODUCTION TO URBAN PLANNING
Three Credits
Study of the role of planning in the development, management, and organization of metropolitan environments. Comprehensive analysis of the overall planning process and how master plans can guide the growth and development of cities and their hinterland.

201 PLANNING THEORY
Three Credits
Presentation of theories of urban planning and an in-depth analysis of various academic and professional planning viewpoints of planning theory. Discussion of transitional periods in the evolution process in explaining urban phenomena.

296 URBAN LAND USE PLANNING
Three Credits
Study of management and the use of land in primarily urban centers, including an analysis of the evolution, legislative, support, scope and nature of land use planning and management. Emphasis on the evaluation and discussion of various development projects and the public’s role in influencing land use development decisions.
292 Three Credits
PLANNING LAW
Survey of cases, legislation, and terminology relevant to planning law. Exploration of the social, economic, and environmental interrelationships of the developmental/real estate industry, local government, and the public. Emphasis on the dynamic role of law in planning processes and procedures.

301 Three Credits
REGIONAL PLANNING AND THE ENVIRONMENTS
Study of an evolutionary perspective of regional planning on a regional, national, and international level. Emphasis on discussions of population, resource distribution, and economic issues. Examination of the patterns of growth and underdevelopment in the context of regions and cities, including the environmental impacts of urban projects and the public/private sector roles and responsibilities in guiding regional economic and social growth.

315 Three Credits
URBAN TRANSPORTATION
Analysis of the role of transportation and transportation systems in the movement of people, goods, and services. Emphasis on an integral and vital component of the overall planning process and as the umbilical cord for the economic growth and stability of the community, metropolis, and nation.

335 Three Credits
PLANNING DESIGN, TECHNIQUES AND CONCEPTS
Overview of the history and process of urban design. Focus on the environmental movement and the concerns about environmental quality, historic preservation, and the design/development of residential, downtown, and shopping areas, and the effect of citizen-community participation on urban design and development.

355 Three Credits
URBAN ECONOMIC DEVELOPMENT PLANNING
Study of the economic vitality of established central cities in conjunction with their metropolitan regions. Primary emphasis on the internal structure of urban areas, including the dynamics of central city economics. Analysis of the dependence of residents upon unstable private capital formation within a city or region and the deleterious effects which capital migration has upon the quality of life in the central city and its environs.

365 Three Credits
HUMAN SERVICES PLANNING AND EVALUATION
Study of the multidisciplinary nature of planning and evaluation of human services, including such elements as social services, physical and mental health care; housing, drug, and alcohol abuse programs; informational services, etc. Evaluation of the effects of various human services programs on the quality of life of the public in general and on specific populations needing such special resources.

380 Three Credits
HOUSING AND COMMUNITY DEVELOPMENT
Introduction to both the rationale and techniques for providing assistance in the community development and city development process. Examination of the myriad institutional and market forces, as well as socioeconomic and demographic factors that affect the supply and the demand for housing. Emphasis on the concepts of citizen participation, self-direction, and self-help in real and simulated neighborhood revitalization efforts.
OFFICERS OF ADMINISTRATION

OFFICE OF THE PRESIDENT

MCDEMMOND, MARIE V. .......................................................... President
B.A., Xavier University; M.Ed., University of New Orleans; Ed. D., University of Massachusetts at Amherst.

SCHENIDER, ALVIN J. .......................................................... Executive Vice President
B.A., Grambling State University; M.A., Ph.D., Northwestern University. Began service in 2002.

CURTIS, JACQUELINE.......................................................... Special Assistant to the President

ELLIS, ERNEST M. .......................................................... Internal Auditor
B.S., Norfolk State University; Further study: University of District of Columbia, University of Kentucky at Lexington,
University of Nebraska at Omaha; CIA (Certified Internal Auditor) and CFE (Certified Fraud Examiner). Began service in 1982.

HORSEY, EARLIE P. .......................................................... Executive Director Planning & Budget

JOHNSON, KARLA C. .......................................................... Executive Assistant to the President & Agency Legislative Liaison

JOHNSON, FRANCINE .......................................................... Compliance Officer/Ombudsman

KELLY, PATRICK B. .......................................................... General Counsel and Special Assistant Attorney General
B.A., Michigan State University; J.D., Wayne State University; State Licensure and Admission to Practice in Virginia, Michigan and

ACADEMIC AFFAIRS

BARNES, ELsie M. .......................................................... Vice President for Academic Affairs
B.S., North Carolina A&T State University; M.A.T., Indiana University of Bloomington; D.A., Government,

CUEVAS, NURIA .......................................................... Associate Vice President for Academic Affairs/Director, Institutional Effectiveness and Assessment
B.S., Southwestern Union College; M.S., University of Memphis; Ph.D., Kent State University. Began service in 2000.

JONES, DOROTHY L. R. .......................................................... Associate Vice President for Academic Affairs
B.S., Albany State College; M.A., Ph.D., The Ohio State University. Harvard University, Institute for Management and Leadership.
Began service in 1993.

AKOMOLAFE, OLUSUJI .......................................................... Director, Global Education
B.A. University of Lagos; M.S. University of Ife; Ph.D. University of Bordeaux. Began service in 2003.

ATKINS, DEBRA .......................................................... Acting Director, Brambleton Outreach Center
B.A., M.S.W., Norfolk State University. Began service in 1996.

AZEKE, MERCY .......................................................... Executive Director, Office of First Year Experience

BOGGER, TOMMY L. .......................................................... Director, Archives and Special Collections
B.A., Norfolk State University; M.A., Carnegie-Mellon University; Ph.D., University of Virginia. Began service in 1965.

BRACEY-MILLER, KATRINA D. .......................................................... Director, Title III

COKER, JOYCE .......................................................... Events Coordinator, L. D. Wilder Performing Arts Center

FINCHER, GARY .......................................................... Registrar
B.A., M.S.Ed., Western Illinois University; Further study: University of Arkansas, Louisiana State University.
Began service in 2003.

KEANE-DAWES, JENNIFER .......................................................... Director, Graduate Studies

LAMPKIN, ANTONETTE K. .......................................................... Director of New Student Orientation
B.S., M.S., Virginia State University; Ph.D., Virginia Polytechnic. Began Service in 1974

LANGLEY, CURTIS TILMON .......................................................... Director, NSU/ODU Tri-Cities Center
B.A., Morehouse College; M.A., Atlanta University; Ph.D., University of Washington. Began service in 1965.

LAWS, PAGE .......................................................... Director, Honors Program

ROANE, MATTIE HINES .......................................................... Director, Library
B.S., Norfolk State University; M.S.L.S., Atlanta University. Further study: Atlanta University. Began service in 1968.
SMITH, BRENDA M. .................................................................................................................. Assistant Director, ACCESS

DEANS

BRAXTON, JEAN .................................................................................................................. Dean, School of Education

DABNEY, DONNA W. ........................................................................................................ Assistant Dean, School of Education
B.S., Texas Woman’s University; M.S., Prairie View A&M University; Ph.D., Walden University. Began service in 2003.

BROADUS-GAY, MARILYN ................................................................................................... Acting Dean, School of Liberal Arts
B.A., M.S.W., University of Kentucky; D.A., George Mason University; Bryn Mawr College Summer Institute for Women in Higher Education Administration. Began service in 1999.

BYRNE, WILLIAM A. ........................................................................................................ Assistant Dean, School of Liberal Arts

DELOATCH, SANDRA J. ........................................................................................................ Dean, School of Science and Technology
B.S., Howard University; M.S., University of Michigan; M.S., The College of William and Mary; Ph.D., Indiana University. Began service in 1972.

MATTIX, LARRY .................................................................................................................. Associate Dean, School of Science and Technology

SMITH, PATRICE .................................................................................................................. Special Assistant to the Dean, School of Science and Technology
B.S., Hampton Institute; M.S., University of Maryland. Began service in 1983.

FEIT, MARVIN .................................................................................................................. Dean, School of Social Work
B.S., Brooklyn College; M.S., Columbia University; MSW., University of Pittsburgh; Ph.D., M.Sci Hyg Began service in 2000.

KEREKES, MARGARET D. ................................................................................................. Assistant Dean, School of Social Work
B.A., The College of William and Mary; M.S.W., Norfolk State University. Further study: Old Dominion University. Began service in 1977.

SHANE, H. MARTIN ........................................................................................................ Dean, School of Business
B.S., M.B.A., Northern Illinois University; Ph.D., University of Iowa. Began service in 2004.

UNIVERSITY ADVANCEMENT

SHELTON, PAUL E. ........................................................................................................... Vice President of University Advancement and Executive Director of NSU Foundation

ADAMS, PHILLIP D. ......................................................................................................... Associate Vice President of University Advancement for Development
B.A., Saint Leo University; M.S., Golden State University, CFRE. Began service in 2000.

COLEMAN, CLARENCE D. .............................................................................................. Associate Vice President of Advancement Services

ALEXANDER, JUAN M. .................................................................................................. Associate Director of Alumni Relations

BRYANT, PHYLLIS C. ...................................................................................................... Senior Writer

COOPER, SHEELA R. ..................................................................................................... Director of Development Services

FEBRES, ANTONIO M. ................................................................................................. Assistant Director, Corporate and Foundation Relations
B.S., Wright State University. Began service in 2003.

GOODSON, MISTI D. .................................................................................................... Public Relations Specialist, Office of News and Media Relations
B.S., M.S., Old Dominion University. Began service in 2000.

HAVRILESKY, CATHERINE L. ..................................................................................... NSU Fiscal Officer and University Advancement Budget Manager
B.S., Old Dominion University. Began service in 2002.

HOGGARD, SHARON R. ................................................................................................. Director of News and Media Relations
B.A., Old Dominion University. Began service in 2000.

KITTERMAN, KATHERINE L. ....................................................................................... Director of Corporate and Foundation Relations

MOORE, SHAYLA H.J. .................................................................................................... Event Planning Coordinator

PACE, LAVORIS A. ....................................................................................................... Associate Director of Marketing Services
RAMIREZ, CECILIA M. ..............................................................Director of Marketing Services

RICKS, VICTORIA A. .............................................................. Development Officer

SAUNDERS, COMARTH G. ...................................................... Assistant Budget Manager
B.S., Christopher Newport University. Began service in 2003.

SQUARE-WILLIAMS, CRYSTAL D. .............................................. Special Assistant to the Vice President for University Advancement
B.S., Old Dominion University. Began service in 2003.

STINSON, WILLIAM ............................................................... Prospect Researcher
B.S., Old Dominion University; M.Ed., Virginia State University. Began service in 2003.

WALTON, KIMBERLY S. ......................................................... Director of Alumni Relations

WATTS, DAVID B. ................................................................. Director of Event Planning
A.A.S., Virginia Western College; B.S., Old Dominion University. Began service in 2001.

WRIGHT-JENKINS, STEPHANIE .................................................. Annual Giving Officer

PLANNING AND BUDGET

HORSEY, EARLIE P. ............................................................... Executive Director, Planning and Budget

SASS, TERRICITA ................................................................. Executive Director, Enrollment Management and Director, Institutional Research

JONES, SHELIA A. ................................................................. Budget Director

FINANCE AND BUSINESS

APPLETON, KEVIN, CPA .......................................................... Vice President for Finance and Business
B.S., Wilberforce University; Certified Public Accountant. Harvard University Institute for Educational Management; Central Association of College and University Business Officers Collegiate Management Institute. Began service in 2003.

BOZEMAN, JOYCE E. ............................................................... Assistant Vice President for Finance
B.S.W., Norfolk State University; M.P.A., Ph.D., Virginia Commonwealth University. Bryn Mawr College Summer Institute for Women in Higher Education. Began service in 2000.

VALENTINE, TONY ............................................................... Assistant Vice President for Business
B.S., Norfolk State University; M.A., Regent University. Began service in 2002.

BARRETT, KAREN ................................................................. Acting Director, Physical Plant
B.S., Norfolk State University. Began service in 1975.

COOPER, JACQUELINE C. .......................................................... Chief, Campus Police
Virginia Port Authority Police Academy. Began service in 1978.

DAWES, THOMAS ................................................................. Director, Campus Planning & Improvements
B.S., Norfolk State University; M.A., Central Michigan University. Began service in 1999

HARDING, ESTHERINE J .......................................................... Director, Financial Aid

LAMB, RONITA ................................................................. Postal Services Supervisor
Began service in 1985.

MARTIN, MICHELLE, CPA ........................................................ Controller
B.S., Norfolk State University; Certified Public Accountant. Began service in 1997.

NOCK, KATRINA S. ............................................................... Acting Director, Material Management
B.S., Norfolk State University. Began service in 1996.

ORR, CHERYL D. ................................................................. Director, Human Resources

WILLIAMS, DAVIDA H. .......................................................... Director, Auxiliary Enterprises

WRIGHT, SHARON B. ........................................................... Director, Student Financial Services
RESEARCH AND TECHNOLOGY

OLADIPO, ADEBISI ............................................................... Vice President for Research and Technology

MASSEY, MARGARET G. ...................................................... Associate Vice President for Technology

DAVIS-TARIO, ALLISON .................................................... Associate Director of Enterprise Information Systems
B.S., B.A., Old Dominion University; M.B.A., Hampton University. Began service in 1996.

SHAW, PAULA D. ......................................................... Director, Office of Sponsored Programs

SMITH, OBIE .......................................................... Associate Director of Media Services

STUDENT AFFAIRS

CURTIS, LARRY .......................................................... Vice President for Student Affairs

MILLER, MARTY .......................................................... Associate Vice President for Student Affairs

LOWE, SHARON B. ...................................................... Assistant Vice President for Student Affairs
B.S., Fisk University; M.A., Columbia University; Ed.S., College of William and Mary. Began service in 1996.

ROBINSON, JANNIE ..................................................... Assistant Vice President for Student Affairs

WILLIAMSON-ASHE, SANDRA ............................................. Special Assistant to the Vice President for Student Affairs
B.S., University of North Carolina at Charlotte; M.S.W., Norfolk State University. Further study: George Washington University. Began service 2001.

ELLIS, BENJAMIN ............................................................ Director, Career Services and Coordinator

FITZGERALD, FAITH ........................................................... Director, Residential Life

GREAVES, CURTIS .................................................. Director, Counseling Center
B.S., The Pennsylvania State University; M.S., Ph.D., Virginia Polytechnic and State University. Began service in 2002.

HARRIS, BEVERLY B. .................................................. Director, Disability Services

HOLMES, VALERIE ............................................................ Director, Student Support Services
B.S., Norfolk State University; M.S., Old Dominion University. Began service in 1973.

LUGO, MARIA .......................................................... Director, International Student and Scholar Services
B.S., Virginia Polytechnic Institute and State University; M.Ed., Old Dominion University. Began service in 2001

MARABLE, MICHELLE ..................................................... Director, Admissions
B.S., Norfolk State University; M.A., The Ohio State University. Began Service in 1983

PERRY, TANYA ............................................................ Director, Upward Bound Program
B.S., Norfolk State University; M.A., Tuskegee University. Began service in 1995.

FACULTY

PROFESSORS

ABATENA, HAILU .......................................................... Social Work
M.S.W., Tata Institute of Social Services; M.A., Ph.D., Syracuse University. Began service in 1997.

ABBASI, SAMI M. .......................................................... Management & Decision Science

ADAMS, DANNY ............................................................ Interdisciplinary Studies

AGYEI, WILLIAM K.A. .................................................. Sociology
B.A., California State University; M.A., Loma Linda University, Johns Hopkins University; Ph.D., University of Maryland. Began service in 1995.

AKOMOLAFE, OLUISUJI ................................................... Political Science
B.A., University of Lagos; M.S., University of Ife; Ph.D., University of Bordeaux. Began service in 2003

ALEXANDER, WILLIAM H. ................................................ History
BAKER, HOLLIE ................................ ................................ ................................ ................................ ...........................................
B.S., Norfolk State University; M.A., University of Virginia.  Began service in 1994.

BANATTE, JEAN M. ................................ ................................ ................................ ................................ ........................................
B.A., B.S., M.S., University of Miami; Ph.D., University of Missouri. Certified Public Accountant. Began service in 1983.

BARNES, ELSIE M. ................................ ................................ ................................ ................................ ........................................
B.A., B.S., North Carolina A & T State University; M.A., Indiana University at Bloomington; D.A., Lehigh University.

BOGGER, TOMMY L. ................................ ................................ ................................ ................................ ........................................

BOWMAN, ARTHUR W. ................................ ................................ ................................ ................................ ......................................

BRAXTON, JEAN B. ................................ ................................ ................................ ................................ ........................................

BROWN, ERNEST ................................ ................................ ................................ ................................ .......................................
B.S., Howard University; M.S., University of Michigan; M.S., The College of William and Mary; Ph.D., Indiana University.
Further study: University of Houston; University of North Carolina at Chapel Hill. Began service in 1984.

BRAXTON, JEAN B. ................................ ................................ ................................ ................................ ........................................
B.S., Howard University; M.S., University of Michigan; M.S., The College of William and Mary; Ph.D., Indiana University.
Further study: University of Houston; University of North Carolina at Chapel Hill. Began service in 1984.
<table>
<thead>
<tr>
<th>Name</th>
<th>University and Degrees</th>
<th>Field</th>
<th>Began Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARRISON, GEORGE C.</td>
<td>B.A., Wilkes College; M.S., Old Dominion University; Ph.D., University of Virginia. Began service in 1973.</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>HAYWOOD, CARL WHEATLEY</td>
<td>B.A., norfolk State University; M.M., M.S.M., Southern Methodist University; D.M.A., University of Southern California. Began service in 1975.</td>
<td>Music</td>
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<tr>
<td>L. S.PAGE</td>
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</tr>
<tr>
<td>LANGLEY, CURTIS T.</td>
<td>B.S., Wichita State University; M.S.W., The University of Kansas; Ph.D., University of Texas at Arlington, School of Social Work. Began service in 1999.</td>
<td>Social Work</td>
<td></td>
</tr>
<tr>
<td>KISSMAN, KRIS</td>
<td>B.A., Talladega College; M.S., University of Chicago; Ph.D., The Ohio State University. Began service in 1992.</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>JORDAN, LAWRENCE</td>
<td></td>
<td>Fine Arts</td>
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</tr>
<tr>
<td>JOHNSTON, EMOGENE</td>
<td>B.S., Norfolk State University; M.S., University of Tennessee; Ph.D., University of Maryland. Began service in 1973</td>
<td>Health, Physical Education and Exercise Science</td>
<td></td>
</tr>
<tr>
<td>JONES, DOROTHY L.R.</td>
<td>B.S., Albany State College; M.A. and Ph.D., Ohio State University. Began service in 1993.</td>
<td>Management &amp; Information Systems</td>
<td></td>
</tr>
<tr>
<td>JONES, RONALD</td>
<td>B.S., M.A., Northern Illinois University; Ph.D., University of Cincinnati. Began service in 1996.</td>
<td>English and Foreign Languages</td>
<td></td>
</tr>
<tr>
<td>KIM, DONG SOO</td>
<td>B.A., Soong Jun University, Seoul, Korea; M.D., Pittsburgh Theological Seminary; M.S.W., University of Pittsburgh; Ph.D., University of Chicago. Began service in 1978.</td>
<td>Social Work</td>
<td></td>
</tr>
<tr>
<td>KISSMAN, KRIS</td>
<td>B.S., Wichita State University; M.S.W., The University of Kansas; Ph.D., University of Texas at Arlington, School of Social Work. Began service in 1999.</td>
<td>Social Work</td>
<td></td>
</tr>
<tr>
<td>KUNG, MOU-LIANG</td>
<td>B.S., Tsinghua University; Ph.D., University of Virginia. Began service in 1974.</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>LANGLEY, CURTIS T.</td>
<td>B.A., Morehouse College, Atlanta University; Ph.D., University of Washington. Began service in 1965.</td>
<td>Urban Affairs, Sociology</td>
<td></td>
</tr>
<tr>
<td>LAWS, PAGE</td>
<td>B.A., Wellesley College; M. Phil., Ph.D., Yale University. Began service in 1987.</td>
<td>English and Foreign Languages</td>
<td></td>
</tr>
</tbody>
</table>
LOUTTS, GEORGE .................................................................Physics
B.S., M.S., Moscow Institute of Fine Chemical Technology, Russia; Ph.D., General Physics Institute, Russia.
Further study: Center for Research and Education in Optics and Lasers, University of Central Florida. Began service in 1993.

MACLIN, ARLENE ..............................................................Engineering
B.S., North Carolina A&T State University; M.S., University of Virginia; Ph.D., Howard University. Began service in 2002.

MAJUMDAR, DEBABRATA ....................................................Biology

MAPP, JOHNNIE A. .........................................................Accounting
B.S., University of Wyoming; M.B.A., Jackson State University; Ph.D., University of Georgia; Certified Fraud Examiner, Certified Government Financial Manager. Began service in 1983.

MARSHALL, BENVIE L. .......................................................Nursing
B.S.N., Medical College of Virginia, Virginia Commonwealth University; M.S., Hampton University; Ed.D., College of William and Mary. Began service 2003.

MATTIX, LARRY .................................................................Physics and Electronics Engineering
B.S., Clark College; M.S., University of Illinois; Ph.D., The College of William and Mary, Further study: American University. Began service in 1971.

MCNEIL, PHILLIP E. ...........................................................Mathematics

MCSWAIN, ARLETHA J. .....................................................Early Childhood Education

MEAD, PATRICIA .............................................................Engineering
B.S., Virginia Community University; B.S., Old Dominion University; M.S., Polytechnic University; Ph.D., University of Maryland

MESHESHA, ABERRA ........................................................Political Science

MILLER, FLOYD E., JR .......................................................Physics

MILLER, SHELDA D. ..........................................................Social Work
B.S.W., Norfolk State University; M.S.W., University of Pennsylvania; D.S.W., Howard University. Began service in 1977.

MUTCHELL, LUCIAS T. ....................................................Health, Physical Education and Exercise Science
B.S., Jackson State University; M.A., Indiana University. Began service in 1978.

MOHANTY, BIDHU B. ........................................................Management & Decision Science
B.Tech., Indian Institute of Technology; M.S., Ph.D., Case Western Reserve University. Began service in 1992.

MOREA, RACHELLE .............................................................English and Foreign Languages

MORRIS, CAROLE V. ........................................................Special Education
B.S., Elizabeth City State University, M.S., Antioch College; Ph.D., University of Miami, Ohio. Began service in 1972.

MURRAY, CLARENCE ........................................................English and Foreign Languages

NOLAN, JAMES ANTHONY ................................................Sociology

OKOLI, EMEKA ...............................................................Mass Communications and Journalism
HND, Harrow College (England) of Higher Education; M.A., Regent University; Ph.D., Howard University. Began service 1993.

OKONKWO, AUGUSTINE ......................................................Biology
B.A., William Jewell College; B.S., M.S., Kansas State College; M.S., University of Illinois; Ph.D., Michigan State University; Post Doctoral Study, University of Michigan. Began service in 1974.

OKPODU, CAMELLIA M. .......................................................Biology
B.S., Ph.D., North Carolina State University; Post Doctorate Fellow, Virginia Tech. Began service in 2003.

OLADIPO, ADEBISI ..............................................................Engineering

ONYEDIKE, EMMANUEL ....................................................Mass Communications and Journalism
B.A., University of Nigeria; M.A., University of Iowa (Journalism); M.A., University of Iowa (Public Affairs); Ph.D., University of Iowa. Began service in 2001.

PAIK, HANNAH SOOK ........................................................Social Work
B.S., Seoul National University; M.R.E., Pittsburgh Theological Seminary; M.S.W., University of Pittsburgh; Ph.D., Virginia Commonwealth University. Began service 1985.

PANIGRAHI, BHAGABAN ......................................................Marketing

PARSON, WILLAR WHITE ......................................................Nursing
A.S., Norfolk State University; B.S., M.A., M.S., Hampton Institute; Ph.D., Old Dominion University. Began service in 1975.
PENDLETON, JESSE L. S. .......................................................... History
B.S., Central State College; M.S., Ph.D., Clark University. Began service in 1999.

PERKINS, ANNIE S. .......................................................... English and Foreign Languages
B.A., Norfolk State University; M.A., Old Dominion University; Ph.D., Howard University. Began service in 1972.

PERRY, RUTH ANNA .......................................................... English and Foreign Languages

PUNJABI, VINA .......................................................... Physics
B.S., University of Gujarat; M.S., Ph.D., The College of William and Mary. Began service in 1988.

RAVENELL, PATRICIA B. .......................................................... Biology
B.S., Bennett College; M.S., Wayne State University; Ph.D., Old Dominion University/Eastern Virginia Medical School.
Began service in 1974.

ROBINSON, DELANYARD .......................................................... Psychology
B.S., Tuskegee Institute; M.A., St. Mary's university; M.S., Ph.D., Rutgers University. Began service in 1984.

ROSENMAN, JOHN B. .......................................................... English and Foreign Languages

ROWE, H. ALAN .......................................................... Chemistry
B.S., University of North Carolina; Ph.D., North Carolina State University. Further study: Bowman Gray School of Medicine.
Began service in 1984.

SAGALDO, CARLOS .......................................................... Chemistry

SAWYER, BRACEY .......................................................... Social Work
B.S., Norfolk State University; M.S.W., Catholic University; D.S.W., Howard University. Further study: Mt. Zion Hospital and Medical Center.
Began service 1976.

SCHIELE, JEROME E. .......................................................... Social Work
B.A., Hampton University; M.S.W., D.S.W., Howard University. Began service in 2002.

SHAH, SHANTILAL N. .......................................................... Computer Science
B.S., University of Baroda, India; M.S., The College of William and Mary; Ph.D., Syracuse University. Began service in 1986.

SHANE, H. MARTIN .......................................................... Management & Decision Science
B.S., Northern Illinois University; M.B.A., Northern Illinois University; Ph.D., University of Iowa. Began service in 2004.

SHIAU, LIANG-RONG .......................................................... Finance and Entrepreneurship
B.A., Soochow University; M.S., University of Southern Mississippi; Ph.D., University of Arkansas. Began service in 1972.

SPURLIN, JOHN H. .......................................................... Technology

THOMAS, ERWIN K .......................................................... Mass Communications and Journalism
B.S., University of Oregon; M.S., Brooklyn College; Ph.D., University of Missouri. Began service in 1981.

THORNTON, MONA .......................................................... Early Childhood/Elementary Education
B.S., M.S., Howard University; Ed.D., University of Massachusetts/Amherst. Began service in 1979.

TICKTON, STANLEY DAVID .......................................................... Mass Communications and Journalism
B.A., Wayne State University; M.A., University of Wisconsin; Ph.D., University of Michigan. Began service in 1974.

TOMPKINS, CHRISTOPHER .......................................................... Fine Arts

TUCKER, DELANO .......................................................... Health, Physical Education and Exercise Science
Began service in 2000.

WALL, CURTISS E. .......................................................... Mathematics

WALTON, LOUISE M. .......................................................... Social Work
B.A., Virginia State College; M.S.W., Virginia Commonwealth University; Ph.D., University of Virginia. Began service in 1986.

WALEY, GARY .......................................................... Management & Decision Science
B.S., M.B.A., Miami University, Ohio; Ph.D., State University of New York, Buffalo. Began service in 1984.

WILSON, ROWENA .......................................................... Social Work
B.A., West Virginia State College; M.S.W., D.S.W., Howard University. Began service in 1986.

WILSON, RUDOLPH .......................................................... Political Science
B.A., Howard University; M.A., Political Science, SUNY, Binghamton; Ph.D., Political Science, Atlanta University. Began service in 1986.

WRIGHT, OTHA .......................................................... Social Work
B.S., Tennessee State University; M.S.W., University of Tennessee; Ed. D, University of Virginia. Began service in 1971.
YOUSSEF, MOHAMED ................................ ................................ ........................................................ Management & Decision Science  
B.S., Cairo University; M.B.A., Baruch College CUNY; M. Phill., The City University of New York;  

ZEMEDKUN, WOLD ................................ ................................ ........................................................ Finance and Entrepreneurship  
B.S., Haile Sellassie I University; M.A., Williams College; Ph.D., University of Cincinnati. Began service in 1986.

ASSOCIATE PROFESSORS

AGIRI, BABATUNDE ................................ ................................ ......................................................... History  
B.A., University of London; M.A., University of Ibadan; Ph.D., University of Wisconsin. Began service in 1997.

AHMAD, AFTAB ................................ ................................ ............................................................... Computer Science  

AIRD, STEVEN D. ................................ ................................ ............................................................. Chemistry  
B.S., Montana State University; M.S., Northern Arizona State University; Ph.D., Colorado State University. Began service in 2002.

BANKS, CARRY ................................ ................................ .............................................................. Technology  
B.S., Elizabeth City State University; Ball State University; Ph.D., Pennsylvania State University. Began service in 1991.

BASAPPA, PRATHAP ................................ ................................ ......................................................... Engineering  
B.S., University of Mysore; M.S., Indian Institute of Science; Ph.D., Indian Institute of Science. Began service in 1999.

BELHADJLI, MONCEF ................................ ................................ .................................................... Management Information Systems  

BENNETT, GLADYS M. ................................ ................................ .................................................... Psychology  
B.S., M.S., DePaul University; Ph.D., University of New Mexico. Began service in 1994.

BERQUIST, ROBERT ................................ ................................ .......................................................... Special Education  

BLACK, SUELY ................................ ................................ ................................................................. Chemistry  

BONNER, CARL E. ................................ ................................ ............................................................... Chemistry  
B.S., M.S., Howard University; Ph.D., University of Rochester. Began service in 1995.

BRIGGS, PAULA CLARK ................................ ................................ .................................................. Mass Communications and Journalism  
B.A., Hampton University; M.A., University of Missouri-Columbia; Ph.D., Howard University. Began service in 1986.

BROADUS-GAY, MARI LyN ................................ ................................ .............................................. Interdisciplinary Studies  
B.A., M.S.W., University of Kentucky; D.A., George Mason University;  

BROCKINGTON, WANDA G. ................................ ................................ ............................................ Mass Communications and Journalism  

BROWN, CHARLOTTE A. ................................ ................................ ..................................................... English and Foreign Languages  
B.S., University of Tennessee; M.S., University of North Florida. Further study at Old Dominion University. Began Service in 1978.

BROWN, JAMES P. ................................ ................................ ............................................................. History  
B.A., Illinois Wesleyan University; M.A., Indiana University. Further Study: Mexico City College; Illinois State University; U.C.L.A.  
Began Service in 1968.

BROWN, ROGERS N. ................................ ................................ ............................................................. Music  

CHAKKA, RAM ................................ ................................ ............................................................ Computer Science  
B.Sc., Andhra/Nagajaran University; M.S., Indian Institute of Science, Ph.D., University of Newcastle upon Tyne. Began service in 2000.

CHAUDHURY, S. RAJ ................................ ................................ ......................................................... Physics  

CHESTER, MICHAEL C. ................................ ................................ .................................................... Accounting  
B.A., North Carolina State University; M.S., University of North Carolina, Greensboro;  
Ph.D., Virginia Commonwealth University; Certified Public Accountant. Began service in 1976.

COAN, BOYD ................................ ................................ ............................................................. Mathematics  
B.S., State University of New York at Brockport; M.S., Syracuse University; Ph.D., University of North Carolina at Chapel Hill.  
Began service in 1999.

COLSON, DARLENE G. ................................ ................................ .................................................... Psychology  
B.A., M.A., Case Western Reserve University; Ph.D., University of North Carolina at Chapel Hill. Began service in 1980.

DABNEY, DONNA W. ................................ ................................ ....................................................... Secondary Education and School Leadership  
B.S., Texas Woman’s University; M.S., Prairie View A&M University; Ph.D., Walden University. Began service in 2003.

DANEK, ROBERT ................................ ................................ .............................................................. English and Foreign Languages  
B.A., Stanford University; M.L.S., University of Oklahoma; Ph.D., Indiana University. Began service in 1999.

DONDETI, VENKATESWARA R. ................................ ................................ ........................................ Management & Decision Science  
B.S., Regional Eng College (India); M.S., Ph.D., Case Western University. Began service in 1989.
DORSEY, SAM

EARL, ARCHIE W., SR.
B.S., Norfolk State University; M.A., Hampton University; Ed.D., The College of William and Mary. Began service in 1991.

FAISON, KAREN
B.S.N., Hampton University; MSN/FNP-University of North Carolina at Chapel Hill; Certificate in Health Administration, Old Dominion University; Ph.D., Virginia Commonwealth University. Began service in 1999.

FERGUSON, MILTON WINSTON
B.S., Norfolk State University; M.S., Purdue University. Further study: Purdue University; University of Michigan. Began service in 1965.

FORD, CHARLES H.

GOLEMBIEWSKI, WALTER
B.S.E.E., Gannon University; M.S., Pennsylvania State University; Ed.D., University of Pittsburgh. Began service in 1996.

HAILE-MARIAM, YACOB

HALL, JOSEPH
B.S., Roanoke College; M.S., Old Dominion University; Ph.D., Kent State University. Began service in 1997.

HARRIS, JUNE L.
B.S., North Carolina Central University; M.A., Atlanta University; Ph.D., University of Maryland, College Park. Further study: John Hopkins University; University of Alabama; Loyola College. Began service in 2003

HARVEY, JOYCE B.
B.S., Christian Brothers College; B.S., University of Tennessee; M.S., Norfolk State University; Ph.D., Old Dominion University. Began service in 1981.

HOLMES, GWENDOLYN V.
B.S., Norfolk State University; M.A., Hampton University; CAGS, Virginia Polytechnic & State University, Ed.D., Virginia Tech. Began service in 2000.

HSIEH, CHUNG-CHU
B.S., National Tsing Hua University; M.S., Ph.D., Northwestern University. Began service in 2002.

HUNT, CHARLES RAY
B.S., Jackson State College; M.A., Ball State University; C.A.S., Northern Illinois University. Further study: Virginia State University; Old Dominion University. Began service in 1970.

IBRAHIM, ADEM H.
B.S., Royal Institute of Technology, Stockholm, Sweden; Ph.D., Old Dominion University. Began service in 1997.

JACKSON-HEARD, MARY F.

JENKS, NELSON GARY
B.A., Ohio State University; M.A., University of Northern Iowa; Further study Xavier University and Illinois State University. Began service in 1992.

KEEVE, MICHAEL O
B.A., Hampton University; M.S., University of Virginia; Ph.D., Georgia Institute of Technology. Began service in 1987.

KHAN, MUSHTAQ A
B.S., University of Punjab; M.S., University of Pakistan; Ph.D., Old Dominion University. Began service in 1987.

KHANDAKER, MAHBUB A

KNIGHT, MARGARET D.

LAVENDERIE, RAYMOND G.
B.S., M.B.A., University of Rhode Island; Ph.D., Pennsylvania State University; Certified Fraud Examiner. Began service in 1990.

MARTIN, MATILDA J.
B.S., Fayetteville State University; M.S., Kansas State; Ph.D., University of Florida. Began service in 1973.

MASEMBA, HARREET

MITCHELL, DIANE

MOOSAVIZADEH, SHAROOZ
B.S., M.S., Ph.D., Old Dominion University. Began service in 1992.

NEWBY-AXELANDER, CASSANDRA
B.A., University of Virginia; M.A., Old Dominion University; Ph.D., The College of William and Mary. Began Service in 1992.
NOGINOV, MIKHAIL A. .................................................................Physics
M.S., Moscow Institute for Physics and Technology; Ph.D., General Physics Institute of the USSR.
Further Study: Old Dominion University. Began service in 1997.

NWEKE, ANTHONY .................................................................Chemistry
B.S., University of Benin, Nigeria; Ph.D., University of Maryland, College Park. Began service in 1998.

OKALA, CHINEDU.................................................................Fine Arts

OKEREAOEZEKE, NONSO .............................................................Sociology
LL.B., University of Nigeria; B. L. Nigerian Law School; M. A. University of Detroit; Ph. D. Indiana University of Pennsylvania. Began service in 2003.

PACE, WILLIAM H., JR. ............................................................English and Foreign Languages
B.A., Rollins College; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Arkansas. Further study; American University; Western Carolina University. Began service in 1973.

PARKER, WILLIAM H., JR. ........................................................Mathematics
B.S., St. Paul’s College; M.S., Old Dominion University; M. Div., Virginia Union University; Ed.D., Virginia Polytechnic and State University. Began service in 1992.

PETERSON, SANDRA LOUISE ..................................................Computer Science

POLLEY, PAULETTE ...............................................................Marketing
B.S., Howard University; M.B.A., Kent State University; Ph.D., Kent State University. Began service in 1996.

PRETLOW, CAROL J. ..........................................................Political Science
B.A., Fisk University; M.A., Norfolk State University; J.D., Washington College of Law at American University; LL.M., American University. Began service in 1995.

RAKHIMOV, RAKHIM ............................................................Chemistry
B.S., Moscow Institute of Physics and Technology; M.S., Moscow Institute of Physics and Technology; Ph.D., Institute of Chemical Physics, Moscow; Dr. S. Institute of Chemical Physics, Moscow. Began service in 1996.

RANSOM, HARRISON LEROY ....................................................Physics

RENCE, MARIS .................................................................English and Foreign Languages
Technical Director, Wilder Center B.A., Cleveland State University; M.F.A., Tulane University. Began service in 1997.

ROSS-HAMMOND, AMELIA .....................................................Music
B.S., Ithaca College; M.M., College of New Jersey; Ph.D., University of Denver. Began service in 1997.

SANFORD, O’NEIL ...............................................................Music

SAWYER-WATSON, BERNICE ..................................................Allied Health

SHEEN, JEENSON .............................................................Technology
B.S., Tamkang University, Taiwan; M.S., Ph.D., Old Dominion University. Began service in 1997.

SIRJANI, MOJABA .............................................................Mathematics
B.S., Old Dominion University; M.S., North Carolina State University; Ph.D., Old Dominion University. Began service in 1994.

SITES, ROBERT .................................................................Fine Arts

SOCOLOVSKY, EDUARDO A. ..................................................Mathematics
B.S., M.S., University of Buenos Aires; Ph.D., Carnegie-Melon University. Began service in 2002.

SONG, KYO D. ..............................................................Technology
B.S., Inha University; M.S., Hampton University; Ph.D., University of Nebraska. Began service in 1993.

SUN, SAM-SHAIJING ..........................................................Chemistry
B.S., Peking University; M.S., California State University at Northridge; Ph.D., University of Southern California. Began service in 1998.

THOMAS, RONALD E. ..........................................................Psychology
B.A., Lake Forest College; M.A., Ph.D., Boston University. Began service in 1981.

THOMPSON, DENISE-MARGARET ........................................Finance and Entrepreneurship
B.S., University of West Indies; M.S., Stanford University; Ph.D., University of Southern Florida. Began service in 1999.

UNSETH, ALLAN D. .............................................................Accounting
B.A., University of Minnesota; M.A., Minnesota State University; Certified Public Accountant. Began service in 1973.

VERMA, RENUKA ..............................................................Mathematics
B.S., Central State University; M.A., Old Dominion University; Ph.D., Pennsylvania State University. Began service in 1999.

COOPER, PHYLLIS E. ................................ ................................ ................................ ................................ ....
B.S., Morehouse College; B.S., M.S., Ph.D., Georgia Institute of Technology. Began service in 2004.

COOMBS-REYES, JEROME D ................................. ................................ ................................ ................................ ..................
B.S.W., M.S.N., University of Virginia. Ph.D., Hampton University. Began service in 1999.


CALLAHAN, ANDREA ................................ ................................ ................................ ................................ ........................

CAGEAO-LUCHETTI ................................ ................................ ................................ ................................ ................................ ........
B.S.M.E., Georgia Tech. M.B.A Capital University. Began service in 2002

BYRD, MELENDEZ O. ………………………………………………………………………………………………
B.S., Villanova University; M.S.W., Boston College. Began service in 1993.

B.S., Indiana University; M.Ed., Temple University; Ph.D., Temple University. Began service in 1995.

WARNER, SEAN ................................ ................................ ................................ ................................ ..................Secondary Education and School Leadership
B.A., City College of New York (CUNY); M.Ed., University of Massachusetts; Ed.D., University of Massachusetts. Began service in 2000.

WARREN, NATHANIEL, JR. .................................................................................................................... Athletics

WASHINGTON, CHRISTOPHER ........................................................................................................... Engineering
B.S., Hampton University; M.E., Ph.D., University of Virginia. Began service in 2002.

WILLIAMS, EDGAR ................................................................................................................................. Management and Marketing
B.A., Lincoln University; M.B.A., Ph.D., University of Utah. Began service in 1984.

WILLIAMS, JOHN F. ................................................................................................................................. Army ROTC

WITZE, KARA A. ................................................................................................................................. Health, Physical Education and Exercise Science
B.A., Biola University; M.S., California State University at Fullerton; Ph.D., Oregon State University. Began service in 2000.

ZAPATERO, ENRIQUE ............................................................................................................................. Management Information Systems
B.S., Hampton University; M.B.A., Hampton University; Ph.D., Virginia Commonwealth University. Began service in 1995.

ASSISTANT PROFESSORS

ADAMS, LEROY ................................................................................................................................. Special Education

ADAMS, PAUL ........................................................................................................................................ Music

AGBAKPE, PETER TSE.......................................................................................................................... Mathematics
B.Sc., University of Science & Technology, Kumasi, Ghana; M.S., Ph.D., Hampton University. Began service in 1998.

AKAMIRO, CHIJIOKE E. ..................................................................................................................... Technology
B.S., M.S., West Virginia University. Further study: Old Dominion University. Began service in 1987.

AMOS, GLORIA LEE ............................................................................................................................ Music

ANDERSON, WANELLE J. ..................................................................................................................... English and Foreign Languages
B.A., Virginia State University; M.A., Norfolk State University; Ph.D., Regent University. Began service in 2000.

ARMSTRONG, LENORA ....................................................................................................................... Health, Physical Education and Exercise Science

ASKEW, ROBERT ................................................................................................................................. Finance and Entrepreneurship

BEATHEA, WILLIAM ........................................................................................................................... Music

BOYKINS-WINROW, CAROLLYN ....................................................................................................... Biology
B.S., Fisk University; M.S., Tennessee State University; Ph.D., Michigan State University. Began service in 2000.

BRYANT-SHANKLIN, MONA .............................................................................................................. Early Childhood/Elementary Education
B.S., North Carolina Central University; M.S., Kansas State University; Ph.D., University of North Carolina at Chapel Hill. Began service in 1997.

BURKE, THEODORE ............................................................................................................................ Social Work
B.S., Villanova University; M.S.W., Boston College. Began service in 1993.

BYRD, MELENDEZ O. ............................................................................................................................ Secondary Education and School Leadership

CAGEAO-LUCHETTI ........................................................................................................................... Biology
B.S., M.S., University of Buenos Aires; Ph.D., Old Dominion University & Eastern Virginia Medical School. Began service in 2001.

CALLAHAN, ANDREA ......................................................................................................................... Special Education

CANNON, SHELLIA ............................................................................................................................... Nursing
B.S.W., M.S.N., University of Virginia. Ph.D., Hampton University. Began service in 1999.

COOMBS-REYES, JEROME D............................................................................................................. Mathematics
B.S., Morehouse College; B.S., M.S., Ph.D., Georgia Institute of Technology. Began service in 2004.

COOPER, PHYLLIS E. ............................................................................................................................ English and Foreign Languages
B.S., Central State University; M.A., Old Dominion University; Ph.D., Pennsylvania State University. Began service in 1999.
CROMWELL, BERTHENIA ................................ ................................ ................................ ................................ ................................ Nursing

DAS, RABINDRA N. ................................ ................................ ................................ ................................ ................................ Chemistry
B.S., Burdwan University; M.S., Ph.D., Indian Institute of Technology. Began service in 2003.

DAVENPORT, CAROL ................................ ................................ ................................ ................................ ................................ English and Foreign Languages
B.A., Norfolk State University; M.A., Old Dominion University; Ph.D., Pennsylvania State University. Began service in 1999.

DOUGLAS, RANSOM ................................ ................................ ................................ ................................ ................................ Technology

EPPELEIN, LAWRENCE E. ................................ ................................ ................................ ................................ ................................ Tourism and Hospitality Management

EXUM, BRENDA ................................ ................................ ................................ ................................ ................................ Social Work
B.A., M.S.W., Norfolk State University. Began service in 1993.

FAIRFAX, COLITA NICHOLS ................................ ................................ ................................ ................................ ................................ Social Work
B.S., Howard University; M.S.W., Rutgers University; M.A., Temple University. Further study: Temple University. Began service in 1999.

FALLS, II, IRA W. ................................ ................................ ................................ ................................ ................................ English and Foreign Languages
B.S., M.S., Norfolk State University; Ph.D., Old Dominion University. Began service in 1987.

FANG, MING ................................ ................................ ................................ ................................ ................................ Mathematics
B.S., Hunan University; M.S., and Ph.D., University of Delaware. Began service in 2003.

FOSTER, JOYCE A. ................................ ................................ ................................ ................................ ................................ Sociology
B.S., Norfolk State University; M.A., Purdue University. Began service in 1969.

GAINES, RODNEY P. ................................ ................................ ................................ ................................ ................................ Health, Physical Education and Exercise Science

GEDDIS, DEMETRIS L. ................................ ................................ ................................ ................................ ................................ Engineering
B.S., Hampton University; M.S., Ph.D., Georgia Institute of Technology. Began service in 2004.

GRAHAM, JONATHAN, JR. ................................ ................................ ................................ ................................ ................................ Computer Science
B.S., University of Wisconsin; M.S., Jackson State University. Further study: The College of William and Mary. Began service in 1984.

GRIFIN, WILFORD ................................ ................................ ................................ ................................ ................................ English and Foreign Languages

HACKER, DESIDERIA ................................ ................................ ................................ ................................ ................................ Psychology
B.A., Emory University; M.S., Ph.D., University of Georgia. Began service in 2000.

HAROLD, ALMA ................................ ................................ ................................ ................................ ................................ English and Foreign Languages

HARRIS, MELINDA D. ................................ ................................ ................................ ................................ ................................ Finance and Entrepreneurship
B.A., Lincoln University; M.B.A., University of Phoenix, San Jose Campus. Further study: Case Western Reserve University. Began service in 1993.

HAYNES, GWENDOLYN SHAW ................................ ................................ ................................ ................................ ................................ English and Foreign Languages

HOU, JIA SHI ................................ ................................ ................................ ................................ ................................ Mathematics
B.S., Shanghai University; M.S., Ph.D., Rensselaer Polytechnic Institute. Began service in 2002.

HU, NING ................................ ................................ ................................ ................................ ................................ Computer Science

JACKSON, CATHY M. ................................ ................................ ................................ ................................ ................................ Mass Communications and Journalism
B.S., Jackson State University; M.A., University of Michigan; Ph.D., University of Missouri. Began service in 1998.

JAMES, IONEY ................................ ................................ ................................ ................................ ................................ Early Childhood /Elementary Education
B.A., University of West Indies; M.Sc., Central Connecticut State University; Ph.D., University of Albany (SUNY). Began service in 2002.

JERVEY, TAMMITHA Y. ................................ ................................ ................................ ................................ ................................ Biology
B.S., Norfolk State University; Ph.D., Eastern Virginia Medical School/Old Dominion University. Began service in 2002.

JOHNSON, LINDA E. ................................ ................................ ................................ ................................ ................................ English and Foreign Languages
B.S., M.S., Norfolk State University. Further Study: Old Dominion University, Norfolk State University. Began service in 1972.

KEREKES, MARGARET D. ................................ ................................ ................................ ................................ ................................ Social Work
B.A., The College of William and Mary; M.S.W., Norfolk State University. Further study: Old Dominion University. Began service in 1977.

KOONCE, RICHARD J. ................................ ................................ ................................ ................................ ................................ Mass Communications and Journalism

LANGLEY, THALIA ................................ ................................ ................................ ................................ ................................ Social Work
B.A., Texas Southern University; M.S.W., University of Washington. Began service in 1984.

LONERGAN, PAMELA A. B.S., M.S., Old Dominion University; Certification in Medical Technology, Norfolk General Hospital, Virginia; Further study: Old Dominion University. Began service in 1989.

LONG, JACQUELYN ELIZABETH B.S., Fisk University; M.S., Syracuse University. Further study: University of Maryland. Began service in 1972.


MURRAY, BETTY B.S., South Carolina University; M.S., Bowling Green State University. Further study: Old Dominion University. Began service in 2000.


NOGINOVA, NATALIA M.S., Moscow Institute for Physics and Technology; Ph.D., USSR Academy of Sciences. Began service in 2003.


PATRICK, KATINA H. B.S., Norfolk State University, Ph.D., Howard University. Began service in 2004.

PEARLMAN, DANIEL B.A., University of Maryland, College Park; M.F.A., George Mason University. Began service in 1996.

PHARR, GWENDOLYN E. B.A., Shippensburg State College; M.S., Old Dominion University. Further study: University of Tennessee. Began service in 1993.


SANDERS, STEPHANIE B.M.E., Jackson State University; M.M., University of Houston. Further study: Regent University. Began service in 2000.

SISSOKO, MACKI A.S.E., Mali Polytechnic Institute; M.S., Ph.D., Auburn University. Began service in 1999.

SMITH, GREGORY B.S., Norfolk State University, M.S., Hampton University; Ph.D., Howard University. Began service in 1994.

SMITH, OBIE B.S., M.S., Norfolk State University; Certification in Medical Technology, Norfolk General Hospital, Virginia; Further study: Old Dominion University. Began service in 2000.


STUART, JON C. B.S., South Carolina State University; M.S., Ph.D., Howard University. Began service in 1999.

STUART, JON C. B.S., South Carolina State University; M.S., Ph.D., Howard University. Began service in 1999.


WHITE, KAREN B.A., North Carolina Central University; M.S., Norfolk State University; Psy.D., The Virginia Consortium Program in Clinical Psychology. Began service in 1996.
WHITE, RONALD .................................................. Mathematics  

WILLIAMS, FRANCES, R. .................................................. Engineering  
B.S., M.S., North Carolina Agricultural and Technical State University; Ph.D., Georgia Institute of Technology. Began in 2004.

XIN, CHUNGSHENG .................................................. Computer Science  

XU, KAIPING .................................................. Biology  
B.S., M.S., University of Science and Technology of China; Ph.D., Alabama at Birmingham. Began service in 2000.

YANISKO, MARY .................................................. Social Work  
B.S.W., M.S.W., Norfolk State University. Began in 1994.

INSTRUCTORS

BOONE, GERALDINE T .................................................. Music  

BUTLER, TERRY W .................................................. Music  

CHEN, DEBORAH .................................................. Computer Science  
B.S., University of Chinese Culture, Taiwan; M.S., Old Dominion University. Began service in 1984.

CUFFEE, MONIQUE C .................................................. Allied Health  
B.S., Norfolk State University; M.P.H., Northern Illinois University. Began service in 2003.

COTTER, MICHAEL J .................................................. English and Foreign Languages  

DAVIS, CARRIE L .................................................. Nursing  

EVERETT, JOHN CARL .................................................. Computer Science  
A.S., Tidewater Community College; B.S., M.A., Old Dominion University. Began service in 1994.

FANG, MING .................................................. Mathematics  
B.S., Hunan University; M.S., Ph.D., University of Delaware. Began in 2003.

FERGUSON, LARRY .................................................. Secondary Education and School Leadership  

FIGUEROA, LYDIA R .................................................. Nursing  
B.S., Long Island University; M.S., Hampton University. Began service in 2002.

FREDERICK, CHRISTY .................................................. Fine Arts  

GERST, JACKSON C., Jr .................................................. Health, Physical Education and Exercise Science  

GLYMPH, ANITA C .................................................. Nursing  

GREENE-STINNETT, PAMELA .................................................. Early Childhood/Elementary Education  

HARPER, SHANDA .................................................. Computer Science  
B.S., Norfolk State University; M.S., Virginia Tech. Began service in 2000.

HOCHRADEL, REBECCA .................................................. Tourism and Hospitality Management  
B.S., University of Louisville; M.S., Georgia State University. Further Study: Old Dominion University. Began in 1999.

HOU, MAY .................................................. Computer Science  
B.S., National Taiwan Normal University; M.S., University of Iowa. Began service in 1988.

HUNT, GERALDINE .................................................. Political Science  

JACKSON, PATRICIA D .................................................. English and Foreign Languages  

JOHNSON, MAMIE L .................................................. English and Foreign Languages  

JOHNSTON, JILL C .................................................. Allied Health  
B.S., Norfolk State University; M.S., James Madison University. Began service in 2003.

JONES, JAMES III .................................................. Army ROTC  
JONES, TERENCE...............................................................Mathematics

KILLOUGH, ISABEL H.R ..........................................................English and Foreign Languages
B.A., A.A.P., University of Seville; M.A., Old Dominion University. Began service in 1999.

KRKOVICH VADIM B ............................................................English and Foreign Languages
M.A., Moscow State University; Ph.D., University of Texas at Austin. Began service in 2001.

LANGHORNE, RONNETTE .........................................................Nursing
B.S.N., Norfolk State University; B.S., M.S., Hampton University. Began service 2003.

LIESENER, JAMES J..............................................................Special Education

NIXON, PATRICIA S .........................................................Music

OLARIU, ELEONORA M .........................................................Computer Science
B.S., Institute Pedagogic Timisoara; M.S., University of Timisoara, Romania. Began service in 1986.

OPFER, STEVEN E .....................................................Mass Communications and Journalism

OUTLAW, BRUCE ...............................................................Engineering
B.S., Norfolk State University; M.S., Old Dominion University. Began service in 2002.

PARKER, WALTER ...............................................................Technology
B.S., M.S., Norfolk State University. Began service in 2000.

PERRY, DOTTIE D .............................................................English and Foreign Languages

PUGH-THOMAS, DEVIN .....................................................Physics
B.S., Norfolk State University; M.S., University of Virginia. Began service in 2004.

RICHARDSON, EVETTE .......................................................Management Information Systems

ROPER, CYNTHIA G ..........................................................English and Foreign Languages

SHERROD, ARNETTA R ......................................................Biology
B.S., Norfolk State University; M.S., Howard University. Began service in 1975.

SMITH, PATRICE ...............................................................Biology
B.S., Hampton Institute; M.S., University of Maryland. Began service in 1983.

SNOWDEN-LANGLEY, DENISE .............................................English and Foreign Languages
B.A., Delta State University; M.A., Norfolk State University. Further study: Old Dominion University. Began service in 1985.

STANLEY-BROWN, JOSEPHINE ............................................Management Information Systems

SULAIMAN, MUNIR ............................................................Technology
HND (S.B.), Kaduna Polytechnic Institute, Kaduna Nigeria; B.S., Norfolk State University; M.A., Norfolk State University
Began service in 2000.

TOY, JAMES L .................................................................Physics

TYLER, INDIRA V ............................................................Nursing
B.A., University of Notre Dame; B.A., University of South Carolina. Began service in 2002.

WALKER, STEPHANIE ......................................................English and Foreign Languages
B.A., Norfolk State University; M.A., Old Dominion University. Began service in 1995.

WALTERS, JACQUELYN P ..................................................Army ROTC
B.S., Norfolk State University. Further study: Old Dominion University; Norfolk State University. Began service in 2002.

WALTON, JOSEPH F.........................................................Allied Health
B.S., Hampton University; A.S., Gupton-Jones College of Funeral Service. Further study: Norfolk State University. Began service in 2003

WILLIAMS, AURELIA .........................................................Computer Science
B.S., Norfolk State University; M.S., John Hopkins University. Began service in 2001

WILSON, MATTIE C .........................................................Allied Health
B.S., Jackson State University; M.A., Webster University. Began Service in 2004.

WOLBORSKY, DIEGO I .....................................................Army ROTC
Began service in 2004

ZACHERY, TIMMEY T ......................................................Music
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