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## UNDERGRADUATE

## 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 specified 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 readmission.
- 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 to the new degree program.
- Students are held 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.

This document is subject to change. Current university policies are located on the university's web site at http://www.nsu.edu/policies/. Please refer to this website for policy updates and policies and procedures not addressed in the University Catalog.

This document is intended to adhere to all statutory regulations, State Council of Higher Education for Virginia (SCHEV) guidelines, and other official documents and pronouncements of the Commonwealth of Virginia and the Norfolk State University Board of Visitors.

The current version, as amended, is posted on the University's website.
Norfolk State University is committed to the policy that all persons will have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

## ACADEMIC CALENDAR

## Fall Semester 2021

| Event | Date |
| :---: | :---: |
| State of the University Address/ <br> Faculty/Staff/School/Department <br> Meetings/Faculty Information <br> Workshops | Tuesday, August 24 |
| Departmental Advising and Registration | Friday, August 27 - Saturday, August 28 |
| Classes Begin/Late Registration | Monday, August 30 |
| Deadline for Late Registration/ <br> Adding Courses or Declaring Audit | Friday, September 03 |
| Mini Term 1A/1C Deadline for Late Registration/Adding Courses or Declaring Audit | Friday, September 03 |
| Deadline to Drop a Course and Receive 100\% Refund (18/1 and Mini Term 1A/1C) | Friday, September 03 |
| Labor Day Holiday (No Classes) | Monday, September 06 |
| Mini Term 1A/1C advisory grades due (6 week session) | Monday, September 20 - Saturday, September 25 |
| Founders Day Convocation | Thursday, September 16 |
| Deadline to Apply for December 2021 Graduation | Friday, September 24 |
| At the 5th Week, First Advisory grades due ( 12 week session) | Monday, September 27 - Saturday, October 02 |
| Mid Term Grading for Graduate Courses | Monday, October 11 - Saturday, October 16 |
| Mini-Term 1B/1D (Classes Begin) | Saturday, October 16 |
| Fall Break (No Classes for 15 week session) | Thursday, October 21 - Friday, October 22 |
| Mini-Term 1B/1D Deadline for Late Registration/Adding Courses or Declaring Audit | Friday, October 22 |
| Deadline to Drop a Course and Receive 100\% Refund (Mini Term 1B/1D) | Friday, October 22 |
| Registration for Spring 2022 Semester Begins | Monday, November 01 - Saturday, January 15 |
| At the 10th week, Second advisory grades due ( 13 week session) | Monday, November 01 - Saturday, November 06 |
| Mini Term 1B/1D advisory grades due (6 week session) | Monday, November 15 - Saturday, November 20 |
| Election Day | Tuesday, November 02 |
| Deadline to Drop a Course (21/1, 21/1B, 21/1D) | Friday, November 12 |
| Reading Day (No classes) | Wednesday, November 24 |
| Thanksgiving Break | Thursday, November 25 - Sunday, November 28 |
| Classes Resume | Monday, November 29 |
| Final Grades Due for December 2021 Graduates | Wednesday, December 01 |
| Classes End | Friday, December 03 |

(Last Day to Withdraw from the University without Academic
Penalty)

| Reading Day (No Classes) | Saturday, December 4 |
| :--- | :--- |
| Final Examination Period | Monday, December 6-Friday, December 10 |
| COMMENCEMENT | Saturday, December 11 |
| Deadline to Report Final Grades | Tuesday, December 14 |

Registration One-Stop Shop and Advising Services will be located on the first floor of the Student Center beginning Friday, August 27,2021 through Friday, September 3, 2021 for registration. Hours of operation will be 8:00 a.m. until 6:00 p.m. The Office of the Registrar, Financial Aid, Cashiers Office, and Student Accounts will be in Room 149 until Friday, September 3, 2021.

Note: Academic Calendar dates are subject to change. Visit the NSU Website at http://www.nsu.edu/enrollment-management/registrar/calendars (http://www.nsu.edu/enrollment-management/registrar/calendars/) for the most recent updates.

## Spring Semester 2022

| Event | Date |
| :---: | :---: |
| University Community/Faculty/ Staff/School/Department Meetings/ Faculty Information Workshops | Tuesday, January 04 |
| Departmental Advising and Registration | Friday, January 07 - Saturday, January 08 |
| Classes Begin/Late Registration | Monday, January 10 |
| Deadline for Late Registration/ <br> Adding Courses or Declaring Audit | Friday, January 14 |
| Mini Term 2A/2C Deadline for Late Registration/Adding Courses or Declaring Audit | Friday, January 14 |
| Deadline to Drop a Course and Receive 100\% Refund (20/2 and Mini Term 2A/2C) | Friday, January 14 |
| Martin Luther King Jr. Holiday (No Classes) | Monday, January 17 |
| Deadline to Apply for May 2022 Graduation | Friday, January 28 |
| Mini Term 2A/2C advisory grades due ( 7 week session) | Monday, January 31 - Saturday, February 05 |
| At the 5th week, First advisory grades due ( 15 week session) | Monday, February 07 - Saturday, February 12 |
| Mid Term Grading for Graduate Courses | Monday, February 21 - Saturday, February 26 |
| Mini Term 2B/2D (Classes Begin) | Monday, February 28 |
| Mini-Term 2B/2D Deadline for Late Registration/Add/Drop Courses or Declaring Audit | Friday, March 04 |
| Deadline to Drop a Course and Received 100\% Refund (Mini Term 2B/2D) | Friday, March 04 |
| Spring Break (No classes) | Monday, March 07 - Sunday, March 13 |
| Registration for Summer and Fall 2022 Semester | Monday, March 14 - Friday, June 17 |
| At the 10th week, Second advisory grades due (15 week session) | Monday, March 21 - Saturday, March 26 |
| Deadline to Drop a Course (21/2, 21/2B, 21/2D) | Friday, April 01 |
| Mini Term 2B/2D advisory grades due (7 week session) | Monday, March 28 - Saturday, April 02 |

Final Grades Due for May 2022 Graduates
Classes End
(Last Day to Withdraw from the University)
Final Examination Period
COMMENCEMENT
Deadline to Report Final Grades
Faculty Development Workshop

Wednesday, April 20

Friday, April 22

Saturday, April 23 - Friday, April 29
Saturday, May 07
Tuesday, May 10
Wednesday, May 11 - Thursday, May 12

Registration One-Stop Shop and Advising Services will be located on the first floor of the Student Center beginning Friday, January 07, 2022 through Friday, January 14, 2022 for registration. Hours of operation will be 8:00 a.m. until 6:00 p.m. The Office of the Registrar, Financial Aid, Cashiers Office, and Student Accounts will be in Room 149 until Friday, January 14, 2022.

Note: Academic Calendar dates are subject to change. Visit the NSU Website at http://www.nsu.edu/enrollment-management/registrar/calendars (http://www.nsu.edu/enrollment-management/registrar/calendars/) for the most recent updates.

## Summer Sessions 2022

May 17 to June 25, 2022: Six-Week Term (TERM A)

Event Date

| End of Registration (Term A) | Saturday, May 15 |
| :--- | :--- |
| Classes Begin/Late Registration | Monday, May 17 |
| Deadline for Late Registration/ | Thursday, May 20 |
| Adding Courses or Declaring Audit |  |
| Deadline to Drop a Course and | Thursday, May 20 |
| Receive 100\% Refund |  |
| Memorial Day Holiday (No Classes) | Monday, May 31 |
| Deadline to Drop a Course | Tuesday, June 08 |
| Classes End | Thursday, June 24 |
| (Last Day to Withdraw from the |  |
| University without Academic |  |
| Penalty) |  |
| Final Examination Period | Friday, June 25 |
| Deadline to Report Final Grades | Tuesday, June 29 |

June 28 to July 23, 2022: Four-Week Term (TERM B)

| Event | Date |
| :--- | :--- |
| End of Registration (Term B) | Saturday, June 26 |
| Classes Begin/Late Registration | Monday, June 28 |
| Deadline for Late Registration/ | Thursday, July 01 |
| Adding Courses or Declaring Audit |  |
| Deadline to Drop a Course and | Thursday, July 01 |
| Receive 100\% Refund | Monday, July 12 |
| Deadline to Drop a Course | Thursday, July 22 |
| Classes End |  |

(Last Day to Withdraw from the University without Academic Penalty)
Final Examination Period Friday, July 23

Deadline to Report Final Grades Monday, July 26

Note: Academic Calendar dates are subject to change. Visit the NSU Website at http://www.nsu.edu/enrollment-management/registrar/calendars (http://www.nsu.edu/enrollment-management/registrar/calendars/) for the most recent updates.

## WELCOME TO NORFOLK STATE UNIVERSITY

Norfolk State College was founded on September 18, 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 expression 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.

## Our Mission

Norfolk State University, a comprehensive urban public institution, is committed to transforming students' lives through exemplary teaching, research and service. Offering a supportive academic and culturally diverse environment for all, the University empowers its students to turn their aspirations into reality and achieve their full potential as well-rounded resourceful citizens and leaders for the 21 st century.

## Vision Statement

Norfolk State University will be recognized nationally as a premier public institution with outstanding signature academic programs, innovative research, and community engagement opportunities.

## Core Values

Norfolk State University's strength lies in its core values. They form the foundation for the University's actions and reflect what is important to the members of the Norfolk State University community and the Hampton Roads region.

1. Excellence - We are dedicated to fostering a culture of excellence in all facets of the University through the highest educational standards for student achievement, stellar faculty teaching, innovative research, dedicated service and creative co-curricular activities.
2. Student-Centered - Students are our top priority, and we are committed to helping them become globally competitive in an enriching, stimulating and supportive environment.
3. Diversity and Inclusiveness - We foster a multicultural campus respecting all people, cultures, ideas, beliefs, identities, socio economic backgrounds, and perspectives. We train our students to become leaders in an ever-changing global and multicultural society.
4. Integrity and Civility - We expect everyone to be accountable for his or her actions and to engage in honest, ethical behavior. We value the contributions of each person, treating all with respect and civility, and affirm our shared responsibility for institutional success.
5. Engagement - We continually enhance the university's role and influence in affairs of local and global communities by promoting educational attainment, cultural enrichment, and economic development.
6. Pride - We display great admiration for the University and its rich history and legacy.
7. Financial Empowerment - We aggressively pursue expanded and more diversified revenue streams.

## Institutional Goals

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

- 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.
- The University shall continue to utilize its assembled expertise in research and public service to develop programs specifically related to urban needs.
- The University shall continue to develop its management capability in order to provide adequate, efficient, and timely services to its constituents.
- The University shall continue to maintain an environment which encourages its graduates to assume leadership roles in the community, state, nation, and world.


## Accreditations and Affiliations

Institutional Accreditation - Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) (http://www.sacscoc.org/) is the regional body for the accreditation of degree-granting higher education institutions in the Southern states. It serves as the common denominator of shared values and practices among the diverse institutions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee,

Texas, Virginia and Latin America and other international sites approved by the Commission that award associate, baccalaureate, master's, or doctorate degrees. The Commission also accepts applications from other international institutions of higher education.

SACSCOC Mission Statement: The mission of the Southern Association of Colleges and Schools Commission on Colleges is to assure the educational quality and improve the effectiveness of its member institutions.

Core Values: The Southern Association of Colleges and Schools Commission on Colleges has six core values:

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1. Integrity
2. Peer Review/Self-regulation
3. Student Learning
4. Continuous Quality Improvement
5. Accountability
6. Transparency
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SACSCOC Vision Statement: To serve as the premier model for shaping and ensuring the quality of higher education throughout the world.
Accreditation Status of Norfolk State University
The official statement on Norfolk State University's regional accreditation status as required by Standard 14.1, Principles of Accreditation (2018), of the Southern Association of Colleges and Schools Commission on Colleges is as follows:
Norfolk State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) (http:// www.sacscoc.org/) to award associate, baccalaureate, master's, and doctorate degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Norfolk State University

- Norfolk State University Institution Details (https://sacscoc.org/institutions/?institution_name=norfolk+state +university\&results_per_page=25\&curpage=1\&institution=0011N00001h9E7kQAE)


## Specialized Accreditation

| Accrediting Agency | Discipline |
| :---: | :---: |
| Engineering Accreditation Commission (EAC) of ABET | 1. Electrical and Electronics Engineering (BS) |
|  | 2. Optical Engineering (BS) |
| Accrediting Council on Education in Journalism and Mass Communications | 3. Mass Communications - General Broadcast (BS) |
|  | 4. Mass Communications - Journalism (BS) |
| American Chemical Society (ACS) | 5. Chemistry (BS) |
| Academy of Nutrition and Dietetics, Accreditation Council for Education in Nutrition and Dietetics | 6. Food Science and Nutrition (BS) |
| American Psychological Association | 7. Clinical Psychology (Ph.D.) |
| Association to Advance Collegiate Schools of Business (AACSB) | 8. Business (BS) |
| Commission on Accreditation of Allied Health Education Programs, American Kinesiotherapy Association | 9. Physical Education/Exercise Science (BS) |
| Computing Accreditation Commission of ABET | 10. Computer Science (BS) |
| Council on Social Work Education (CSWE) | 11. Social Work (BSW) |
|  | 12. Social Work (MSW) |
| National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) | 13. Medical Technology (BS) |
| The Association of Technology, Management and Applied Engineering (ATMAE) | 14. Construction Management Engineering Technology (BS) |
|  | 15. Computer Engineering Technology (BS) |
|  | 16. Electronic Engineering Technology (BS) |
| National Association of Schools of Music (NASM) | 17. Music Education (BMus) |
|  | 18. Music (MMus) |
| National Council for the Accreditation of Teacher Education (NCATE) | 19. Art Education (BS Art) |
|  | 20. Art Education (MAT) |
|  | 21. Biology Education (BS Biology) |
|  | 22. Biology Education (MAT) |
|  | 23. Chemisitry Education (BS Chemistry) |
|  | 24. Chemistry Education (MAT) |


|  | 25. Early Childhood/Elementary Education (BS Interdisciplinary Studies or Psychology) |
| :---: | :---: |
|  | 26. Early Childhood/Elementary Education (MAT) |
|  | 27. English Education (BS English) |
|  | 28. English Education (MAT) |
|  | 29. Health and Physical Education (BS) |
|  | 30. History Education (BS History) |
|  | 31. History Education (MAT) |
|  | 32. Mathematics Education (BS Mathematics) |
|  | 33. Mathematics Education (MAT) |
|  | 34. Pre-Elementary Education/Early Childhood Special Education (MA) |
|  | 35. Special Education (BS Interdisciplinary Studies or Psychology) |
|  | 36. Special Education (MA) |
|  | 37. Urban Education (MA): School Counseling, Principal Preparation, and Curriculum Development and Supervision |
| Accreditation Commission for Education in Nursing, Inc. (ACEN) | 38. Nursing (BS) |

## Affiliations

## Membership Affiliation

- 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 Colleges for Teacher Education
- The Virginia Association of Teacher Educators
- 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 and Council of Graduate Schools
- 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
- Cluster Program
- College Placement Council
- Conference of Southern Graduate Schools
- Council for Advancement and Support of Education
- Council of Historically Black Graduate Schools
- Council on Social Work Education
- Intercollegiate Music Association
- Mid Atlantic Association for School, College and University Staffing and Group for the Advancement of Doctorial Education
- National Alliance of Business College/Industry Relations
- National Association for Equal Opportunity in Higher Education
- National Association for Intercollegiate Athletics
- National Association for the Health Professions
- National Association of College Admissions Counselors
- National Association of Student Personnel Administration
- National Business Education Association
- National Center for Allied Health Leadership
- National Collegiate Athletic Association
- National League of Nursing
- Norfolk Chamber of Commerce
- Southern Association of Collegiate Registrars and Admissions Officers
- Southern College Placement Association, Inc.
- Southern Region II, ALAW
- Southern Regional Education Board
- Virginia Association of Allied Health
- Virginia Association of College Nursing
- Virginia Council of Graduate School
- Virginia Public Health Association


## Campus Library

Donald L. Essex
Dean of Library Services
Lyman Beecher Brooks Library
(757) 823-9153

Lyman Beecher Brooks Library supports the academic programs of Norfolk State University. Built in 2012, the library is named after Dr. Lyman Beecher Brooks (1910-1984), the Director and Chief Administrative Officer of the university from 1938 to 1975. The library's mission is to provide information resources, services, and technologies that enable and equip Norfolk State University students, faculty, and staff to become successful scholars and lifelong learners.

The library contains nearly one million information resources that NSU students, faculty, and staff can access. These include over 550,000 books, more than 115,000 periodicals, and over 290,000 media. Approximately $28 \%$ of these information resources are physical resources and approximately $72 \%$ are digital resources. The latter can be accessed online and remotely.

The library also has several special collections. The Herbert A. Marshall Collection focuses on African American history and culture and contains nearly 19,000 books. The Harrison B. Wilson Archives maintains more than 5,000 historical records related to NSU and African Americans in Virginia. And the African Art Gallery collects and exhibits over 700 works of art and artifacts from 13 African countries.

There are several information services available on the library's website to assist researchers. These include the online catalog (https:// library.nsu.edu/), which provides information about the books, periodicals, and media held by the library; the discovery service (https:// norfolkstateu.on.worldcat.org/discovery/), which enables more comprehensive searches of information available through the library; and more than 200 online databases (https://libguides.nsu.edu/az.php) that provide access to general and specialized content on a wide range of academic and popular subjects.

For additional information about Lyman Beecher Brooks Library, please contact the Information Desk at 757-823-2418 or library@nsu.edu and visit www.library.nsu.edu (https://library.nsu.edu/).

## Campus Archives

## Harrison Wilson Archives

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

## The African Art Gallery

The art gallery houses a collection of African art from 14 countries representing 40 groups and cultures. Included in the gallery is a reference library that features over 400 books on African art, culture, and history.

## ADMINISTRATIVE OFFICES

The administrative offices help the University carry out its mission efficiently and effectively. The University is organized into five (5) divisions:

- Office of the Provost
- Finance and Administration
- Operations and Institutional Effectiveness (https://catalog.nsu.edu/ shared/operations-institutional-effectiveness/)
- Student Affairs (p. 21), and
- University Advancement.

Each division is led by a vice president who is responsible for implementing programs and services that are essential for the management of the University.

## Office of the Provost

Dr. DoVeanna Fulton<br>Provost and Vice President for Academic Affairs<br>(757) 823-8408

The Office of the Provost at Norfolk State University bears leadership responsibility for the academic focus of the institution. The Office plays a central role in the articulation, development, initiation and continuing support of the educational philosophy of Norfolk State University which is articulated in its mission: "Through exemplary teaching, scholarship, and outreach, Norfolk State University transforms lives and communities by empowering individuals to maximize their potential, creating lifelong learners equipped to be engaged leaders and productive global citizens."

The Office is made up of two colleges, three professional schools, an off-campus center, and academic support programs. The colleges are the College of Liberal Arts and the College of Science, Engineering, and Technology. The schools are the School of Business, the School of Education, and the Ethelyn R. Strong School of Social Work. Thirty bachelor's degree programs, one associate degree program, fifteen master's degree programs, and three doctoral degree programs are offered through these colleges and schools. Continuing Norfolk State University's tradition of service, the Office of the Provost promotes and encourages community involvement. The Office of the Provost provides a variety of programs and opportunities in which the students, faculty, and staff may demonstrate altruistic spirit.

The goal of student success guides all academic policies and processes. The Office of the Provost 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 Office of the Provost works in concert with the faculty to ensure that the curriculum supports the University's mission and strategic imperatives.

To that end, the Provost has developed the following goals:

- Enhance the Collegial Environment - identify correct Rules of Engagement
- Enrollment Growth in Quality and Quantity - increase student enrollment with improved quality
- Improve the freshman to sophomore retention rate and increase the Graduation Rate
- Implement Teacher/Scholar Model for the faculty - improve sponsored research and NSU role in economic development
- Implement Performance Based Management Model - ensure accountability at all levels

The implementation plan for these goals including targeted initiatives, action steps and resource needs, are available in the Office of the Provost, Suite 460, Harrison B. Wilson Hall (757) 823-8408. Programs under the Office of the Provost include, but are not limited to, the programs/services which follow.

## Cooperative Education/Internship Program

Cooperative Education at Norfolk State University is a 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 by 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 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:

| Course | Credit Hours |
| :--- | :--- |
| CED 250 | 1 |
| CED 350 | 3 |
| CED 450 | 3 |

Interested students may request information from the following address:
Norfolk State University
Career Services
Cooperative Education Program
Student Services Center, Suite 318
Norfolk, Virginia 23504
(757) 823-8462

## Robert C. Nusbaum Honors College

Dr. Khadijah Miller, Dean
(757) 823-8208
(757) 823-2864

The Robert C. Nusbaum Honors College 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. The Robert C. Nusbaum Honors College currently has three component programs:

- the prestigious Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) Science Honors Program for selected math and science majors;
- the Alison J. and Ella W. Parsons General Honors Program for all majors;
- and the Discipline-Specific Honors Programs currently available for students in History; Psychology; Interdisciplinary Studies; Technology; Nursing; Health Services Management; Health; Physical Education and Exercise Science; Social Work; and Business.

The Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) was established with a goal 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. Please see the separate DNIMAS catalog entry for admissions requirements.

## Admissions Criteria and Requirements for the Alison J. and Ella W. Parsons General Honors Program <br> Eligibility requirements for high school students are a 1080 SAT (Math + Verbal) and an unweighted high school GPA of at least 3.0. An ACT

score of 21 or higher is also acceptable. The requirement for current NSU students and transfer students is also a 3.0 GPA.

Students must maintain a 3.0 cumulative GPA and take 30 hours of Honors courses in their time at NSU, to include at least one Honors Seminar capstone course: General Studies (GST) 345 H or GST 445 H . All students in Honors courses are part of the Robert C. Nusbaum Honors College and participate in Honors College activities.

Transfer students entering NSU with an academic Associate's degree, plus a GPA of 3.0 or above, may earn a special RCN Honors College diploma by completing 18 credit hours' worth of Honors courses, to include at least one Honors Seminar or Honors capstone major project.

Admissions Criteria and Requirements for the Discipline-Specific Honors Programs
As part of the Robert C. Nusbaum Honors College, the NSU DisciplineSpecific Honors Programs provide exciting communities for students with strong commitments to their respective major fields and metamajors. There are currently nine departments offering DSHPs.

Students in a DSHP must take at least 18 hours of Honors courses from the General Education tiers as designated by their department and at least 12 hours of Honors courses in their major, to include a designated Honors capstone course.

## GRADUATION HONORS

Robert C. Nusbaum Honors College graduates receive an Honors medallion and highest recognition at graduation as well as an NSU diploma in the major with an Honors College seal and endorsement. For a special diploma, students must complete 30 hours of Honors credits, including at least one Honors Seminar (GST 345 H or GST 445 H) or an approved capstone Honors research project in the major department (for DSHP students). Students entering NSU as transfers with an A.A. or A.S. or A.A.S. plus General Studies certificate degree may receive a special diploma with 18 hours of Honors credit (including at least one Honors Seminar or Honors capstone major project).

For additional information, please contact the Dean of Robert C. Nusbaum Honors College at (757) 823-8208.

## 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.

Graduate and undergraduate students are eligible to participate in the Exchange Program. For degree purposes, credits earned will be considered resident credit 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 a cumulative grade point average of 2.1 or better. The approval of the college/school dean is required.

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.

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

## Virginia Tidewater Consortium Cross Registration Program

Norfolk State University students may also take undergraduate courses at any of the following Tidewater institutions:

- Christopher Newport University (Newport News),
- Hampton University (Hampton),
- Paul D. Camp Community College (all campuses),
- Regent University (Virginia Beach),
- Thomas Nelson Community College (Newport News),
- Tidewater Community College (all campuses), and
- Virginia Wesleyan College (Norfolk).

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 normally limited to courses not available to students at the home institution during the current semester.

For further information, contact the Office of the Registrar at (757) 823-8229.

## 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 Army Reserve Officers Training Corps (AROTC) was established at Norfolk State University on July 1, 1948, in the Military Science Department. Army ROTC is one of the best leadership courses in the country and is part of the college curriculum. During classes and field training, students will learn first-hand what it takes to lead others, motivate groups, and how to conduct missions as an officer in the Army. Upon graduation from Army ROTC, students will earn the bar of a Second Lieutenant and become a leader for life.

## 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.

## OFF - CAMPUS Center

## Virginia Beach Higher Education Center (VBHEC)

Dennis Montgomery, J.D., Director
(757) 368-4150

## Email: dlmontgomery@nsu.edu

The mission of NSU programs and services at the Virginia Beach Higher Education Center (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, VBHEC strives to develop and disseminate educational programming, training programs, and selected technological information to its adult constituents outside the traditional credit delivery formats.

The Virginia Beach Higher Education Center, operated cooperatively by Norfolk State University and Old Dominion University, offers graduatelevel courses for Norfolk State University in criminal justice, secondary education, urban education (counseling), and social work. Undergraduate courses and a number of continuing education (non-credit) offerings are also available. This Center offers administrative services, including academic counseling and course registration. Courses offered at the Virginia Beach Higher Education Center are listed with section number 85.

The goal of the Center is to strengthen the skills of the adult learner through educational opportunities in workforce development, leadership, competitive education programs, continuing education, and business and community partnerships.

The Center focuses on meeting the needs of non-traditional students and offers weekend and evening courses. Other programs located at VBHEC are Spartan Prep Academy, Military Education Programs, the Reclamation Project, and the Criminal Justice Master's degree program. Courses are offered using a variety of modalities including, but not limited to, face to face, online, and videoconferencing. Non-credit continuing education certificate courses and programs are offered year round. The VBHEC is also used for special events such as the Annual Women's Conference. Community groups, school systems, and government agencies also host various events at this location.

## Spartan Prep Academy

Spartan Prep Academy is a college awareness program to introduce Virginia Beach City Public School students to the many advantages of continuing their education beyond high school and to the specific programs available at Norfolk State University (NSU). This partnership between Norfolk State University at the Virginia Beach Higher Education Center (VBHEC) and Virginia Beach City Public Schools is designed to increase the enrollment of minority students from Virginia Beach City Public Schools in post-secondary institutions. The goal of this initiative is to introduce students from Virginia Beach City Public Schools to careers and educational opportunities available at NSU. The vision of Spartan Prep is to help adolescents by offering exposure to the academic experience, the taking care of "college business" experience, and the "college life" experience.

## NSU Reclamation Project

The Norfolk State University's Reclamation Project was launched in 1999. The Project's purpose is to facilitate the continuing education and subsequent graduation of former NSU students who left the University prior to completing all academic requirements for the bachelor's degree. The Reclamation Project is designed for students to take full advantage of technology while maintaining the academic integrity and intellectual rigor of the University. Among the methodologies for possible degree completion are web-based and lecture-enhanced instruction, independent study, and traditional classroom instruction offered at the NSU main campus (Norfolk), the Virginia Beach Higher Education Center (Virginia Beach), and other accredited institutions of higher learning.

Coursework completed at other accredited institutions of higher learning can usually be transferred to NSU for credit toward the undergraduate degree provided that a letter grade of " $C$ " or better is earned. The three requirements for returning to Norfolk State University via the Reclamation Project are the student:

1. must be a former NSU student,
2. must be 24 years of age or older, and
3. must not have taken any courses at Norfolk State during the immediate past five years.

## NSU Off-Campus Site at Naval Station Norfolk (NSN)

Mr. Wayne Ivey, Director
(757) 823-2585

Email: wlivey@nsu.edu (dlmontgomery@nsu.edu)

## Naval Station Norfolk MSVA Office

The Norfolk State University's Naval Station Norfolk location supports the Master's of Urban Education program. It is located in Building CEP-87 on the base and houses classrooms, a computer lab and an administrative office. The office provides administrative services, academic and enrollment counseling and registration support for students enrolled in the program. The office also serves as a liaison between the University and Naval Station Norfolk offices and facilities access to the base for staff, faculty and students.

The office also provides support to military and veteran related student on the base. The office focuses on supporting active duty military members and veterans seeking to earn their degree by providing various services including enrollment counseling and degree planning. The office supports Norfolk State's recruiting efforts by attending military education fairs and conducting outreach to prospective military students.

## Office of Extended Learning

Dr. Dorothy Jones, Director (757) 368-8661

Website: www.nsu.edu/Academics/Academic-program/ (http:// www.nsu.edu/Academics/Academic-program/)
Email: oel@nsu.edu
Norfolk State University's Office of Extended Learning (OEL) works with the academic and administrative units of the University. It offers coursework through online, blended and video conferencing.

## The Office of Extended Learning

The Office of Extended Learning provides coordination and support services to Norfolk State University's educational divisions to comprehensively infuse technology across the curriculum utilizing electronic learning initiatives that include distance learning, blended learning, and face-to-face instructional technology. This office is also responsible for certifying faculty as online instructors as well as providing Blackboard instructional training for faculty and students alike.

## NATIONAL COUNCIL FOR STATE AUTHORIZATION RECIPROCITY AGREEMENT (NC-SARA)

Norfolk State University (NSU) is a member of the National Council for State Authorization Reciprocity Agreement (NC-SARA), which allows online delivery of distance learning programs to residents of states other than Virginia. All NSU licensure programs lead to a recommendation for a Virginia license. Therefore, prospective students should review
the specific academic requirements for the program in which they are enrolling.

Pursuant to the United States Department of Education's Program Integrity Rule, each institution of higher education is required to provide all prospective and current students with the contact information of the state agency or agencies that handle complaints. NSU consistently monitors ongoing developments in the relevant laws in every state.
If authorization becomes necessary, NSU will obtain the necessary approvals.

The following link provides a list of contacts for each state (https:// www2.ed.gov/about/contacts/state/). If additional information is needed after a student has exhausted all available internal grievance procedures, the student may access the NC-SARA student complaint process (https://nc-sara.org/student-complaints/).

For information on resolving non-academic concerns, please click here (https://www.nsu.edu/campus-life/services-resources/dean-of-students/ student-complaints/).

## Military Education Programs

NSU is ranked within the top $20 \%$ of Military Friendly Schools/Colleges across the United States for the third year in a row. NSU was able to accomplish this goal based on a number of factors that include military affiliated students being able to access financial aid programs, active duty military able to use military tuition assistance, and support of education benefits for military spouses and dependents. In addition, the availability of military friendly distance learning and online degree programs, participation in the MyCAA program, proximity to a military base, various military bases throughout the region with representative outreach, and NSU having an excellent academic accreditation. Not to mention, NSU assists in the ease of acquiring military student scholarships, discounts, and grants.

## Navy College Distance Learning Program Partnership (NCDLP) Interdisciplinary Studies Program (120 credits)

A program designed for military and civilian students. Military students may transfer-in up to 90 credits of military experience and training, CLEP/DANTES examinations and other college credits. Students may combine classroom instruction with Web-Based/Online courses. A strong Liberal Arts Degree provides foundations in many disciplines such as Management, Administration \& Supervision, Leadership, Social Science, Education, Engineering, and Technology.

## Urban Education Community Counseling Naval Base Program

Urban Education Community Counseling (UEDCC) is a Master of Arts, 39 credit, degree program designed for persons seeking a position in community counseling. Classes are held throughout the year consisting of 5 nine-week sessions. The program seeks military and civilian students who are engaged in individual and group counseling, academic advising, career development and training, and positions in human services. The goal of the program is to graduate a significant number of individuals in the counseling profession, whose education and experience at Norfolk State University will have a positive impact on mankind, resulting in changed lives in the greater community.

## Criminal Justice Master's Degree Program

The Master of Arts in Criminal Justice consists of a core of five courses ( 15 credit hours) that set the foundation and parameters for specialization in two concentrations:

1. Management and Planning, or
2. Juvenile Justice.

For more information, please contact:

Dr. David Spinner, Program Coordinator Virginia Beach Higher Education Center Norfolk State University
1881 University Drive, RM 268
Virginia Beach, Virginia 23453
Phone: (757) 368-6369; Fax: (757) 368-4381
Email: criminaljustice@nsu.edu

# Division of Finance and Administration 

Dr. Gerald Hunter<br>Vice President and Chief Financial Officer<br>(757) 823-8011

The Division of Finance and Administration (DFA) undergirds the instructional and service goals of the University and academy by providing appropriate business, environmental and safety services for all students, faculty, staff, alumni, and other stakeholders based upon Virginia, federal, and generally accepted accounting principles (GAAP), management and ethical practices. DFA administers the institution's fiscal and business services and protects its financial and capital resources, which include providing leadership initiatives and services that sustain and enhance the University's living, learning, and working environments for students, faculty, and staff. DFA priorities and goals are to provide exemplary customer service, operational efficiency and effectiveness, and financial accountability. The institution's commitment to academic excellence and fiscal soundness is reflected in its stewardship of resources, integrity in activities and customer-friendly interactions with constituents.

The Division ensures that the University complies with applicable state and federal requirements and sustains credible fiscal and operational management. The Division's support services include:

## I. Auxiliary Enterprises and Services

Auxiliary Services is a unique, multi-faceted unit of the Finance and Administration area that is responsible for coordinating non-educational and general business services that contribute and relate directly to the mission, goals, and objectives of Norfolk State University.

- Book Store

757-823-2037
The bookstore is the University's retail location for textbooks, general books, supplies, materials and Norfolk State University memorabilia. The bookstore is also the source for official class rings, graduation regalia and announcements.

- Conference Services

The Conference Services Office is a "one-stop-shop" for all event planning needs. Conference Services provides comprehensive event coordination and management services for meetings, conferences, camps, and academic programs.

- Dining Services

757-823-2114
A multi-unit operation that provides dining services from Scott/Dozier Dining Hall, West Dining Hall, Spartan Station Food Court, Student Center Food Court, Café at the Nursing/General Education Building and Outtakes at Wilson Hall. Catering services are also available upon request.

- Printing Services

757-823-8179
Printing Services is a full-service unit of Auxiliary Services offering professional printing and copying services.

- Spartan Card

757-823-9479

The Spartan Card Office provides a "One Card" identification (ID) solution and is responsible for issuing ID Cards all personnel and students on the campus.

- Ticket Center

757-823-9009
The Spartan Ticket Center is the central outlet for information about and the ticketing of athletic and cultural events. The Spartan Ticket Center is also responsible for selling parking decals and collecting parking fines.

## II. Facilities Management

Facilities Management operates, maintains, and addresses the day-today operational needs and preserves the physical assets of the Norfolk State University campus; ensures a safe, healthy work environment for all students, employees, visitors, and the surrounding community; and provides quality facilities maintenance and repair services. The goal is to provide and deliver outstanding customer service to the university.

## - Administrative Services

757-823-2392

1. Provides financial, budgeting, and administrative services to the operating units within facilities.
2. Services provided include budget, finance, payroll, postal services, inventory control, transportation, billing, payment of all utility and vendor invoices.

- Capital Planning and Improvements

757-823-8440

1. Provides services for space utilization, design and planning.
2. Construction contract administration and funding for all new planning and construction projects.
3. Coordinate bidding, and contracting services for capital outlay projects and minor renovations to existing facilities.

- Environmental Health, Safety and Risk Management 757-823-9142

1. Provides oversight to mandated programs
2. Provides safety consultations to faculty and staff, and conducts training, incident investigations; monitors and coordinates evaluations for fire safety systems.
3. Manages liability and property damage claims; appraises and issues certificates of insurance coverage.
4. Coordinates hazardous waste storage and disposal.
5. This area works collaboratively with University Police to assess response procedures for emergencies.

- Facilities Management

757-823-4595

1. Provides services needed to operate and maintain all university facilities.
2. Services are provided by carpenters, painters, mason plasterers, plumbers, electricians, HVAC mechanics, locksmiths, laborers, engineers, administrative, work management center, and supervisory personnel.
3. The Department is responsible for electrical and other utilities distribution.

- Building Services and Grounds

757-823-2772

1. Directs the planning and administration of the care and upkeep of all physical facilities at the University,
2. Oversees the custodial and grounds/landscaping services of all Auxiliary and Education \& General Facilities.
3. Inspects buildings for compliance with environmental (cleanliness), health and safety standards.
4. Direct and organize the cleaning, environmental, and safety functions of the grounds/landscaping division.
5. Provides labor services such as sound setups, moving and hauling for the entire university community.

## III. Planning and Budget

The Office of Planning and Budget works with the campus community to allocate efficiently financial resources and monitor the various budgets of the University. The mission is to lead effectively the development and management of all University budgeting activities, which include:

- Develop annual operating budget of the university (both the revenue and expenditure budgets).
- Provide education, training, and guidance to internal constituents regarding all aspects of the budgetary process.
- Deliver strategic information and analysis to guide planning, decisionmaking, policy development and the allocation of financial resources.
- Determine financial aspects of the University's Capital Outlay budget.
- Communicate frequently with University constituents to discuss the status of their budgets, as well as, the overall budget of the University.


## IV. Procurement Services and Central Warehouse

Procurement Services procures high quality goods and services notwithstanding the source of funding in which the contract is to be paid or whether the public body, the contractor, or third party are providing the consideration; provides quality services at a reasonable cost in a timely and professional manner; and in compliance with the provisions of the Restructured Higher Education Financial and Administrative Operations Act, Chapter 4.10 ( § 23-38.88 et seq.) of Title 23 of the Code of Virginia, and in particular § 23.38.90 of the Restructuring Act.

- Procurement Services

757-785-3851
Mission is to procure high quality goods and services at a reasonable cost in a timely manner and in compliance with University and Commonwealth laws and regulations.

- Central Warehouse

757-823-2936
Provides the central point for vendor deliveries, shipping of goods, inventory stock processing and control, supply-order filling and billings, inventory maintenance, and disposal of all University surplus property in accordance with the compliance and provisions of the Restructured Higher Education Financial and Administrative Operations Act, Chapter 4.10 (§ 23-38.88 et seq.) of Title 23 of the Code of Virginia, and section ( $\S 23.38 .90$ ) of the Restructuring Act.

## V. University Controller

The Office of the Controller is responsible for managing the overall Accounting, Financial Reporting, Payroll and Treasury operations of the University. This includes managing internal controls to mitigate risks; ensuring that the official financial records of the University are current and accurate; safeguarding University assets to minimize risk of financial
loss; and developing and maintaining reporting tools and guidelines to provide high-quality financial information that supports the University's mission, strategic management initiatives, and leadership vision.

## - Bursar and Student Accounts <br> 757-823-2951

The Student Accounts Department is the general billing and collections office for student tuition, course fees, room and board and other educational related fees. This department is also responsible for the posting of employee tuition benefits and the billing of third party and contract accounts. Financial Services

## - Financial Services - Financial Reporting

 757-823-8808The mission of the Financial Services Office is to ensure the integrity of the University's official financial records. Financial Services is responsible for maintaining the general ledger and daily interfaces with the Commonwealth Accounting and Reporting System; producing the annual financial statements; filing all tax returns, and state and local banking transactions and reconciliations (Financial Reporting), processing invoices and other University payments (Accounts Payable) ; post-award financial activities for sponsored programs (Grants and Contracts Accounting), and maintaining the fixed assets database (Fixed Asset Accounting).

- Financial Services - Accounts Payable 757-823-9485
The Accounts Payable Office is responsible for processing of invoices, bills, travel reimbursements, student payments and any documents authorized for payment within the Prompt Pay Act and other state policies and procedures of Virginia. Disbursements from local funds are processed according to the policies and procedures of the University.
- Financial Services - Grants and Contracts Accounting \& Fixed Assets 757-823-2816
The Grants and Contracts Accounting Office is responsible for the post-award financial activities for sponsored programs to include the following:

1. Attending grant set-up meetings
2. Establishing Chart of Account Coding for grant projects
3. Assigning Grant Numbers to Grant Projects
4. Entering Grant Information in to Projects Accounting Module of Colleague
5. Preparing Detailed Budget for BU1.5 Form with PI Signature
6. Preparing and submission of Financial Reports to Granting Organizations
7. Submitting Monthly Financial Certifications to PI/PD
8. Requesting Reimbursements and Sending Invoices to Granting Agencies
9. Preparing electronic drawdowns
10. Preparing Indirect Cost Recoveries
11. Review Budget-Line Adjustment Requests
12. Review HR-1 Forms and Stipend forms for Grant Projects to verify funds availability
13. Distribute Time and Effort for Grant Projects to PIs/PDs
14. Process Revenue Received by Depositing it to Proper Grant Project
15. Initiate Grant Close-Out Process /Prepares financial documentation for Grant Close-Out
16, Process refund payment back to grantor or unspent funds.

## 17. Provide Technical Assistance to PI/PD on Grant Projects and Systems (MYNSU)

- Payroll Services

757-823-2946
The Payroll Office is responsible for processing payroll transactions for full time employees, hourly employees (including students), and adjunct faculty. Leave transactions for classified employees are entered and monitored by the Payroll Office. The office is also responsible for entering employee benefits and monitoring hours worked for part time employees.

- Agency Risk Management \& Internal Control (ARMICS) 757-823-2907
Agency Risk Management and Internal Control Standards is a directive issued by the State Comptroller in November 2006 and applies to all state agencies and institutions within the Commonwealth of Virginia. Its purpose is to implement internal control standards and "best practices" that directly support the mission of the Commonwealth and of the University. It is part of the Commonwealth Accounting Policies and Procedures (CAPP) manual and is an ongoing process that provides reasonable assurance of the integrity of fiscal processes and that all assets are safeguarded.


## VI. University Police and Parking Services

Responsible for providing direct supervision, leadership, and coordination of police department operations and activities, including the divisions of patrol services, administrative support division, police communications, criminal and internal investigations, and parking services. Other duties include management activities to include oversight and submission of the Annual Security Report also known as the Clery Report. Primary responsibility consists of the overall safety and security of the campus community.

## - University Police <br> 757-823-9109

Reports directly to the Chief of Police and provides direct supervision and leadership to the Lieutenants assigned to the Operations Unit, Administrative Unit, and the Investigations Unit. Other duties include management activities to include service on several internal and external committees.

- Parking Services

757-823-2211
Responsible for the issuance of parking decals as well as decal enforcement throughout the campus community to ensure adequate and available parking for all. Additionally, Parking Services is also responsible for coordinating parking for special events throughout campus.

## CONTACT CAMPUS POLICE

Incidents may be reported in person or anonymously:

| - Non-Emergency | $757-823-8102$ |
| :--- | :---: |
| - Emergency | $757-823-9000$ |
| - Anonymous | $757-823-2148$ |

The Norfolk State University Police Department has primary responsibility for security on campus. The mission of the Norfolk State University Police Department is "to promote and maintain personal safety and physical and environmental security." The department's efforts include preventive measures through education and enforcement and promoting awareness of individual safety and crime prevention responsibility.

Norfolk State University Police Officers are sworn law enforcement 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 established by the Commonwealth of Virginia and the Virginia Department of Criminal Justice Services. The policies and procedures also comply with federal requirements set forth in the Student Right-To-Know Act, and the Campus Security Act, which was signed into law in November 1990 (20 U.S.C. Section 1092). Title II of this Act is known as the Crime Awareness and Campus Security Act.
Norfolk State University Police Department prepares, publishes, and distributes an annual Campus Security Report in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. Institutions that participate in student financial aid programs under Title IV of the Higher Education Act of 1965 must comply with the conditions of this Act. The report includes information about campus security policies and procedures and crime statistics for the previous three years. These statistics focus on reported crimes that occurred on and off campus and certain off-campus buildings owned or controlled by Norfolk State University. Public property within or immediately adjacent to and accessible from Norfolk State University is also included.
Additionally, the annual Safety and Campus Security Report outlines policies that relate to the following: the possession, use, and sale of alcoholic beverages (including the enforcement of state underage drinking laws), drug, and alcohol-abuse education programs, the reporting of crimes, sexual assault/sexual harassment education and prevention programs, and procedures for reporting sex offenses.

## CAMPUS SECURITY

- Campus Safety - The term "campus crime" tends to bring to mind a few obvious crimes such as, bicycle thefts or textbook thefts. Certainly, these thefts can and do prove very costly to victims. But a realization that any crime that occurs in society can and does occur on a college or university campus puts you one step closer to avoiding becoming a victim. For more info, click here: https:// www.nsu.edu/publicsafety/campus-safety (https://www.nsu.edu/ publicsafety/campus-safety/)
- Parking Services - Operation hours (M-F) 7:30 a.m. to 5:00 p.m. Parking decals may be purchased at the Spartan Ticket Box Office located across from Echols Hall during the hours of 9:30am and 5:30pm. For more info, click here: https://www.nsu.edu/About/ Administrative-Offices-Services/Campus-Safety-and-Parking/ParkingServices (https://www.nsu.edu/About/Administrative-Offices-Services/Campus-Safety-and-Parking/Parking-Services/)
- "Blue Light" emergency call boxes are strategically located throughout the campus and connect directly to the University Police Department. This security measure is provided to ensure the safety of everyone. For more info, click here: https://www.nsu.edu/ publicsafety/blue-lights (https://www.nsu.edu/publicsafety/bluelights/)
- Crime Prevention Programs - The police department is available to assist campus departments and community organizations in planning, presenting and coordinating activities and programs. For more info, click here: https://www.nsu.edu/publicsafety/crimeprevention (https://www.nsu.edu/publicsafety/crime-prevention/)
- The University Police Department is a part of Norfolk State University's Department of Administration and Finance. The
department performs a variety of law enforcement tasks, including but not limited to, investigation of criminal activity, apprehension of criminals, traffic enforcement, emergency response, and special security assignments. For more info, click here: https://www.nsu.edu/ publicsafety/campus-security (https://www.nsu.edu/publicsafety/ campus-security/)


## 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 Acting Executive Director of Communications and Marketing via the area's media outlets.

During times of inclement weather (e.g., hurricanes, tornadoes, etc.) employees and students may obtain information regarding NSU closing and cancellation of classes from the following:

| Radio Stations | Television Stations |
| :--- | :--- |
| WNSB FM 91.1 | WTKR TV 3 |
| WOWI FM 102.9 | WAVY TV 10 |
| WJCD FM 105.3 | WVEC TV 13 |
| WHRV FM 89.5 | WVBT TV 43 |

For more information on this policy, please call:

- Office of Communications and Marketing at (757) 823-8373,
- Office of Finance and Business at (757) 823-8011,
- Office of Risk Management at (757) 823-9142,
- Switchboard at (757) 823-8600 or
- SpartanLine at (757) 823-2600.


## Postal Services

The Postal Service provides University faculty, staff, and students with quality services when processing official campus and off-campus mail, and provides 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 are also provided.

## Division of Student Affairs

Dr. Leonard Brown, Jr.
Vice President for Student Affairs
(757) 823-8141

The Division of Student Affairs is the central administrative unit responsible for the coordination and direction of student programs, services, and activities outside the classroom. The departments within the Division are dedicated to recognizing and providing for the needs of each student while stimulating student development outside the classroom. Other goals are aimed at preserving the rights of each individual student; fostering respect and communication among different cultures; maintaining a continued process of self-assessment; and adapting objectives to meet the needs of the student body while supporting the educational mission of the University.

## Office of the Dean of Students

Student Services Center, Suite 307
(757) 823-2152

The Office of the Dean of Students assists all students, graduate and undergraduate, from their initial orientation to the University through successful completion of their academic and career goals. The Dean of Students staff advocates for student needs, addresses student complaints, acts as a liaison between students and academic departments, and provides support and challenges designed to enhance personal growth, as well as a sense of personal authority and responsibility in each student.

## Student Advocacy and Family Relations

## Student Services Center, Suite 319

Student Advocacy and Family Relations is available and committed to address comments, questions, and concerns related to the NSU experience. Individuals are counseled regarding University policies and procedures. Concerns and complaints are investigated by working with campus officials and a response is given via email. An online form is available at https://www.nsu.edu/student-affairs/dean-of-students/student-complaints. Ensuring the highest level of satisfaction is paramount.

## Student Conduct

Student Services Center, Suite 307
Student Conduct through the Dean of Students Office supports the mission of the University by promoting an environment conducive to transforming lives and empowering individuals through the fair and impartial administration of the Code of Student Conduct. We recognize that every community includes rules, standards, and expectations. The office helps educate students on their responsibilities as members of the Norfolk State University community and promotes a safe and inclusive atmosphere. Additional information can be found at: Student Conduct (http://www.nsu.edu/dean-of-students/student-conduct/)

The Dean of Students Office is located in the Student Services Center, Suite 307. The telephone number is 757-823-2152.

## Student Concerns

The Office of Academic Engagement handles academic student concerns rising to the Office of the Provost.

## STUDENT COMPLAINT PROCESS

Student concerns will be addressed according to published protocol. For academic concerns, students must begin by interacting directly with the instructor in a respectful, professional manner. Nearly all concerns can be resolved at the level of the instructor in a collegial conversation.

- Please take time to review a flowchart of the University's Student Complaint Process (https://www.nsu.edu/oel/student-complaintprocess/)

The official process for addressing student concerns is located at the link below. Please see the appropriate school or college Student Resolution Form below.

## Student Resolution Forms

- Student Resolution Form - COLA (https://www.nsu.edu/Academics/ Academic-Engagement/Student-Pathways-Academic-Formation/ Student-Concerns/Student-Resolution-Form_COLA.aspx)
- Student Resolution Form - CSET (https://www.nsu.edu/Academics/ Academic-Engagement/Student-Pathways-Academic-Formation/ Student-Concerns/Student-Resolution-Form_CSET.aspx)
- Student Resolution Form - Business (https://www.nsu.edu/ Academics/Academic-Engagement/Student-Pathways-Academic-Formation/Student-Concerns/Student-ResolutionForm_Business.aspx)
- Student Resolution Form - Social Work (https://www.nsu.edu/ Academics/Academic-Engagement/Student-Pathways-Academic-Formation/Student-Concerns/Student-Resolution-Form_SocialWork.aspx)
- Student Resolution Form - Education (https://www.nsu.edu/ Academics/Academic-Engagement/Student-Pathways-Academic-Formation/Student-Concerns/Student-ResolutionForm_Education.aspx)


## SCHEV

In accordance with VAC 40-31-100 of the Virginia Administrative Code, the State Council of Higher Education of Virginia (SCHEV) is responsible for investigating all written and signed student complaints against post-secondary educational institutions in Virginia, once a student has exhausted all available grievance procedures at the University. Please review the attached link for additional information: SCHEV Student Complaints Page (http://www.schev.edu/index/students-and-parents/resources/student-complaints/).

## Complaints and Grievances to External Entities

For students (and other persons) who wish to address unresolved complaints, the University provides contact information for the following entities:

1. The Southern Association of Colleges and Schools Commission on Colleges SACSCOC, 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for unresolved complaints concerning University compliance with accrediting standards;
2. The State Council of Higher Education for Virginia (SCHEV), 101 N. 14th Street, 10th Floor James Monroe Building, Richmond, Virginia 23219 for unresolved complaints concerning a condition or incident involving the University;
3. The Office of the State Inspector General, 101 N. 14th Street, 7th Floor, Richmond, Virginia 23219, (804) 625-3255 or (800) 723-1615, for complaints alleging fraud, waste, abuse, or corruption; and
4. The Office of Civil Rights of the U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202, (1-800-872-5327), for complaints concerning federal laws prohibiting discrimination.

## Career Services

Student Services Center, Room 318 757) 823-8462

Career Services is responsible for the overall planning, development, and implementation of the University's Career Services program for students and alumni. The office is located in Suite 318, Student Services Center.

Functions include:

1. Identifying and developing full-time, internship and cooperative opportunities;
2. Maintaining Handshake, a dynamic database of employment opportunities that allows students/alumni to upload resumes, and apply for jobs and internships;
3. Providing career coaching and advising;
4. Planning and conducting professional seminars which include Resume Writing, Interviewing Skills, Internship Preparation, Job Search Strategies and Dress for Success, and Professional Social Media training;
5. Planning and coordinating the On-campus Interviewing Program;
6. Planning and conducting career fairs (fall/spring) and graduate professional school day (fall semester).

Student must register with Career Services to receive all available services. Seniors are strongly encouraged to register with Career Services to prepare to transition into the professional workforce upon graduation.

## Counseling Center

## (757) 823-8173

The Counseling Center provides a range of counseling services for Norfolk State University students at no charge. Services include individual, group, and crisis counseling, as well as educational outreach programming.

Counseling Services are confidential. The Counseling Center does not release information about a student without the student's written permission, except in cases of imminent danger to self or others, when the student is a minor (under 18), per court order, or otherwise required by law. Counseling records are not part of academic records.

Counselors are available to consult with students, parents, and staff about issues that affect student life. Adjustment difficulties, substance abuse, depression, troubled relationships, and the inability to manage stress are a few reasons students seek counseling services. Crisis counseling is available to students 24 hours per day, seven days per week.

The Counseling Center staff are professional counselors trained, licensed and experienced in addressing issues common among university students. Appointments can be made by phone or in person. For additional information, please visit the Counseling Center in Room 312, Student Services Center, or call (757) 823-8173.

# Office of Accessibility Services/ International Student Services (OASIS) 

James Bowser Bldg., Suite 121

(757) 823-8325

The mission of Accessibility Services/International Student Services is to promote the academic success of students with disabilities (SWD), and International Students through high-quality educational assistance; faculty and staff seminars; workshops and training, and assistive technology training for students, faculty, staff, and administrators.

## Accessibility Services

Accessibility Services is committed to complying with both the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973.

Accessibility Services assists currently enrolled students with documented disabilities including physical disabilities, traumatic head injuries, learning disabilities and other health concerns. Services include counseling, rehabilitation, note-sharing, and priority seating.

All contacts are held in strict confidence, and information is released only with the student's permission.

## Assistive Technology Laboratory (AT Lab)

The AT Lab exists to support the enhancement of student outcomes through the delivery of information, training, and support through the use of assistive technologies. Students with documented disabilities who are enrolled in the SSDS program are given access to the AT Lab where they are able to utilize specialized hardware, software, and other technologies that level the playing field in their endeavor to excel.

A complete list of services and accommodations are provided through the OASIS and within the AT Lab is available from Accessibility Services and the Norfolk State University Student Handbook.

## International Student Services

James Bowser Bldg., Suite 121
(757) 823-8325

International Student Services assists international students with matters related to immigration, promoting international education, and intercultural understanding. The office circulates immigration information and acts as a referral source for students, staff, faculty, and the community. Services include issuing visa documents/advising students; processing immigration petitions; serving as a liaison between the international student, the university, government agencies; and providing support services and education to enhance student success.

More information is available in the International Student Services Office and in the Norfolk State University Student Handbook. The office is located in the James Bowser Bldg., Suite 121.

## Housing and Residence Life

Residential Complex, Suite 100
(757) 823-8407

Living in one of our residential communities provides a great opportunity for students to take advantage of campus resources such as tutoring, library and dining; interact with people from different backgrounds, be actively involved with campus life, create lifelong friendships, and
develop to your fullest potential. Students who reside in our residential communities are required to abide by all University policies and respecting the rights of other residents.

## Staff

Each residential community is staffed with full-time and part-time employees such as a residence hall director, graduate assistant (GA), front desk staff, and a resident assistant (RA) who is assigned to each floor. All staff are responsible for administering and enforcing University policies and regulations, while acting as an advocate, listener, mediator and resource person.

## Living on Campus

All students who live within our residential communities are members of the Residence Hall Association (RHA). RHA is committed to enhancing the residential experience on campus. Each community has representatives who work with the Office of Housing \& Residence Life to identify areas of concern, enhance services provided to residential students, and plan and implement fun, creative programs and activities.

## Payment of Fees

All students desiring on-campus housing must submit an online housing application and include the non-refundable housing deposit of $\$ 300.00$ by the deadline date (Fall semester entry-April $1^{\text {st }}$ for current NSU students and June 1st for incoming first-time students; Spring semester entryNovember 1st).

Applications will be considered upon submission of a complete housing application and the $\$ 300$ deposit. Students may submit a request for a preferred residential community but Housing and Residence Life does not guarantee placement. Spaces are assigned on a first-come, first-serve basis.

Upon receipt of a bill from NSU, the entire room and board balance must be paid in full or payment arrangements made with the Office of Student Accounts in order for students to receive a key to their room. To inquire about individual accounts, students should contact the Office of Student Financial Services at (757) 823-8381.

## Roommate Request(s)

Requests for roommates will be honored, to the extent possible, provided the request is mutual and included on the housing application of each applicant, deadlines for fees are met, and each person making the request meets all eligibility criteria for living in the desired residential community.

## Occupancy of Rooms

Students are required to occupy rooms on or before the first day of classes or they may forfeit their room reservation.

## Check-In

Upon check-in, students must complete a Blue Card Emergency Contact Form, receive their key, and complete a Room Condition Report. Students must have satisfied all financial obligations to the University and submitted a signed housing contract.

## Housing during Breaks

All residential communities are typically closed during the Fall break, Thanksgiving, spring and summer breaks (except Spartan Suites). Students are not required to move their belongings out of their room during Breaks if they plan to return after the break ends. Students will
receive updated information with specific dates and times to vacate the respective community.

Students will depart the residential communities at the conclusion of the Fall semester, which coincides with the Thanksgiving holiday. Students who plan to return for the Spring semester are not required to remove their belongings. However, students are strongly encouraged to secure all valuables or take them home.

## Withdrawal Procedures

Those who withdraw from their community must contact their residence hall director. Residents are responsible for removing all personal possessions and for cleaning their rooms, which must be verified by the residence hall director. The student is responsible for completing all paperwork to finish the withdrawal process. Students considering withdrawing from their assigned space after the designated grace period outlined in their Housing Contract may incur additional charges on their student account based on contract terms.

There will be a $\$ 100$ charge for all rooms/suites not cleaned and a $\$ 75$ key charge for all keys not returned. Both offenses are subject to possible sanctioning that could prohibit future residency. In addition, students withdrawing from the residence halls will incur a $\$ 50$ charge for improper check-out if they fail to complete any part of the withdrawal process. Students should contact their respective residence hall director if they have questions.

## Check-Out Procedures

Prior to student check-in and upon checkout, each residence hall will have staff assigned to check the condition of the room/suite. Damages and other discrepancies will be noted on the back of the resident's Blue Card. Normal wear is not penalized. Should the resident in violation not be known, all residents assigned to the room will be charged. Each resident assigned to a room/suite is responsible for cleaning his or her side of the room. Rooms and/or suites must be clean and free of all trash. Students housed in suites must ensure that the bathrooms are clean. Charges will be assessed for broken, damaged, misplaced, or out of area furniture. Failure to follow correct check-out procedures will result in a fine and possible sanctioning that prohibit future residency in the residence halls.

## 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 Office of Housing and \& Residence Life. Information is available about rooms, houses, and apartments that are available to students. Contracts or agreements are private matters between the student and the landlord and not Norfolk State University. Students are urged to make living arrangements well in advance of the beginning of the semester.

## Violation of Residence Hall Rules and Regulations

Living with a diverse group of students can be challenging and rewarding at times. The Office of Housing \& Residence Life seeks to provide an inclusive and welcoming environment where values such as respect, civility, and accountability are upheld at all times. Students within the residential communities are required to abide by the 2022-2023 Residential Handbook (Guide to Community Living) and the terms of their Housing Contract. Additionally, residents are required to abide by the Norfolk State University Code of Student Conduct. Alleged violation of the Handbook or Code of Conduct will result in disciplinary action.

## Spartan Health Center

Spartan Station
(757) 278-3360

Student health services are provided by Fort Norfolk Plaza Urgent Care. Basic health services provided Living with a diverse group of students can be challenging and rewarding at times. The Office of Housing \& Residence Life seeks to provide an inclusive and welcoming environment where values such as respect, civility, and accountability are upheld at all times. Students within the residential communities are required to abide by the Guide to Community Living Handbook and the terms of their Housing Contract. Additionally, residents are required to abide by the supplies, general and emergency medical services, health education counseling, maintenance of immunization/ health history records, provision of forms and materials on preventive health, mental health, and other health-related areas, and injections of allergy serum (at students' expense). Should a student require consultation with a specialist, the health care provider at the Center will refer the student to a local practitioner. The Center is staffed with highly skilled health care professionals including physicians, nurse practitioners, and nurses.

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 that exceeds the services listed above must be paid by the student. Students are encouraged to purchase health insurance to cover the cost of specialty referrals, prescriptions or hospitalization. Students need to bring their NSU ID and any insurance documentation they have in the event outside labs, imaging or referrals are needed.

It is recommended that any necessary dental and/or eye examinations be done prior to coming to the University, as the Health Center cannot provide these services.

The Spartan Health Center does not operate a pharmacy. Prescriptions may be filled at local pharmacies.

## Emergency Care

When a serious or life-threatening illness or injury occurs on campus, the NSU Campus Police Department should be contacted immediately by calling (757) 823-9000. Norfolk State University's campus has easy-tosee, blue-light emergency telephones located across campus. Blue-light phones provide a direct connection to the University Police Department. Most blue-light phones are located on each building on campus, including residence halls, and along major foot traffic areas. Phones mounted on residence halls have an emergency button that, when pushed, connects directly with the University Police Department.

If emergency medical transportation is needed, the University Police Department will make the necessary arrangements to ensure that the individual is taken to the nearest urgent health care facility. The expense of this care will be borne by the student.

## Location and Office Hours

The Spartan Health Center is housed in the Spartan Station at the east end of the campus. It is open Monday through Friday from 8:00 a.m. to 5:00 p.m. Walk-in hours will be from 8:00 a.m. to 10:00 a.m. for the acutely ill. Acutely ill is defined as new onset of sickness such as fever, diarrhea, urinary problems, and upper respiratory problems. Students should call the Spartan Health Center at (757) 278-3360 or visit the Spartan Health Center's website to make an appointment to ensure prompt treatment. However, students with new onset illnesses will be
seen on a walk-in basis between scheduled appointments, whenever possible.

## Appointments

Students should call for an appointment to ensure prompt treatment. However, students with new onset illnesses will be seen on a walk-in basis between scheduled appointments, whenever possible.

## Confidentiality

The relationship between a clinician and the patient is strictly confidential. To ensure this, the Spartan Health Center will not release files or information to anyone, including university officials, relatives, or prospective employers, without the expressed written consent of the patient. Only upon issuance of a legal subpoena will records be provided without the patient's authorization.

## Medical Excuses

Written statements verifying a student's visit to the Health Center will be issued, if necessary, at the discretion of the Health Care Provider. An official university excuse may be obtained from the Office of the Dean of Students.

## Immunizations

Health History Record of Immunizations Virginia State Law (Sec.23-7.7) and Norfolk State University require all full-time entering and returning students to provide documentation of immunizations and a completed health record form. The information on this health record is needed to both protect the health of the university community and to assist the Spartan Health Center staff in providing comprehensive medical care for students.

## Student Accident Insurance Plan

All full time undergraduate students (U.S. citizens and permanent residents) taking 12 or more credit hours and all international students (full and part time, graduate and undergraduate) will automatically be enrolled in the Accident Only Expense Benefit and the Outpatient Prescription Drug Benefit, insured by BCS Insurance Company. This plan is mandatory and no waivers will be allowed. The annual premium of $\$ 100$ will be assessed to each qualifying student in two equal installments of \$50 each semester.

Additional coverage for sickness benefit is also available. While enrollment in the Sickness Expense portion of the plan is not mandatory, it is highly recommended for students who do not have adequate insurance for sicknesses. Part-time and graduate students are also eligible to enroll in the Optional Sickness plan. Specific information regarding the student insurance plan can be obtained via the NSU website.

## Health Insurance

Information about the NSU student insurance plan maybe obtained at the Spartan Health Center or the Office of Student Services/Judicial Affairs. Health History/Record of Immunizations Virginia State Law (Sec. 23-7.7) and Norfolk State University require all full-time entering and returning students to provide documentation of immunizations and a completed health record form. The information on this health record is needed to both protect the health of the university community and to assist the Spartan Health Center staff in providing comprehensive medical care for students.

## Student Center

(757) 823-8200

The Norfolk State University Student Center builds a sense of community by facilitating learning, leadership and personal development to enhance the student's experience.

The Student Center is home to the Student Government Association, the Office of the Student Activities and Leadership, meeting rooms, Spartan commuter Lounge, computer labs, Spartan Echo and Spartan Reflection Yearbook Office, Spartan Game Zone, Spartan Training Zone, Spartan Express Café, and University Bookstore. The Spartan Lanes are managed by the Student Center along with Intramural Sports teams and IM league teams.

## Student Activities and Leadership <br> (757) 823-8200

The Office of Student Activities and Leadership is responsible for the coordination and implementation of a creative, responsive, and diverse co-curricular program. Norfolk State University strives to cultivate individuals who have not only mastered academic coursework, but have also developed active interests and skills in interpersonal relations. To assist with this mission, the University promotes a wide range of student organizations and activities. Students are encouraged to participate in the following academic, social, athletic, literary, and religious activities.

## Student Organizations

- Accounting Association
- 200 Plus Menu
- 2xclusive Hip Hop Dance Team
- Active Minds at Norfolk State University
- African Student Association
- Airway Science Club
- Alpha Delta Mu National Social Work Honor Society
- Alpha Epsilon Rho
- Alpha Eta Rho Fraternity, Inc.
- Alpha Kappa Alpha Sorority, Inc.
- Alpha Kappa Delta
- Alpha Kappa Mu Honor Society
- Alpha Lambda Delta Honors Society for First Year Students
- Alpha Mu Gamma National Collegiate Foreign Language Honor Society
- Alpha Nu Omega Fraternity Inc.
- Alpha Nu Omega Sorority, Inc.
- Alpha Phi Alpha Fraternity,Inc.
- Alpha Phi Omega Fraternity, Inc.
- Alpha Phi Sigma National Criminal Justice Honor Society
- Alpha Sigma Lambda
- American Association of University Women
- American Chemical Society
- American Physics Society
- American Production and Inventory Control Society
- Arabic Language \& Culture Club
- Association for Computing Machinery
- Association of Black Communicators
- Association of Concerned Sociologists
- Association of General Contractors of America
- Association of Information Technology Professionals
- Athletes in Action
- Banking and Finance Club
- Baptist Student Union
- Consumer Services and Family Studies Club
- Cooperative Education Club
- Council for Exceptional Children
- Council of Independent Organizations (C.I.O.)
- Dance Marathon
- Beta Gamma Sigma Honor Society
- Beta Kappa Chi National Scientific
- Beta Psi Biology Society
- Boxing Club
- Business Honor Council
- Caribbean Student Association
- Cheerleaders
- Chemistry Club
- Chess Club
- Chi Eta Phi Sorority, Inc.
- Christian Student Fellowship
- Circle K International
- Collegiate Secretaries International
- Commuter Student Association
- Concert Choir
- Consumer Services and Family Studies Club
- Cooperative Education Club
- Council for Exceptional Children
- Council of Independent Organizations (C.I.O.)
- Dance Marathon
- Data Processing Management Club
- Delta Sigma Theta Sorority, Inc
- Determined Educated Sisters Taking Initiative N Encouraging Dreams(D.E.S.T.I.N.E.D.)
- DNIMAS Student Association
- Early Childhood Education Club
- Eboni Rage Fashion Society
- Economics Club
- Elements of Style
- English Club
- English and Foreign Languages Major Club
- Elements of Style
- Entertainment Alliance
- Entrepreneurship Club
- Epsilon Tau Sigma
- Family and Consumer Sciences
- Filipino Americans @ Norfolk State
- Finance and Banking Association
- Food Science and Nutrition Club
- French Club
- Freshman Class
- Girls in Science, Engineering and Technology (GISET)
- Genetics Society of Norfolk State University
- Golden Key National Honor Society
- Gospel Choir

Grace Church Ministries

- Graduate Student Association
- Group for Microgravity \& Environmental Biology Strategies for Ecology, Education, Diversity and Sustainability (GMEB-SEEDS)
- Guild of Fine Arts
- Habitat for Humanity
- HBCU's Peace + Love
- Health/Physical Education \& Exercise Science Majors Club
- Health Services Management Association
- History Club
- Honda Campus All-Star Challenge
- Honor Society of Nursing
- Honors College Student Association
- Hotel, Restaurant and Institutional Management Club
- Industrial Education Technology Club
- Institute of Electrical and Electronic Engineers
- Interdisciplinary Studies Student Association
- International Food Service Executive Association
- International Student Organization
- International Technology Education Collegiate Association
- Intervarsity Christian Fellowship
- Iota Phi Theta Fraternity, Inc.
- James W. Howell Book Club
- Junior Class
- Kappa Alpha Psi Fraternity, Inc.
- Kappa Delta Epsilon
- Kappa Kappa Psi Fraternity, Inc.
- Kappa Omicron Nu
- Kappa Omicron Tau Society
- Ladies and Gentlemen of Technology
- Leading the Education of Gay and Straight Individuals (LEGASI)
- League of Extraordinary Men
- The League of Extraordinary Women
- The League of Gamers Inspiring Culture (L.O.G.I.C.)
- Lyman B. Brooks Debating Society
- Mass Communications Student Association
- Master Social Work Graduate Student Organization
- Material Advantage (ACerS-ASM-TMS)
- Materials Research Society Mathematics Club
- Minority Association of Pre-Health Students
- Music Educators National Conference
- National Association for the Advancement of Colored People (NAACP)
- National Association of Black Accountants (NABA)
- National Association of Blacks in Criminal Justice
- National Broadcasting Society
- National Council of Negro Women
- National Institutes of Science
- National Pan-Hellenic Council
- National Society of Black Student Engineers
- National Society of Minorities in Hospitality
- National Society of Pershing Angels Sorority, Inc.
- National Society of Pershing Rifles Fraternity, Inc.
- National Student Nurses Association
- Norfolk Review (formally The Rhetorician)
- NSU Dance Theatre
- NSU Theatre Company
- Nursing Honor Society
- Nutrition Club (formerly Food Science and Nutrition Club)
- Omega Psi Phi Fraternity, Inc.
- Online Student Organization
- Optical Society of America (NSU Student Chapter)
- Order of Omega
- Organization of International Black Unity
- Phi Alpha Delta Law Fraternity International
- Phi Alpha Theta
- Phi Beta Delta Honor Society for International Scholars
- Phi Beta Lambda
- Phi Alpha Delta Law Fraternity International
- Phi Alpha Theta
- Phi Beta Delta Honor Society for International Scholars
- Phi Beta Lambda
- Phi Beta Sigma Fraternity, Inc.
- Phi Delta Psi Fraternity, Inc.
- Phi Mu Alpha Sinfonia of America, Inc.
- Physical Education and Exercise Science Club
- Physics and Engineering Club
- Pi Gamma Psi Fraternity, Inc.
- Pi Sigma Alpha Honor Society
- Pi Sigma Epsilon Fraternity, Inc. (formerly American Marketing Club)
- Political Science Association
- Pre-Alumni Club
- Pre-Medical Society
- Psi Chi (The International Honor Society in Psychology)
- Psychology Club
- Public Relations Student Society of America
- Resident Hall Association
- SDX
- Senior Class
- Sigma Alpha Iota International Music Fraternity
- Sigma Tau Delta International English Honor Society
- Sister Circle
- Society for the Advancement of Management
- Society of Manufacturing Engineers
- Society of Physics Students
- Society of Women Engineers
- Sociology Club
- Sophomore Class
- Spanish Club
- Spartan Alpha Tau
- Spartan Cavalry
- Spartan Epidemik
- Spartan Generals
- Spartan Legion Marching Band
- Student Activities Board
- Student Affiliate of the American Chemical Society
- Student Ambassadors
- Student Association of Music
- Student Athlete Advisory Committee
- Student Government Association
- Student National Technical Association
- Student Nurse Association
- Student Virginia Education Association
- Students in Free Enterprise
- Students Standing 4 Sickle-Cell
- Students Taking Action Now: Darfur(S.T.A.N.D.)
- Swim Club
- Taekwondo Club
- Tau Beta Sigma National Honor Band Sorority, Inc.
- Technology Education Collegiate Association
- Teacher PREP Student Support Services Program
- The Diplomats' Circle
- Thurgood Marshall Pre-Law Club
- Upsilon Phi Delta Honor Society
- Urban Control Entertainment Crew
- University Dance Theater
- University Players
- Veterans Club
- Virginia 21
- Virginia Family and Consumer Sciences
- Vocational Industrial Clubs of America
- Wesley Westminster Club
- Whitney Young Social Work Club
- World Changers
- Young Democrats
- Young Life Multicultural
- Young Republicans
- Zeta Phi Beta Sorority, Inc


## Student Publications

1. Spartan Echo Newspaper
2. Spartan Reflections Yearbook
3. The Intramural Program

## 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, the program promotes:

1. Better health through exercise,
2. Social interaction and the development of friendships,
3. Sportsmanship of the highest order, and
4. Important values developed through team spirit and cooperation.

The list of competitive intramural activities includes tennis, coeducational volleyball, men's and women's basketball, flag football, softball, billiards, recreational swimming, bowling, roller skating, and ice skating. Students who do not ordinarily take part in sports are encouraged to participate in and enjoy some type of physical activity. The skills acquired in the intramural program will encourage future sports participation and healthy habits that will last a lifetime.

## Student Government Association

Students are invited to help guide the direction of the University through membership in the Student Government Association (SGA). The purpose of the SGA is to develop a cooperative spirit among students; to promote self-development through personal expression, communication, 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.

## Campus Program Disclaimer

University organizations frequently invite speakers and performers to campus. The views and opinions of these guests do not necessarily represent those of the University or the sponsoring organization.

## Military Services and Veterans Affairs

Student Services Center, Suite 110
(757) 823-2586

The Office of Military Services and Veterans Affairs (MSVA) provides support and assistance to active duty military, reservists, Veterans and family seeking to complete their education from admission through graduation. MSVA also provides counseling to students using tuition assistance and Department of Veterans Affairs (VA) education benefits. The VA Certifying Official for Norfolk State University assists students with Education Plans and serves as a liaison between the University and the VA, providing information on university procedures and resolving problems regarding eligibility and payment of VA benefits. MSVA also provides information about Virginia State Veterans benefits, including the Virginia Military Survivors and Dependents Education Program.

Each semester, students using VA education benefits must report their enrollment to MSVA by completing the Veterans Enrollment Reporting Form. New students who are planning to use VA benefits must report to MSVA before enrolling. Students using VA benefits must immediately inform MSVA if they add, drop, audit, stop attending, have a class cancelled, withdraw or are withdrawn from class(es) or the University, are unable to attend classes, or make any changes to their enrollment

Educational assistance is available for U.S. military Veterans and members of the National Guard and Selected Reserve. Dependents of Veterans in certain categories may be eligible for benefits. In all instances, the VA determines eligibility. The VA sends monthly payments directly to the student following verification of enrollment each semester. Receipt of VA benefits may have an impact on levels of federal and state financial aid for which a student may be eligible; therefore inquiries regarding financial aid eligibility should be directed to the Norfolk State University Office of Financial Aid. Norfolk State University is authorized to receive tuition payments for Veterans attending school under the Veterans Readiness and Employment Program. For information on the
program and eligibility requirements, Veterans should contact VA at 1-800-827-1000. The University also accepts tuition waivers under the Virginia Military Survivors and Dependents Education Program.

## VA Delayed Payment Compliance Addendum

Norfolk State University adheres to the requirements of 38 USC 3679(e). Norfolk State University will not impose any penalties on students entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 G1 Bill benefits while awaiting payments from the Department of Veterans Affairs (VA).

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

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

Norfolk State University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33.

## Grievance Policy

The Virginia State Approving Agency (SAA), is the approving authority of education and training programs for Virginia. This office investigates complaints of GI Bill beneficiaries. While most complaints should initially follow the school grievance policy, if the situation cannot be resolved at the school, the beneficiary should contact our office via email saa@dvs.virginia.gov

## U.S. Code, 38 U.S.C. 3679(c). Veterans Access, Choice, and Accountability Act of 2014

## Official School Catalog Addendum

I certify the current policy is true and correct:
The following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill - Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38 United States Code, who lives in the Commonwealth of Virginia wh1le attending a school located in the Commonwealth of Virginia (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more
Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her final State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more
Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 33I I(b)(9)) who lives in the Commonwealth of Virginia while attending a school located in the Commonwealth of Virginia (regardless of his/her final State of residence) and enrolls in the school within three years of the Service
member's death in the line of duty following a period of active duty service of 90 days or more.

- Anyone described above remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same institution. Therefore, the described person must be enrolled in the institution and use educational benefits under Chapters 30, 31, 33 or 35 of Title 38, United States Code.

Authorized Official to Make Revisions to the Catalog: Dr. DoVeanna Fulton
Title: Provost and Vice President for Academic Affairs

## Division of University Advancement

Mr. Clifford Porter

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 the institution's 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, and the L. Douglas Wilder Performing Arts Center. The NSU Foundation, Inc. is a separate entity that also advances and supports the University's mission by soliciting, receiving, investing, and administering gift resources for the University. Many need-based scholarships are administered through the NSU Foundation.

## ADMISSIONS

Mr. Dominique N. Harrison
Director of Recruitment and Admissions
Phone: (757) 823-9514
Fax: (757) 823-2078
Email: dnharrison@nsu.edu (admissions@nsu.edu)
http://www.nsu.edu/admissions/

## General Admissions Information

Through exemplary teaching, scholarship, and outreach Norfolk State University transforms lives and communities by empowering individuals to maximize their potential, creating life-long learners equipped to be engaged leaders and productive citizens.

Norfolk State University seeks to admit in-state and out-of-state applicants whose combination of academic preparation, aptitude, achievements, and motivation predict a reasonable probability of success in one or more of the University's academic programs.

NSU does not discriminate based on ethnicity, race, gender, age, disability or religious beliefs. The Office of Undergraduate Admissions evaluates applicants based upon their individual potential for success at NSU and their perceived potential contribution to enhancing university performance against its goals and objectives.

## Undergraduate Admissions Criteria

1. A student who earns at least a 2.3 (weighted) high school grade point average and a minimum test score of an 880 SAT or 17 ACT is eligible for consideration of admissions. Students who have demonstrated the greatest probability of success will be given priority in the selection of the first year class.
(Norfolk State will be test-optional for first-year applicants for the 2022-2023 admissions cycle).
2. The applicant should have completed a minimum total of 22 units distributed as follows:

| Code $\quad$ Title | Credits |
| :--- | ---: |
| English | 4 |
| Mathematics ** (Algebra I, Geometry, Algebra II (required) | 3 |
| Science | 3 |
| History and Social Sciences | 3 |
| Health and Physical Education | 2 |
| Electives | $\mathbf{1}$ |
| Fine Arts or Practical Arts | 6 |
| Total Credits | $\mathbf{2 2}$ |

3. Students with a high school equivalency diploma will be considered upon successful completion of the General Education Development (GED) test with a minimum score of 530. GED graduates may be subject to the requirements outlined above. The University is interested in the quality of the applicant's academic preparation and indicators of overall promise as a student.
** We strongly encourage students to take at least one Math course beyond Algebra II.

## Admissions Priority Deadline

The priority application date for fall undergraduate admission is May $1^{\text {st }}$. October $1^{\text {st }}$ is the priority date for spring.

## Applying as a First-Time Freshman

When applying for admission as a freshman, the applicant must provide the following:

1. An application completed in full and a non-refundable application fee of $\$ 25$.
2. Applicants must submit a copy of their high school transcript, SAT and/or ACT scores, and any other requested documentation.
3. Applicants should submit official college transcript(s) if any college coursework has been attempted.
4. An official report of test results issued by the General Education Development (GED) testing center, if applicable.

## Applying as a Transfer Student

When applying for admission as a transfer student, the applicant must provide the following:

1. An application completed in full and a non-refundable application fee of \$25.
2. Official transcripts from all colleges attended. Transfer students must be in good standing at the last school attended and must have a minimum cumulative grade point average of 2.0. Information about transfer credit is provided in the next section.
3. High school transcripts, if fewer than 12 semester hours are transferrable.
4. SAT/ACT scores, if applicant is under the age of 21 and fewer than 12 semester hours are transferred.

## Guaranteed Admission

Students who have completed an associate's degree and are transferring from a Virginia community college to Norfolk State University may be granted junior status. For a complete description of the agreement, please visit the NSU website.

## Transfer Credit

Transfer credit is acceptable for coursework with a grade of "C" or better 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 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. Two copies of the Certificate of Advanced Standing (CAS) will be generated for all accepted transfer students. The CAS must be submitted to the academic advisor for review and approval during the transfer orientation session. 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 (AP)

Students who attain a score of 3 or higher on the Advanced Placement Examinations administered by the College 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 high school counselors and teachers. All AP scores must be sent to the Office of Admissions prior to enrollment.
2. College Level Examination Program (CLEP)

Students who attain satisfactory scores on the Subject Examinations College Level Examination Program (CLEP) under the auspices of the College Entrance Examination Board are eligible to receive course credit on the basis of such tests. However, the CLEP examination must be completed prior to or during enrollment at Norfolk State. Academic advisors should be consulted to determine whether credits can be applied to 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 were administered CLEP through the DANTES program must have CLEP scores reported directly to the University from DANTES.)

Selected CLEP Subject Examinations are offered at nationwide test centers on a monthly basis. CLEP registration information may be obtained from the NSU website.
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 credit through ACT PEP. These examinations are offered at test centers throughout the nation. For more information, contact the Department of Nursing at (757) 823-9013.

## 4. Credit for Military Service

Honorably discharged veterans of the United States Armed Forces may be granted credit for military science and certain courses in health and physical education upon presentation of the Report of Transfer or Discharge (DD 214) to the Admissions Office. These forms should be submitted prior to the first day of enrollment.
5. International Baccalaureate Exams

Students who attain a score of 4 or higher 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.

## Applying as an International Student

When applying for admission as an international forwarded directly from the College Board to the student, the applicant must provide the following:

- An application completed in full and a non-refundable application fee of $\$ 25$, payable in U.S. funds, or an official fee waiver.
- Official or certified copies of all academic work and examination results in native language and in English. Evaluated transcripts must be received directly from a NACES approved organization (www.naces.org).
- Proof of English language proficiency for non-native English speakers. Evaluated transcripts must be received directly from a NACES (https://www.naces.org/) approved organization.
- SAT I or ACT scores for undergraduate applicants under the age of 21. Two letters of recommendation.
- Financial documents, including notarized affidavit of support, student certification form, and bank statements in US language and currency.

Additional documents may be required.
Due to the length of time required to obtain U.S. visas, applications for admission must be received 4 months prior to the semester applicants wish to enroll. Contact the Office of Admissions for detailed application information and instructions.

## Non-Degree Admission

Complete the undergraduate application and submit with the $\$ 25$ non-refundable application fee. Students on academic or disciplinary suspension are ineligible to apply as a non-degree-seeking student. Applicants should be prepared to present official credentials upon request. Financial aid is not available for non-degree students except for those seeking teacher certification.

Applicants who were denied admissions as a degree-seeking student may not enroll as a non-degree student during the same academic year. Courses taken as a Non-degree students will not count towards admissions to the university. Non-degree seeking students may take no more than 29 semester hours.

Teacher Certification applicants must receive approval from the department, must hold a four year degree from an accredited institution, and must provide that transcript to the Office of Transfer Admissions and Services.

## Second Degree

Students who have completed a bachelor's degree at NSU and wish to pursue another bachelor's degree in another field of study should apply as a Second Degree student.

Second degree applicants are those who have earned a bachelor's degree from an accredited 4 -year institution and are seeking an additional bachelor's degree at NSU. They should apply as a transfer student and must provide a copy of the transcript from their degree granting institution to the Office of Transfer Admissions and Services.

## Special Programs:

## Admission to the Nursing Program

Admission to the programs within the Department of Nursing is competitive and based on criteria that include completion of high school or college prerequisites, demonstrated ability in mathematics and the natural sciences, competitive grade point average in previous academic work, and other requirements as specified in literature that may be obtained directly from the Department of Nursing or at http:// www.nsu.edu. (http://www.nsu.edu/nursing/)

## Partnership for Academic and Student Success (PASSport)

Norfolk State University and several Virginia Community Colleges have created The Partnership for Academic and Student Success (PASSport) to assist students who wish to attend NSU but need additional academic preparation prior to engaging in collegiate study. The purpose of the program is to provide access and support to promising students who do not initially qualify for enrollment at NSU. Please contact the Office of Transfer Admissions and Services at (757) 451-7745 for additional information regarding the program.

## Readmission

Any former undergraduate who has not attended Norfolk State University for two or more spring or fall terms must complete an undergraduate
readmission application form, students may re-apply at www.nsu.edu/ registrar (http://www.nsu.edu/About/Administrative-Offices-Services/ Registrar/Readmission-Reclamation/). 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 student is applying to guarantee review.

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.

## Financial Aid

The purpose of Norfolk State University's financial aid program is to provide financial resources to eligible students who, without such aid, would be unable to attend the University. Aid is awarded based on financial need and/or merit. Types of aid include scholarships, grants, loans, and student employment.

The University offers several awards each year to eligible new and returning students. Some of these awards are available only to Virginia residents while others are awarded without regard to state residency.

Generally, students must be enrolled at least half-time, matriculating in a degree-seeking program or teacher certification, meet satisfactory academic standards, and meet the eligibility requirements of the award. However, certain programs require a student to maintain a full-time status, and certain programs award assistance to less than half-time students.

An entering student must be accepted for admission to the University prior to receiving a financial aid award offer. Award notifications are sent via mail for new students and MyNSU (https://fs.nsu.edu/adfs/ls/? wa=wsignin1.0\&wtrealm=urn\%3amy.nsu.edu\%3a443\&wctx=https\%3a\%2f \%2fmy.nsu.edu\%2f_layouts\%2f15\%2fAuthenticate.aspx\%3fSource\%3d \%252F\&wreply=https\%3a\%2f\%2fmy.nsu.edu\%2f_trust\%2fdefault.aspx) for returning students beginning in late February to early March of each award year.

The information about financial aid contained in this catalog is subject to change or deletion as circumstances warrant. For more information about financial aid, visit the Financial Aid webpage (https:// www.nsu.edu/Admissions-Aid/Apply-to-NSU/Tuition-and-Financial-Aid/ Types-of-Aid/Financial-Aid/)

## Applying for Financial Aid

The most important step in the financial aid process is to apply using the Free Application for Federal Student Aid (FAFSA). This form can be completed and submitted online via studentaid.gov (https:// studentaid.gov/h/apply-for-aid/fafsa/) and can be completed as early as October 1.

The NSU priority deadline for completing the FAFSA is March 15. Financial aid is awarded on an annual basis. Students must complete the FAFSA each year to be considered for federal, state, and/or various institutional aid types. Students must also continue to meet eligibility criteria.

The U. S. Department of Education will provide the applicant with a Student Aid Report (SAR). NSU will receive an Institutional Student Information Record (ISIR) if the student indicated NSU's Federal School Code (003765) on the FAFSA. These reports will include the student's Expected Family Contribution (EFC). The EFC is calculated using a standard formula established by the U.S. Department of Education and is used as a measure of a family's financial ability to contribute to educational expenses. The Financial Aid Office will use this number to construct a financial aid package.

The U.S. Department of Education and/or NSU may select students for a process called verification. Students selected for verification must provide supporting documentation prior to being awarded financial. Documentation may include, but is not limited to, number in household/ college verification, dependency status, untaxable income such as pension/annuities and IRA deductions, and other documents to resolve
any discrepancies reported by the U.S. Department of Education. Students who are selected for verification will be notified by the Financial Aid Office via letter, email and/or the "Missing Documents" section of the Financial Aid MyNSU (https://fs.nsu.edu/adfs/Is/? wa=wsignin1.0\&wtrealm=urn\%3amy.nsu.edu\%3a443\&wctx=https\%3a\%2f \%2fmy.nsu.edu\%2f_layouts\%2f15\%2fAuthenticate.aspx\%3fSource\%3d \%252F\&wreply=https\%3a\%2f\%2fmy.nsu.edu\%2f_trust\%2fdefault.aspx) portal. To prevent delays in processing, promptly provide any additional documentation that is requested.

## Enrollment Status

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, cost of attendance and aid may be pro-rated.

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

| Credit Hours | Undergraduate | Graduate |
| :--- | :--- | :--- |
| 12 or more | Full-Time | Full-Time |
| $9-11$ | Three-Quarters | Full-Time |
| $6-8$ | Half-Time | Half-Time |
| $1-5$ | Less than Half-Time | Less than Half-Time |

## Cost of Attendance

Each year, the Financial Aid Office provides an estimated cost of attendance for determining financial aid. The financial aid cost of attendance budget is based upon tuition and fees, as approved by the Board of Visitors, an average cost of room and board (meals), and an estimated cost for books and supplies, transportation, and miscellaneous expenses related to attending school.

## Notification of Awards

Incoming freshmen are notified via U.S. mail and e-mail of their financial aid offer. Current students should check for award information online via MyNSU (https://fs.nsu.edu/adfs/ls/?wa=wsignin1.0\&wtrealm=urn \%3amy.nsu.edu\%3a443\&wctx=https\%3a\%2f\%2fmy.nsu.edu\%2f_layouts \%2f15\%2fAuthenticate.aspx\%3fSource\%3d\%252F\&wreply=https\%3a $\% 2 f \% 2 f m y$.nsu.edu\%2f_trust\%2fdefault.aspx). In addition, Financial Aid sends various correspondences throughout the academic year to the student's NSU email address.

## Grants

## Federal Pell Grant

Federal Pell Grants are available to undergraduate students only and are administered by the Financial Aid Office. Eligibility is determined based on a Pell Grant chart that is published by the U.S. Department of Education.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grants (FSEOG) is awarded to students who have exceptional financial need (students with a 0 EFC ) and is awarded to undergraduate students only. FSEOG is awarded to the neediest Pell eligible students.

## Teacher Education Assistance for College and Higher Education (TEACH) Grant

The Teacher Education Assistance for College and Higher Education Grant (TEACH) is available to undergraduate and graduate students who are taking course work that is necessary to begin a career in teaching. For more information on the TEACH Grant program, students may visit the website: https://studentaid.gov/teach-grant-program. (https:// studentaid.gov/teach-grant-program/)

Virginia Guaranteed Assistance Program (VGAP)
The Virginia Guaranteed Assistance Program (VGAP) is available to undergraduate Virginia students. Below are the VGAP criteria:

## Entering Freshman

- Must be an undergraduate student admitted in a degree-seeking program
- Must be a Virginia resident
- Must have a 2.5 or higher for entering freshman
- Must enroll as a full-time student (12 credit hours or more)


## VGAP Renewal

- Maintain a cumulative grade point average (GPA) of a 2.0 or higher
- Maintain full-time enrollment
- Advance to the next grade level or complete at least 30 credit hours each year


## Virginia Commonwealth Award

The Virginia Commonwealth Award may be offered to Virginia and non-Virginia residents; undergraduate or graduate. Below are the requirements for the undergraduate Commonwealth Award:

- Must be a U.S. citizen/Virginia resident
- Must be enrolled in a degree-seeking program
- Must maintain satisfactory academic progress
- Must be enrolled at least 6 hours


## Scholarships

While every attempt is made to meet a student's financial need, funds are limited. Students may require additional funds to cover their expenses. Students who request additional funds may wish to first consider applying for institutional and external scholarships.

Institutional Scholarships - Institutional scholarships are offered through various departments as well as via the AwardSpring (https:// nsuscholarships.awardspring.com/) portal on the Financial Aid webpage at https://www.nsu.edu/Admissions-Aid/Apply-to-NSU/Tuition-and-Financial-Aid/Types-of-Aid/Financial-Aid (https://www.nsu.edu/ Admissions-Aid/Apply-to-NSU/Tuition-and-Financial-Aid/Types-of-Aid/ Financial-Aid/).

## Loans (http://www.nsu.edu/financialaid/ scholarships/)

## William D. Ford Federal Direct Loan

Undergraduate and graduate students may qualify for the Federal William D. Ford Direct Student Loan programs. There are two major types of Federal Direct Loans: Subsidized and Unsubsidized.

Subsidized Federal Direct Loans provide low interest rates and are available to students who have financial need. A credit check is not required to receive these loans. The federal government pays the interest on these loans while the student is enrolled in at least six (6) credit hours. Repayment of Direct Student Loans begin six (6) months after the student ceases to be enrolled in at least six (6) credit hours, withdraws from the University (officially or unofficially), or graduates from the University. Students must maintain satisfactory academic progress (SAP). Freshmen may borrow up to $\$ 3500$, Sophomores - $\$ 4500$, Juniors and Seniors - $\$ 5500$ in the Ford Subsidized Direct Loan and an additional $\$ 2000$ in the Ford Unsubsidized Loan (as a dependent student). Independent students may borrow up to $\$ 4000$ as a junior and $\$ 5000$ as a senior in the Ford Unsubsidized Loan. The maximum aggregate Ford Subsidized Loan amount as an undergraduate is $\$ 23,000$. In combination of the Ford Subsidized and Unsubsidized Loans, an undergraduate student may borrow up to $\$ 31,000$ as a dependent student and $\$ 57,500$ as an independent student.

Unsubsidized Federal Direct Loans are loans in which the student is responsible for the interest, which may be paid while the student is in school or accrued and then added to the principal balance when the student enters repayment. Repayment begins six (6) months after the student is no longer enrolled in school at least half-time.

It is important to note that students are awarded Federal Ford Direct Subsidized and Unsubsidized loans as a part of the financial aid award packet. Students are required to sign the Master Promissory Note (MPN) and complete Loan Entrance Counseling at the point that the initial award is offered. This process does not require renewal on an annual basis.

In addition, at the point in which the student graduates, withdraws from the University (officially or unofficially) or fails to return, the student must complete loan exit counseling.

The MPN and the loan entrance/exit counseling information can be found via www.studentaid.gov.

## Federal Direct Parent PLUS \& Graduate PLUS

Parents of dependent students may opt to apply for the Parent Loan for Undergraduate Student (PLUS). Graduate students may also opt to apply for the Graduate PLUS loan. Both types of loans require a credit check, a Master Promissory Note, Loan Entrance Counseling and in some cases, Credit Counseling. Parents and graduate students may apply for these loans via www.studentaid.gov (http://www.studentaid.gov/).

## Student Employment Federal and Institutional Work Study

Work-Study provides eligible students another source of financial aid. Work-study programs allow students to gain valuable work experience and networking opportunities. Eligible students are awarded either federal, state or institutional work-study. Institutional Work-Study excludes employment in certain departments, such as Athletics, Housing and Residence Life, Student Activities, Parking, Fitness Center, and Band. Eligible Work-Study students may also work in community service jobs. Students awarded work-study can view job announcements via the web at Work Study (http://www.nsu.edu/work-study/) page. A work-study award does not reduce a student's direct charges (i.e., tuition/fees, room/ board, or other charges).

## Satisfactory Adademic Progress (SAP) Policy

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, state and institutional grants, scholarships, employment, and loan programs. Students must meet minimum SAP standards to receive and to maintain eligibility for financial aid. The SAP standards apply to all students in degree seeking programs of study who wish to be considered for financial aid. SAP is a qualitative (GPA) as well as a quantitative (pace) measurement of courses attempted versus courses completed.

Academic Level Requirements - A student's must completed hours must equal $67 \%$ of hours attempted to meet SAP standards. (For example: a student must pass 11 credit hours out of 15 credit hours attempted). Students must not exceed $150 \%$ of attempted credit hours required to complete the program of study. Students must maintain a certain cumulative grade point average level. Failure to maintain the minimum cumulative grade point average, not completing at least $67 \%$ of hours attempted, and/or exceeding $150 \%$ of attempted coursework in the student's program of study will constitute not meeting SAP standards The minimum grade point average for each classification level is indicated below:

| Academic | Total Credit Hours <br> Classification Level | Cumulative Grade Point <br> Average |
| :--- | :--- | :--- |
| Freshmen | Less than 30 | 1.7 or higher |
| Sophomores | $30-59$ credit hours | 1.8 or higher |
| Juniors | $60-89$ credit hours | 2.0 or higher |
| Seniors | 90 or more credit hours | 2.0 or higher |

These minimum standards are required in order to be considered for all federal, state, or institutional financial assistance.

## The Appeal Process

To appeal a denial of financial aid, the student may submit the SAP Appeal Application along with all supporting documentation and the SAP Academic Plan. The SAP Appeal Application can be obtained via Forms | Financial Aid | Norfolk State University - Norfolk State University (nsu.edu) (https://www.nsu.edu/financial-aid/forms/).

## In Person:

Financial Aid Appeals Committee
Student Services Center, Suite 211
Via Mail:
Financial Aid Appeals Committee
Norfolk State University
Student Services Center, Suite 211
700 Park Avenue
Norfolk, VA 23504
Via Fax: (757) 823-9059
Include the student's name and ID number on all documents. The appeals deadline is one (1) month prior to the start of the term. The Financial Aid Appeals Committee will notify students of the appeals decision via their official NSU e-mail address and regular mail.

## Withdrawal and Return of Title IV Funds

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing $60 \%$ of a semester. Title IV funds include Pell, FSEOG, Direct Subsidized, Direct Unsubsidized, and PLUS loans. In addition, certain State aid programs may require recalculation of eligibility (i.e., the Virginia Commonwealth and VGAP awards).

If a student leaves the University prior to completing $60 \%$ of a semester, the Financial Aid Office recalculates eligibility for Title IV Funds based on the percent of earned aid using the following Federal Return of Title IV Funds formula: Percent of aid earned = the number of days completed up to the withdrawal date divided by the total number of days in the semester. Any break of five (5) consecutive days or more is not counted as part of the days. The University may be required to return a portion of the funds, and the student may be required to return a portion of the funds. Keep in mind that when federal and/or state aid is returned, the student may owe a balance to the University. If this is the case, the student should contact the Student Accounts Office to make financial arrangements to pay the outstanding balance.

## Student Refunds

- 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. The refund process will begin approximately seven working days after the last date of class cancellation. Notifications will be sent to students via their NSU email accounts one refunds have been processed.
- Students may sign up to receive refunds via direct deposit to a designated bank account. Banking information can be provided on MyNSU (http://www.nsu.edu/mynsu/) under Spartan Self Service.


## Tuition Appeal

Norfolk State University will promptly refund tuition and/or cancel a financial charge from a student's account provided that the student meets the requirements of the University's policy on tuition appeals and submit 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, Student Services Building, Suite 212
700 Park Avenue,
Norfolk, Virginia 23504.
For more information on the tuition appeal process or on obtaining an appeal form, please contact the Office of the Registrar at (757) 823-8229.

## Residence Hall Financial Information Residential Fees

All students who plan to live on campus must pay a non-refundable housing deposit of $\$ 300.00$ by the deadline date, (May 1 st for fall entry or November 1st for spring entry) to reserve on-campus housing. Only applications accompanied by deposits will be considered. No bed spaces are guaranteed after the deadline dates.

Upon receipt of a bill from NSU, the entire room and board balance must be paid in full or payment arrangements made with the Office of Student Accounts by the respective May 1st/November 1st deadline date. To inquire about individual accounts, students should contact the Office of Student Financial Services at (757) 823-8381.

Students are required to occupy the assigned room on or before the first day of classes. Failure to do so could result in the loss of on-campus housing

## Damage Deposit

Students who desire to live in the residence facilities will be required to pay a non-refundable residential room deposit of $\$ 300$.

## 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 a 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 all financial obligations to the University are satisfied.

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

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


## Residence Hall Withdrawal Procedures

Contract Cancellation and Penalties: Neither voluntary withdrawal nor eviction from the residence halls will relieve the student of financial liability for the amount payable under this contract in addition to any and all collection charges he/she may incur.

Students who withdraw from the University and/or an assigned room must terminate their University Housing Contract by completing the Contract Cancellation Form. Upon withdrawal from University housing during either the Fall or Spring semester, all room and meal plan fees will be assessed on a semester basis as follows:

| Withdrawal/Drop Period | Refund to Student |
| :--- | :--- |
| Before first day of class | $100 \%$ Room \& Board Prorated |
| First week of class | based on days occupied |
| Second week of class | $75 \%$ Room and Board |
| Third week of class | $0 \%$ |

Failure to officially terminate the contract in the prescribed manner may result in additional fees and/or charges, including but not limited to moving and/or storage charges. NSU is not responsible for any items left and/or stored in any residential facility upon move-out.

## Tuition and Fees

## Virginia In-State Tuition Guidelines

The following guidelines outline eligibility information for obtaining instate tuition rates in the Commonwealth of Virginia. The information is not comprehensive and should only be used as a general reference. Comprehensive Virginia State Code 23.1-502 information can be found at Virginia Law (https://law.lis.virginia.gov/vacode/title23.1/chapter5/ section23.1-502/).

## Domicile

To be eligible for in-state tuition rates, students must be domiciled in Virginia for a minimum of one year preceding the first official day of classes. Domicile is defined as the student's "present, fixed home to where the student returns following temporary absences and to where he or she intends to stay indefinitely." In order to qualify for Virginia in-state tuition, therefore, the student must meet two criteria:

- he or she must currently reside in Virginia, and
- intends to reside in Virginia indefinitely.

As a minor, a student carries his or her parents' domiciliary status. Once the student reaches the age of 24 , he or she is eligible to establish his or her own domicile. However, if a student is over 24 years of age and is financially dependent on his or her parents, the parents must be domiciled in Virginia before the student becomes eligible for in-state tuition benefits.

## Factors Used to Determine Domicile

The University reviews several factors when determining domicile including:

- Residence during the past year prior to the first official day of classes
- State to which income taxes are filed or paid
- Driver's license
- Motor vehicle registration
- Voter registration
- Employment
- Property ownership
- Sources of financial support
- Location of checking or passbook savings account
- Other social or economic ties with Virginia and other states

The presence of any or all of these factors does not unquestionably determine Virginia domicile. These factors, used to support a case for instate tuition benefits, must have been present for one year prior to the first official day of classes.

Residence or physical presence in Virginia attained primarily to attend a college or university does not entitle a student to in-state tuition rates. If a student is 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 residing in the state primarily to attend an institution and does not intend to stay indefinitely. Applications for change of domicile are available through the Office of Admissions website.

All applications and supporting documents must be received in the Office of Admissions prior to the start of the semester for 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 pertinent Virginia statute and guidelines issued by the State Council of Higher Education for Virginia are on reserve in the University Library. For additional information, contact the Office of Admissions at (757) 823-8396 or 1-800-274-1821.

## 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 tuition affordable. For fee information, students should obtain a current "Schedule of Tuition and Fees" or "Registration Information Booklet" booklet from the Registrar's or Admissions Office located in the Student Services Center or online at http://www.nsu.edu the Student Services Center.

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.

The current listing of tuition and fees is located at: https://www.nsu.edu/ tuitionandfees.aspx.

## Senior Citizens' Tuition and Fees

Persons 60 years of age or older who are residents of Virginia and whose taxable income is less than \$23,850 (http://lis.virginia.gov/cgi-bin/ legp604.exe?151+sum+HB2068) may:

- To register for and enroll in courses as a full-time or part-time student for academic credit if such senior citizen had a taxable individual income not exceeding $\$ 15,000 \$ 23,850$ for Virginia income tax purposes for the year preceding the year in which enrollment is sought;
- To register for and audit courses offered for academic credit; and
- To register for and enroll in courses not offered for academic credit in any state institution of higher education in this Commonwealth.

Such senior citizen shall pay no tuition or fees except fees established for the purpose of paying for course materials, such as laboratory fees, but shall be subject to the admission requirements of the institution and a determination by the institution of its ability to offer the course or courses for which the senior citizen registers. The State Council of Higher Education shall establish procedures to ensure that tuition-paying students are accommodated in courses before senior citizens participating in this program are enrolled. However, the state institutions of higher education may make individual exceptions to these procedures when the senior citizen has completed seventy-five percent of the requirements for a degree.

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 or her 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.

## New Student Orientation Fee

All first-time freshman and transfer students must pay a one-time orientation fee of $\$ 100$. For additional information about the enrollment fee, contact the Office of Admissions at (757) 823-2607.

## Housing Department

All students who plan to live on campus must pay a non- refundable housing deposit of $\$ 300.00$ by the deadline date, (May 31 st for fall entry, November 1 st for spring entry) to reserve on-campus housing. Only applications accompanied by deposits will be considered. Applications can be completed online at http://www.nsu.edu/residentiallife (http:// www.nsu.edu/residentiallife/). Housing is not guaranteed after the deadline dates.

## Other Charges

Students enrolled in certain music, physical education, nursing, on-line 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 Registration Information Booklet (http://www.nsu.edu/ registrar/).

## 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 Student Center.

## Bookstore Authorization

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

If awarded financial aid exceeds the total tuition, fees, room, and board, funds may be placed on the Spartan Card for books and supplies. Students must be registered and have a current Spartan Card.

To obtain a book authorization, student should log on to http:// www.nsu.edu/mynsu/.

## Registration Payment Due Dates

All students are expected to pay prior balances and satisfy current tuition, fee, room and board at the time of registration unless payment arrangements are made and/or financial aid is awarded 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.

## Class Cancellation

If satisfactory payment arrangements are not made by established due dates, a student's registration will be cancelled. Students may re-register during the registration period and may be subject to late registration fees.

Note: Students run the risk of not being able to re-register for the same class schedule because the class(es) may have filled and, as a result, may be closed.

## Payment of Tuition and Fees

Students should be prepared to satisfy current tuition, fees, room, and meal costs through direct payment, financial aid, and one of the approved payment plans.

Financial aid is the amount indicated on the Financial Aid award letter.
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, American Express 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 costs. Regardless of the option chosen, make certain payment or satisfactory arrangements are made by the scheduled class cancellation dates published for each semester.

## Option 1

Make payments via Spartan Self Service on MyNSU (http://
www.nsu.edu/mynsu/) using your checking account or debit/credit cards with VISA, MasterCard, American Express or Discover logos.

## Option 2

Pay balances at the Cashier's Office (Cash, Personal Check, Money Order, VISA, MasterCard, American Express or Discover Card). Credit card payments can also be made by calling (757) 823-8545. Checks should be made payable to Norfolk State University and must include the student's name and I.D. number. A $\$ 50$ returned check fee will be assessed on all non-negotiable checks. Payments may be mailed
(No cash please). If mailing payments, please allow one week for delivery time. Mail payments to the following address:

Cashier's Office
Student Services Center, Suite 209
Norfolk State University
700 Park Avenue
Norfolk, Virginia 23504

## Option 3

Pay with a combination of financial aid grants and Ford Direct Loans, Parent Plus Loans, alternative/private loans and cash. Non-university scholarships are not credited toward tuition, fees, room and board charges until funds are received. However, these awards may be counted as expected financial aid when establishing payment plans (see below) and included in the total amount of aid that will be used toward payment of University expenses. A copy of non-university scholarship notification should be sent to the Financial Aid office.

NOTE: Parent Plus and alternative/private loans must be approved by the lender and the loan application and approval must be received in Student Accounts 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 studentaid.gov. (https:// studentaid.gov/h/apply-for-aid/fafsa/) Processing may take up to six weeks.

## Option 4

Pay monthly through a TuitionPay (a processing fee will be charged by TuitionPay) semester or annual payment plan. Benefits of this plan include:

- No burden of a lump sum payment if started early
- Manageable, interest-free installment payments
- Reduced need to borrow
- Tuition Insurance at no extra cost

Plan combined with Financial Aid
TuitionPay payment plan is available to all students who owe a balance. There are two easy ways to enroll in the TuitionPay plan:

- By phone: Call a TuitionPay Education Payment Counselor at (800) 635-0120.
- By Internet: Go to the TuitionPay website and follow instructions to set up a monthly payment plan.


## Tuition pay option is available during Fall and Spring semesters only. No

 tuition pay plans are available for Summer School.
## Option 5

Special payment arrangements can be made for those students receiving tuition and fee assistance from non-University sources (third party sponsorships and scholarships). In such cases, the outside agency must make the payment directly to Norfolk State University within 30 days of the billing date. In order to receive the special arrangements, the student must bring or send a letter of authorization from the granting agency to the Office of Student Accounts, Student Services Center, Suite 209, prior to or at the time of registration.

- Services at (757) 823-8381 for an application and more information.
- Prior balances cannot be put on the CP or NSU Payment Plans.


## Billing

The University sends e-mail statements each semester to students who have an outstanding balance or have had activity on their accounts during the statement period. The statement will show the balance brought forward and detail the activity for the period covered. Statement information is available at MyNSU.

Questions pertaining to billing should be directed to the Student Services Center or at http://www.nsu.edu

## Delinquent Accounts

Students who fail to honor payment arrangements or have balances resulting from incomplete or canceled financial aid will have grades, transcripts, diplomas, certifications, and non-mandatory verifications withheld. Payment in full will be required to release the financial hold.

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.

## ACADEMIC INFORMATION

## The Academic Year

The academic year consists of 30 weeks of instructional time divided into two semesters. The first semester begins in late August and ends before the Christmas holidays; the second semester begins in January and ends in May. See the academic calendars provided in the front of this catalog.

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

An optional summer session is offered and includes two mini terms; a six-week term and a four-week term. It offers significant opportunities for entering freshmen and 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 summer session begins one week after the conclusion of the spring semester.

## The Curriculum

The curriculum is the vehicle through which the University seeks to make its most significant impact upon the lives of students. Developing, implementing, and updating curricula is the responsibility of the faculty and academic administrators. Curricular offerings are described in this catalog for each academic program.

## Course Numbering

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

| Course Number | Course Level |
| :--- | :--- |
| $100-199$ | 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.

## Unit of Instruction

The semester credit hour is the unit of instruction used for computing the amount of work required for assigning credit. 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.

## Major Course of Study

Courses 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.

## 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 the 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. 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.

## General Education Core Program

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 required 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:

- Write and speak logically, clearly, and precisely.
- Read and comprehend written and graphic information.
- Locate, compile, organize, and document information from print and digital sources.
- Understand mathematical and technological thought and conceptualize appropriate logic in problem solving.
- Understand and apply key concepts, principles and processes in the natural and social sciences.
- Demonstrate technological proficiency appropriate to their professional and personal needs.
- Examine, evaluate, and appreciate history's influences on economic, political and social events.
- Understand and appreciate diverse cultures and perspectives.
- Examine and understand the role of personal and responsible citizenship in democratic society.
- Appreciate aesthetics.


## Office of Academic Engagement: Spartan Seminar Series

Norfolk State University has created signature initiatives for student success. The Spartan Seminar Series will serve students into their sophomore year; three total semesters will provide sustained opportunities to onboard and socialize students into the academic culture and expectations of the institution. The three required courses are designed to increase academic performance, persistence, and preparation for success, resulting in students who are acutely aware, distinctively prepared and perpetually affiliated with Norfolk State University. During the first year, freshmen will take Spartan Seminar 101 and 102. Spartan Seminar 201 will follow in the sophomore year.

For more information, please contact the Office of Academic Engagement at (757) 823-9081.

## 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:

- Complete Spartan Seminar Series (SEM 101 Spartan Seminar 101, SEM 102 Spartan Seminar 102 and SEM 201 Spartan Seminar 201) with a minimum grade of C. An exemption approval form is available in the academic departments.
- Complete the General Education Core requirements.
- Have a minimum cumulative grade point average of 2.0.
- Have a minimum of 120 semester hours of credit.
- Meet all requirements of the curriculum leading to the degree for which he or she is a candidate.
- 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.
- Meet core competency requirements.

Exceptions to degree requirements may be made only with prior written approval of the Provost upon recommendation of the Department Head and College/School Dean. Exceptions may not exceed six semester hours of academic credit.

## General Education Requirements for the Baccalaureate Degree

Students entering Norfolk State University seeking the baccalaureate degree are required to take forty (40) semester hours from the general education core curriculum consisting of the following subject areas:

| Code | Title | Credits |
| :---: | :---: | :---: |
| Communications (9 Semester Hours) |  |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| ENG 285 | Public Speaking | 3 |
| Digital, Computer \& Telecommunications (3 Semester Hours) |  |  |
| CSC 150 | Computer Literacy | 3 |
| Health and Physical Education (3 Semester Hours) |  |  |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HED 100 | Personal and Community Health | 2 |
| Humanities (3 Semester Hours) |  |  |
| Select one of the following: |  | 3 |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| Mathematics (3 Semester Hours) |  |  |
| MTH 103 | Mathematics in General Education | 3 |
| Spartan Seminar Series (3 Semester Hours) |  |  |
| SEM 101 | Spartan Seminar 101 | 1 |
| SEM 102 | Spartan Seminar 102 | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| Natural Sciences (7 Semester Hours) |  |  |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| SCI 101L | Physical Science Laboratory | 1 |
| Social Sciences (3 Semester Hours) |  |  |
| Select one of | following: | 3 |


| SOC 101 | Introduction to the Social Sciences |  |
| :--- | :--- | :--- |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| ECN 200 | Basic Principles of Economics |  |
| Cultural Perspectives (6 Semester Hours) |  |  |
| Select two of the following: |  |  |
| ENG 383 | African-American Literature, 1940-PRESENT ${ }^{1}$ |  |
| MUS 234 | African-American Music ${ }^{1}$ | 6 |
| HIS 335 | African-American History ${ }^{1}$ |  |
| HIS 336 | African-American History Since 1865 ${ }^{1}$ |  |
| HRP 320 | African American Health ${ }^{1}$ |  |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT |  |

1 Courses satisfy the University's cultural elective requirement. Departments may require specific courses for their majors.

## Requirements for the Associate Degree

The University awards the associate of science 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 the academic departments and pay the required graduation fee. At least 20 hours of general education core are 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 undergraduate students.

Minimum requirements for the associate degree are 60 semester hours with a cumulative grade point average of 2.00. A minimum grade of "C" or better is required in major courses and in ENG 101 College English I, ENG 102 College English II, and SEM 101 Spartan Seminar 101, SEM 102 Spartan Seminar 102 and SEM 201 Spartan Seminar 201.

## General Education Requirements for the Associate Degree

Norfolk State University offers an associate degree program in Architectural Drafting. Students seeking an associate degree are required to complete general education core requirements appropriate to the degree program. See the associate degree program description and curriculum for more information about specific general education core requirements.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Communications | (6 Semester Hours) |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| Digital, Computer \& Telecommunications (3 Semester Hours) |  |  |
| CSC 150 | Computer Literacy | 3 |
| Health and Physical Education (3 Semester Hours) |  |  |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HED 100 | Personal and Community Health | 2 |
| Natural Sciences |  | 3 |
| PHY 152 | General Physics | 1 |
| PHY 152L | General Physics Laboratory I |  |


| Spartan Seminar Series (3 Semester Hours) |  |  |
| :---: | :---: | :---: |
| SEM 101 | Spartan Seminar 101 | 1 |
| SEM 102 | Spartan Seminar 102 | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| Mathematics (3 Semester Hours) |  |  |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| Social Sciences (3 Semester Hours) |  |  |
| Select one of the following: |  | 3 |
| SOC 101 | Introduction to the Social Sciences |  |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| PSY 210 | Introduction to Psychology |  |
| ECN 200 | Basic Principles of Economics |  |
| Humanities Elective (3 Semester Hours) |  |  |
| Select one of the following: |  | 3 |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| ENG 207 | Introduction to World Literature |  |
| Total Credits |  | 28 |

## 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 departments of the University. It is each student's responsibility to know the standards required and to understand that continued financial aid is dependent upon meeting these standards.

## Undergraduate Academic Standards

Satisfactory academic progress toward degree completion by the number of semester hours completed and by the number of quality points earned. A minimum of 240 quality points and 120 completed 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 academic progress are:

| Attempted Resident Hours | Minimum Resident G.P.A. |
| :--- | :--- |
| $1-29$ | 1.7000 |
| $30-59$ | 1.8000 |
| 60 and above | 2.0000 |

## Classification of Undergraduate Students

| Classification | Description |
| :--- | :--- |
| Freshmen | Students meeting all entrance <br> requirements who have completed <br> $0-29$ semester hours. |
| Sophomores | Students who have completed <br> $30-59$ semester hours. |
| Juniors | Students who have completed <br> $60-89$ <br>  <br> Seniors |
| Students who have completed at <br> Full-Time | least 90 semester hours. |
|  | A student who is registered for a <br> minimum of 12 credit hours during |
| Part-Time | a given semester. |

## 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 grade point average or above may carry additional hours ONLY with appropriate approval by the academic advisor/department chairperson and school dean. A course load in excess of 19 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.

For graduate students, the normal course load for a full-time graduate student is 9 and no more than 15 semester hours. A course load in excess of 15 semester hours must be approved by the dean of the school/college.

## Dean's List and Honor Roll

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 G.P.A. with no "I" (incomplete) or missing grades and no grade less than a 'C'. Eligibility for the Honor Roll requires a term G.P.A. of 3.00-3.49 with no "I" or missing grades.

## Honors Designation

Students who have completed all degree requirements and have met the following criteria at the time degree requirements have been met will earn an honors designation. The following honors categories for baccalaureate graduates are reflected in the printed Commencement Program:

- Summa Cum Laude: cumulative resident G.P.A. 3.7500-4.0000
- Magna Cum Laude: cumulative resident G.P.A. 3.5000-3.7499
- Cum Laude: cumulative resident G.P.A. 3.0000-3.4999

The honors designation will be noted on the official transcript.

## Recognition of Honors at Graduation

Honors designations are based on the degree candidate's academic record the semester prior to Commencement. Degree candidates who have earned an honors designation will be recognized in the commencement program provided the honors designation was earned in the semester immediately preceding the anticipated commencement date. For additional information, see Commencement Participation in the Academic Policies section (p. 53).

## Grade Reports

Effective Spring 2006, grades are available online at MyNSU (http:// www.nsu.edu/mynsu (http://www.nsu.edu/mynsu/)) under the Spartan Self Service tab), grade reports are no longer mailed to students. Anyone needing an official grade report for work or other purposes must complete a Request for Official Final Grade Report in the Office of the Registrar. The grade report will be mailed within 2-3 business days.

Information regarding the grading system is described in the Academic Standards section (p. 49). Information regarding the grade appeal process is described in the Academic Policies section (p.54).

## The Grading System

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

| Grade | Quality Points | Description |
| :--- | :--- | :--- |
| A | 4.0000 |  |
| A- | 3.7000 |  |
| B+ | 3.3000 |  |
| B | 3.0000 |  |


| B- | 2.7000 |  |
| :--- | :--- | :--- |
| C + | 2.3000 |  |
| C | 2.0000 |  |
| C- | 1.7000 |  |
| D+ | 1.3000 |  |
| D | 1.0000 |  |
| D- | 0.7000 | n/a |
| F | 0.0000 | Incomplete Official |
| P $^{1}$ | None | Withdrawal |
| AU $^{2}$ | None | No Grade Reported |
| I | None | Satisfactory |
| W | None | Forgiven |
| NG | None |  |
| S | None | None |

1 Pass/fail grades are not available to graduate students, except in those courses designated for pass/fail credit.
2
Entered by the Registrar.
The grade point average is obtained by dividing the total number of quality points earned by the total number of completed semester hours.

| Example Grade Point Average Calculation |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Total Grade | Credit Hours | Quality Points Total Quality |  |
| HIE 264 | C | 1 | 2.0 | 2.0000 |
| HIE 264L | C+ | 2 | 2.3 | 4.6000 |
| HIE 149L | B- | 2 | 2.7 | 5.4000 |
| ECE 340 | B+ | 3 | 3.3 | 9.9000 |
| FIA 280 | A- | 3 | 3.7 | 11.1000 |
| MUS 301 | D- | 3 | 0.7 | 2.1000 |
| TOTAL |  | $\mathbf{1 4}$ |  | $\mathbf{3 5 . 1 0 0 0}$ |

- Total quality points = semester hours multiplied by quality points
- G.P.A. = Sum of total quality Points divided by total semester hours
- A grade of ' F ' $=0$ completed semester hours

Example: 35.1000 total quality points divided by 14 total semester hours equals 2.5071 G.P.A.

## Removal of Incomplete (I) Grades

The "I" (Incomplete) grade may be used by the instructor during the final grading period when the course requirements have not been met because of illness or some other extenuating circumstance. In order to receive an " 1 " grade, the student must be passing the course and have completed $80 \%$ of all coursework. Except for cases such as internships, student teaching, or final projects that may require more time, students have until the 7th week of the following semester to complete and submit missed assignments as indicated on the Incomplete Contract. If work is not submitted by the due date, the default grade will be entered by the Registrar. If no default grade was submitted, the "I" grade will change to " F " (failure).

No student will be allowed to graduate with an "I" on the record.

## Repeating Courses

A student who received a final grade less than an " $A$ " in a course may repeat the course. The course to be repeated must be taken at Norfolk

State University or the original institution offering the course (i.e., through consortium or cross registration agreement) 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 cumulative G.P.A. 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. Students must pass all courses in the major with a grade of C or higher.

## Standards of Satisfactory Academic Progress

## Undergraduate Students

Students must complete at least $67 \%$ of all courses attempted in order to maintain satisfactory academic progress. Courses that are not considered as "completed," but still count as hours attempted are failed (F) courses, incomplete (I) courses, dropped (D) courses and withdrawn (W) courses. Repeated courses will count toward hours earned if:

- a passing grade was earned, and the course had not been counted previously towards hours earned.


## Academic Classification for Full-Time Undergraduate Students

These minimum standards must be met in order for a student 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. Also, students must not exceed $150 \%$ of the number of credits needed to complete a degree.

## Academic Probation and Suspension

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 by specific financial aid programs. Continued eligibility for financial aid is contingent upon good academic standing at 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 and to understand that continued financial aid is dependent upon meeting these standards:

| Level | Total Credit Hours <br> Earned | Cumulative G.P.A. |
| :--- | :--- | :--- |
| Freshman | Less than 30 | 1.700 or higher |
| Sophomore | $30-59$ | 1.800 or higher |
| Junior | $60-89$ | 2.000 or higher |
| Senior | 90 or more | 2.000 or higher |

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

## 1st Warning

Upon receipt of First Warning Probation Letter, the student must schedule an appointment with the Dr. Patricia Lynch Stith Student Success Center and meet with an academic advisor to:

1. Develop and sign an Academic Performance Contract for the upcoming semester.
2. See advisors for schedule revision if pre-registered or completed early registration. (Students who didn't pre-register for the semester must see advisors to assist with course selection and registration).
3. Enroll in and complete the Study Skills Seminar conducted by the Dr. Patricia Lynch Stith Student Success Center.

## 2nd Warning

Upon receipt of Second Warning Probation Letter, the student must:

1. Complete an Academic Performance Contract
2. See advisor to revise course schedule or assist with course selection and registration
3. Enroll in required Study Skills Seminar course conducted by the Dr. Patricia Lynch Stith Student Success Center, if not taken in the first probation warning.

NOTE: GST 200 is the Study Skills Seminar course
This is a non-credit, 16-week seminar that meets weekly for one hour, designed for students who are on academic probation. The seminar introduces and promotes development of skills necessary to enhance academic success in college. Emphasis is placed on weekly activities to promote utilization of positive study habits. Topics discussed include learning styles, test-taking techniques, study skills, stress management, note-taking skills, critical thinking, reading, and writing skills.

## Suspension

Students who are on probation and do not achieve the required grade point average after two warnings are subject to suspension from the University. A letter of suspension will be issued to the student.

## Appealing Academic Suspension: Policy and Procedures

If a student wishes to appeal a suspension decision, a written letter of appeal must be faxed or mailed to the Office of the Registrar at least one month prior to the first day of class. Any appeals received after this date may be deferred until the following semester. The appeal is submitted to the Suspension Appeals Committee and its decision is final. Notification of the outcome will be provided by the Office of the Registrar.

## Readmission after Restoration of Academic Eligibility

Students suspended from the University for academic reasons must appeal the suspension prior to being re-admitted. It is strongly suggested that students adhere to the following requirements prior to appeal:

- Take courses (minimum: 6 credit hours) during the University's summer session and maintain a G.P.A. of 2.0 or better.
- Leave the University for one or more semesters (which may include one summer) complete a minimum of 6 credit hours of academic work at another college or university, and earn a grade point average of 2.0 or better each semester.


## 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, information literacy, 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. 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.

## 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 students 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 POLICIES

## 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, and 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.

Additional 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.

## Attendance Policies

## 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.

## Class Attendance Policy

The University expects students to attend all classes. While 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 course 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 percent of scheduled class meetings for the semester may receive a grade of $F$ for the course.

Students have the responsibility to confer with instructors regarding all absences or intended absences. If a 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 Dean of Students Office within 48 hours.

Class excuses are issued for legitimate reasons as deemed appropriate by the Dean of Students Office. Such reasons may include but are not
limited to medical reasons, funerals for immediate family, and official University business/activity. Official written documentation may be required. Notes from relatives, friends, etc., are not accepted as "official" documentation for absences. The Dean of Students Office 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 Dean of Students Office, 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.

## 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 a major without approval of the department from which and to which a transfer is made.

## Commencement 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.

Students must resolve deficiencies and/or discrepancies in the academic record with the department heads within prescribed guidelines. Failure to do so may result in deferring graduation.

## Commencement Participation

Candidates for graduation must complete all degree requirements or be currently enrolled in all remaining credits that will complete 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 the semester prior to Commencement.

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

## Continuous Enrollment

Students who withdraw from all courses after the third week of the semester are considered to have been enrolled for the semester. Degreeseeking 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.

## Course Substitutions

Course substitutions allow a department to use an NSU course or transfer course ( C or better grade) to meet a degree requirement when the required course is not being taught within a particular semester or is no longer offered. A request for a course substitution requires approval by the student's advisor, the department head, and the school dean.

Substitution is not to be confused with waiver. Substitution is an option to meet a requirement, while waiver implies exemption. Waivers for requirements in the major are not granted.

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

## General Education Core - 6 Hours

MLS and NCS 111, 112, 211,212 for PED 100 Fundametals of Fitness for Life, HED 100 Personal and Community Health HIS 380 American Military History for HIS 100 History of World Societies I, HIS 101 History of World Societies II, HIS 102 United States History to 1865, HIS 103 United States History Since 1865

## Free Electives - 6 Hours

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

## 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 (G.P.A.).

A minimum of $25 \%$ ( 30 additional semester credit hours) above the minimum hour requirement of the major requiring the most credits is required for a student 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.

## Grade Appeal

The instructor has the responsibility for evaluating coursework and determining grades; however, the student has the right to appeal a grade believed to be in error. The appeal process may involve the following steps and may be resolved at any level:

- The student confers with the instructor involved.
- The student and instructor (preferably together) confer with the chairperson of the department offering the course.
- The student and instructor (preferably together) confer with the dean of the school in which the department is housed.

When the above steps do not resolve the issue, the student may initiate a formal written appeal through the Faculty/Student Grievance Committee to the Provost for its review and recommendation. Appeals should not be taken lightly by either the student or the instructor.

The student is responsible for verifying the accuracy of his or 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.

## Off-Campus Class 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 Provost 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.

## 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.

## 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 are not reported and will remain confidential. Information from the assessment activities will be used by faculty and administrators to improve programs and services.

## 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 by the last day of class. 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 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 all 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:

| Withdrawal Date | University Retains |
| :--- | :--- |
| Before Classes | $\$ 50$ Administrative Fee |
| First Week | $10 \%+\$ 50$ |
| Second Week | $20 \%+\$ 50$ |
| Third Week | $30 \%+\$ 50$ |
| Fourth Week | $40 \%+\$ 50$ |
| Fifth Week | $50 \%+\$ 50$ |
| Sixth Week | $60 \%+\$ 50$ |
| Seventh Week | $70 \%+\$ 50$ |
| Eighth Week | $80 \%+\$ 50$ |
| Ninth Week | $90 \%+\$ 50$ |
| Tenth Week | No Refund |

Funds must be returned to the federal financial aid program if less than 60 percent of the semester is completed. The required order for allocating refunds and repayments is:

- 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.

## Registration Procedures

## Registration

The Registrar is the official custodian of academic records and is responsible for the process of enrolling students in courses, providing registration statements (which include 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. For more information please contact the Office of the Registrar at (757) 823-8229.

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 registration information booklet outlining registration policies and procedures, final examination schedules, and other information pertaining to registration for a given semester or summer school is available in the Office of the Registrar or online at www.nsu.edu/registrar (http://www.nsu.edu/registrar/). Class schedules are available online under Search for Classes using http:// www.nsu.edu/mynsu/. 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 registration information booklet, and other official publications.

First-time freshmen and transfer students 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. Returning students must consult with their advisor and agree upon a schedule of courses in order for the advisor to release the WEBNO hold for online registration using MyNSU (http://www..nsu.edu/mynsu/ (http://www.nsu.edu/mynsu/)).

## Early Registration

Currently enrolled students are encouraged to register in advance (preregister) for the following spring or fall semester. The procedures for preregistration 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.

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.

## 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 the Student Success Center (SSC) for advising and schedule changes. Nonmatriculating students should contact the Dean's Office in the College 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.

## Auditing Courses

Students who desire to attend classes but do not plan to receive credit may audit courses. A grade of AU is 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.

## Change of Name and Address

It is the obligation of the student to notify the Office of the Registrar of any change in name (legal documentation required) or address.

## 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 10 business 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 second floor of the Student Services Center, or by mailing the request to:

## Registrar's Office, Suite 212

Student Services Center
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. The check or money order should be made payable to NSU.

Online requests for transcripts may be placed at www.nsu.edu/registrar (http://www.nsu.edu/registrar/). The cost for online transcript requests is $\$ 5.25$ per copy, and must be paid using a valid credit card. The same processing times apply for online requests.

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

## Release of Student Information

(In accordance with FERPA)
Student records are not available without the student's written consent.
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, enrollment status, degree, honors and awards received, and previous educational agency or institution attended.
"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 government 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.

## Retention and Disposition of Records

The Office of the Registrar adheres to the following disposal schedule as recommended by the Library of Virginia's Records Retention and Disposition Schedule, General Schedule No. 111, College and University Records (effective March 2009).

## ACADEMIC RESOURCES AND SERVICES

Dr. Patricia Lynch Stith Student Success Center (SSC)

Nursing \& General Education Bldg., Suite 100
Phone: (757) 823-8507
Email: ssc@nsu.edu
Website: www.nsu.edu/provost/ssc (https://www.nsu.edu/Academics/ Academic-Resources/PLSSSC/)

## Mission

The Spartan Student Success Center (SSC) supports Norfolk State University's mission of transforming lives and communities by empowering a culturally diverse student population through a comprehensive educational plan that addresses academic engagement, educational commitment, self-efficacy, and campus engagement.

## Goal

To provide a systematic approach designed to improve student achievement, increase retention, and reduce the time to degree completion.

- Foster an open and responsive environment that encourages faculty and students to take an active interest and role in student success.
- Develop in each student the skills, attitudes, and beliefs necessary to foster an understanding of the process of learning to achieve academic, career and life goals.
- Work collaboratively with the campus community to promote student persistence and successful completion of the students' educational goals.
- Assess the effectiveness of the Spartan Success Center and evolve in response to student needs.
- To assist students in becoming more independent, self-confident and efficient learners.


## Child Development Laboratory

James Bowser Building, Room 113-A
(757) 823-8111

The Child Development Laboratory is part of Early Childhood Education program in the School of Education. The laboratory provides training and observation facility for class assignments, research, student teaching and field work. It provides a readiness curriculum for ages 2.5 to 5 years. Hours of operation are 7:30 a.m. to 5:30 p.m. Monday through Friday. For more information contact (757) 823-8111 or (757) 823-9241.

## Community and Outreach Services

Brambleton Community Outreach Center
909 Marshall Avenue
Norfolk, VA 23504
(757) 823-8743

The Brambleton Outreach Center (Center) is Norfolk State University's primary connection with its surrounding neighborhoods. The Center is the point of contact for those neighbors seeking information related to community/public service activities conducted by the university.

The Center is the hub for all university community and public service activities. The goal of the Center is to provide the place where neighbors seek and the university through its students and faculty provide the services that encourage communication, interaction, trust and a sense of community with each other.

## THE WRITING Center

Lyman Beecher Brooks Library
P. (757) 823-2271

E: writingcenter@nsu.edu
The Comprehensive Language Learning Center 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.

## Ernest M. Hodge Center for Entrepreneurship

McDemmond Center for Applied Research (757) 823-2953

The Center provides leadership programs and resources that enable NSU to add value to businesses served while immersing students in the entrepreneurial experience. Through multidisciplinary teams, the Center extends knowledge and technical assistance that strengthen and expand the number and quality of minority- and women-owned, growth-oriented, and technology-driven businesses. Please see the School of Business section of catalog for additional information.

## NSU Testing SERVICES

Wilson Hall, Room 133
P. (757) 823-2504

E: testingcenter@nsu.edu

## Mission Statement

The mission of Testing Services is to provide opportunities for students, faculty, staff, and local residents to transform lives and communities, by providing exemplary services and innovative technologies in the delivery of local, national and professional certification examinations; to support lifelong learning and professional advancement.

- Directions to the Testing Center (http://www.nsu.edu/getattachment/ Campus-Life/Services-Resources/Testing-Site/Norfolk-State-University-Testing-Center-Directions.pdf.aspx?lang=en-US)
- Testing Services Calendar (http://www.nsu.edu/testingservices/ calendar/)


## Services Provided

Testing Services is a member of the National College Testing Association and is dedicated to the promotion of professionalism and quality in the administration of testing services and programs, including issues relating to test administration, test accessibility, test development, test scoring, and assessment.

The Testing Center is equipped with over 40 computers in a quality test environment with state of the art workstations and test security systems. The Testing Center provides admissions testing for prospective students, academic testing to support ongoing assessment of continued student learning and national test administration (http://www.nsu.edu/ testingservices/national-tests/).

## Student Benefits

If you are enrolled at Norfolk State University, test administration fees for Non-NSU university exams are waived. - Student Request Forms (http:// www.nsu.edu/testingservices/student-request-forms/)

## Military Benefits

Norfolk State University Testing Services is a fully funded CLEP test center. The United States government offers funding for all 34 CLEP exams through the Defense Activity for Non-Traditional Education Support (DANTES).

## What to Expect When You Visit the Testing Center

- Outstanding and supportive customer service by certified test administrators and proctors
- A clean, comfortable and quiet test environment that is conducive to optimal test- taker performance
- Collaboration between testing services staff, faculty and administrators to ensure that students receive University and national tests in compliance with educational and professional testing standards

Coordination with the NSU Office of Accessibility Services/International Student Services (O.A.S.I.S.) (http://www.nsu.edu/oasis/) to ensure compliance with Section 504 of the Rehabilitation Act of 1973 and the American's with Disabilities Act. These mandates prohibit discrimination of individuals with disabilities and ensure that students with documented disabilities are afforded reasonable accommodations to have equal access to campus classes, activities, and resources

For more information or to schedule a test appointment please contact Testing Services at (757) 823-2504 or testingcenter@nsu.edu.

## Career Interest Inventories- No Cost

If you are uncertain about your major and would like help in identifying your strongest interests, feel free to take one of the no-cost interest inventories below.

- Career One-stop Interest Assessment (30 items) (https:// www.careeronestop.org/toolkit/careers/interest-assessment.aspx)
- O*NET Interest Profiler (60 items) (https://www.mynextmove.org/ explore/ip/)


## The Center for Applied Research and Public Policy

Brown Memorial Hall, C-142
(757) 823-9575

The Center for Applied Research and Special Projects is a computerbased 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. For more information, please contact Dr . Rudolph Wilson at (757) 823-9575.

## Planetarium

Wood Science Building Room 119
(757) 823-8909

The Norfolk State University 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.

## STARS Tutoring Center

Department of Nursing \& Allied Health, NGE Room 311
(757) 823-2453

The Science and Technology Academicians on the Road to Success (STARS) is a school-wide program that builds on the successes of Norfolk State University's undergraduate Science, Technology, Engineering and Mathematics (STEM) programs.

The STARS Peer Tutoring Program offers free, one-on-one tutoring or group tutoring for students taking courses in: biology, chemistry, computer science, engineering, mathematics, nursing, physics, and technology. Tutoring is provided by graduate and undergraduate peer tutors who have been trained in effective tutoring techniques in accordance with College Reading and Learning Association Guidelines.

## Teacher Education Resource Center (TERECE)

Bozeman Education Building, Room 225
(757) 823-8715

The H.H. Bozeman Integrated Media Resource Center is committed to providing high quality service to teacher education candidates. The center 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. For more information, please contact Dr. Leon Rouson at (757) 823-2260.

## SCHOOL OF BUSINESS

Mr. Glenn Carrington, Dean
Dr. Moncef Belhadjali and Dr. Macki Sissoko, Associate Deans
(757) 823-8920

## The School of Business Mission Statement

"The mission of the School of Business at Norfolk State University is to provide quality education to produce successful, ethical, competitive and innovative leaders for the global environment by focusing on high-quality instruction, research and service."

## Accreditation

Norfolk State University's School of Business is accredited by the Association to Advance Collegiate Schools of Business (https:// www.aacsb.edu/) (AACSB-International). AACSB accreditation represents the highest standard of achievement for business schools worldwide and is the hallmark of excellence in business education.

## Programs of Study

The Bachelor of Science (B.S.) degree is offered in Accountancy and in Business. Within the Business major there are seven concentrations: Business Intelligence \& Data Analytics, Entrepreneurship, Finance, Financial Services, Management, Management Information Systems, and Marketing. The School also administers the B.S. degree in Tourism and Hospitality Management.

## Business Core

Students who pursue a B.S. degree in either Accountancy or Business must complete the following core courses that are listed below. These courses are intended to give the student a fundamental understanding of the essential areas of business management. Students should complete all lower-level (100 and 200-level series) Core courses prior to enrolling in courses numbered 300 or higher.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 175 | Introduction to Business \& Entrepreneurship | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 330 | Business Communication | 3 |
| BUS 270 | Business Statistics | 3 |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |
| BUS 366 | Principles of Marketing | 3 |
| Total Credits |  | 48 |

Admission Requirements
The School of Business uses the same standards for admission as the University. Non-matriculating students may not take courses in the School of Business without the consent of the Associate Deans and Dean.

Students transferring courses to NSU may be granted advanced standing. (See Transfer Credit, below.)

## 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. 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 " C " or higher must be earned in the non-business courses listed below.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| MTH 131 | Pre-Calculus for Business Majors | 3 |
| MTH 132 | Calculus for Business Majors | 3 |
| ENG 285 | Public Speaking | 3 |
| SEM 101 | Spartan Seminar 101 | 3 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| \& SEM 201 | and Spartan Seminar 201 |  |

Total Credits

## Transfer Credit

Credits transferred to Norfolk State University from other AACSBInternational accredited colleges or universities may be accepted as substitutes for equivalent courses in a School of Business curriculum, without restriction. Credits transferred to NSU from colleges or universities not accredited by AACSB may be accepted as substitutes only for those courses determined to be equivalent to lower division courses. Credits transferred to NSU from the Virginia Community College System (VCCS) will be accepted as substitutes for equivalent courses, 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. At least 50 percent of business course credits must be earned at NSU.

## Attendance Policy

All students must attend class in accordance with the NSU 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, among other considerations, their current cumulative grade point average. The following course load limitations are suggested:

| Cumulative G.P.A. | Maximum Hours |
| :--- | :--- |
| Below 2.000 | 12 |
| $2.000-2.490$ | 15 |
| 2.5000 or above | 18 |

## 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 Bank of America, Disney, El-Fayoumy, SM Perkins, Thelma M. Hayes Endowment, Wal-Mart Leadership, Haughton Scholarship fund, and the Holley/Osborne Endowment. Students interested in applying for scholarships may contact the Associate Dean of the School of Business.

## Student Organizations

Various student organizations exist in the School of Business and are designed

1. to develop the competent and visionary business leaders of tomorrow
2. to create student interest in various career opportunities in business and government; and
3. to encourage improvement in scholarship and community/ professional service.

Student organizations include the following

- Pi Sigma Epsilon (Marketing)
- Beta Gamma Sigma (BGS) Honor Society
- Finance and Banking Club
- Association for Information Technology Professionals (AITP)
- National Association of Black Accountants (NABA)
- National Coalition of Black Meeting Planners
- Society for the Advancement of Management (SAM)
- Students in Free Enterprise (SIFE)

School of Business Advisory Council

The School of Business Advisory Council operates as an external group to review policies, procedures, and programs offered by the School of Business. The Council also advises the Dean on strategic issues and promotes the establishment of business and community partnerships.

## Ernest M. Hodge Center for Entrepreneurship

Dr. Sally Sledge, Director
(757) 823-2953

The Ernest M. Hodge Center for Entrepreneurship provides leadership programs and resources that enable NSU to serve local businesses while immersing students in the entrepreneurial experience. Through multidisciplinary student/ faculty teams, the Center offers knowledge and technical assistance to businesses in the Hampton Roads region. The goal is to strengthen and expand the number and quality of minority- and women-owned, growth-oriented, and technology-driven businesses in the area.

Most prominently, the Hodge Center's Entrepreneur-in-Residence Program (EIRP) is a first for the nation's Historically Black Colleges and Universities. The EIRP enables students to serve as consultants to prospective entrepreneurs as well as to actual for- and not-for-profit businesses seeking growth opportunities in Hampton Roads. In the case of the former, students assist hopeful entrepreneurs as they perform market research, develop business plans, investigate sources of financing, and launch their new ventures. In the latter instance, guided by clients' senior executives and NSU faculty, EIRP students develop solutions to today's complex business problems and present their recommendations to management. All majors are welcome.

## School of Business Programs

- Bachelor of Science in Accountancy (p. 56)
- Minor in Accountancy (https://catalog.nsu.edu/undergraduate/ business/accountancy-bs/accountancy-minor/)
- Bachelor of Science in Business (https://catalog.nsu.edu/ undergraduate/business/business-bs/)
- Bachelor of Science in Business - Business Intelligence \& Data Analytics, Concentration (p. 60)
- Bachelor of Science in Business - Entrepreneurship, Concentration (p. 63)
- Bachelor of Science in Business - Finance, Concentration (p. 66)
- Bachelor of Science in Business - Financial Services, Concentration (p. 69)
- Bachelor of Science in Business - Management Information Systems, Concentration (p. 70)
- Bachelor of Science in Business - Management, Concentration (p. 73)
- Bachelor of Science in Business - Marketing, Concentration (p. 76)
- Business, Minor (p. 82)
- Bachelor of Science in Tourism \& Hospitality Management - On Campus \& Online (p. 79)


## School of Business Faculty \& Staff

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## Bachelor of Science in Accountancy

## PROGRAMS OF STUDY

The Bachelor of Science (B.S.) degree in Accountancy requires 121 hours of undergraduate coursework. However, after July 1, 2006, the Commonwealth of Virginia will require 150 of education to sit for the Certified Public Accountant (CPA) exam. The courses required of all accounting majors are found in the Curriculum (p. 56) tab.

Any non-business student can take a Minor in Accountancy or Certifications in Accounting. Below are the information for the said programs.

## CERTIFICATIONS IN ACCOUNTING

Many graduates want to obtain professional certification. The most popular certification is that of the Certified Public Accountant (CPA). As in most states, students seeking CPA licensure in Virginia have to meet a 150 credit-hour requirement. A School of Business student has the option to pursue dual degrees in accounting and business (with a concentration in information management or finance). The option has a 30 semester-hour curriculum for the $5^{\text {th }}$ 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.

In addition to the CPA exam, graduates of the School of Business programs may also take the Certified Management Accountant (CMA) exam, Certified Internal Auditor (CIA) exam, Certified Information Systems Auditor (CISA) exam and others. Students interested in taking one of these exams are encouraged to talk to an advisor during their junior year to determine the necessary course requirements

## Minor in Accountancy

A business or a non-business student is required to take five courses (15 hours) to earn a minor in Accountancy

| Summary of Graduation Requirements for Major |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 6 |
| Major Requirements | 21 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |


| Suggested Plan of Study <br> Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 <br> and Spartan Seminar 102 | 2 |
| BUS 175 |  <br> Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| BIO 100L | Biological Science Lab | 3 |
| or SCI 101L | or Physical Science Laboratory | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| BUS 284 | Advanced Microcomputing | 2 |


| MTH 131 | Pre-Calculus for Business Majors | 3 |
| :--- | :--- | ---: |
| MTH 132 | Calculus for Business Majors | 3 |
| Select one of the following: | 1 |  |
| PED 100 | Fundametals of Fitness for Life |  |
| PED 101 | Modified Physical Education | 30 |
| Modified PED |  |  |
|  | Credits | 3 |
| Second Year |  | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one Humanities Elective (Note B) (p. 57) | 3 |  |
| PSY 210 | Introduction to Psychology | 1 |
| SEM 201 | Spartan Seminar 201 | 31 |
|  | Credits | 3 |

Third Year
ACC 301 Intermediate Accounting I 3
ACC 302 Intermediate Accounting II 3
ACC 315 Federal Income Tax I 3
ACC 413 Cost Accounting 3
BUS 330 Business Communication 3
BUS 376 Statistics \& Quantitative Methods 3
BUS 387 Introduction to Entrepreneurship 3
BUS $360 \quad 3$
BUS 365 Organizational Behavior \& Theory 3

| BUS 366 | Principles of Marketing | 3 |
| :--- | :--- | ---: |
|  | Credits | 30 |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| ACC 412 | Advanced Accountng II | 3 |
| ACC 414 | Auditing | 3 |
| ACC 418 | Governmental \& Not-For-Profit Accounting | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| BUS 375 | Management Information Systems \& E- | 3 |
|  | Commerce |  |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Global/Cultural and Language Elective (Note B) | 3 |  |
| (p. 57) |  | 3 |
| Select one Business Elective (Note C) (p. 57) | $\mathbf{3 0}$ |  |
| Credits |  |  |
|  | Total Credits | $\mathbf{1 2 1}$ |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title Cred | Credits |
| :---: | :---: | :---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |
| Note B |  |  |
| Global/Cultural and Language Electives (6 hours) |  |  |
| A student will choose two (2) courses from the list below. At least one of these must be a non-language course. |  |  |
| Code | Title Credits | Credits |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | tory |
| HIS 361 | Latin America: Readings in Latin-American History | tory |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 | 3 |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | ENT |
| HIS 446 | Colonial Latin American | 3 |
| HIS 448 | Slavery in the Alantic Basin | 3 |
| HUM 210 | Humanties | 3 |
| HUM 211 | Humanities | 3 |
| MUS 301 | Music Appreciation | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | a 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |


| BUS 390 | Business Database Management | 3 |
| :--- | :--- | :--- |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |


| BUS 477 | Franchising | 3 |
| :--- | :--- | :--- |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |
| Note R |  |  |
| A student needs to take one of the following courses towards a work |  |  |
| experience elective in the Hospitality Industry (3 credit hours). |  |  |
| Code | Title | Credits |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note S

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

## Minor in Accountacny

# Bachelor of Science in Business - Business Intelligence \& Data Analytics, Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| BUS 175 | Introduction to Business \& | 3 |
|  | Entrepreneurship |  |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |

Select one Science Lab Elective (Note A) (p. 60) 1

| ENG 101 | College English I | 3 |
| :--- | :--- | :--- |
| ENG 102 | College English II | 3 |

HED 100 Personal and Community Health 2
BUS 284 Advanced Microcomputing 3
MTH 131 Pre-Calculus for Business Majors 3
MTH $132 \quad$ Calculus for Business Majors 3
Select one of the following: 1

| PED 100 | Fundametals of Fitness for Life |  |
| :--- | :--- | :--- |
| PED 101 | Modified Physical Education |  |
| Modified PED |  |  |
| BIO 100L | Biological Science Lab |  |
| SCI 101L | Physical Science Laboratory |  |
|  | Credits | $\mathbf{3 0}$ |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| ENG 285 | Public Speaking | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| Select one Humanities Elective (Note B) (p. 60) | 3 |  |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| BUS 330 | Business Communication | 3 |
| BUS 376 | Statistics \& Quantitative Methods | 3 |


| BUS 387 | Introduction to Entrepreneurship | 3 |
| :---: | :---: | :---: |
| BUS 360 | Corporate Finance | 3 |
| BUS 375 | Management Information Systems \& ECommerce | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 366 | Principles of Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Business Elective (Note G) (p. 61) |  | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| BUS 391 | Introduction to Data Analytics \& Big Data | 3 |
| BUS 431 | Information Systems Analysis and Design | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| BUS 491 | Data Analytics \& Visualization | 3 |
| BUS 492 | Business Intelligence | 3 |
| Select three Business Electives (See Note D) (p. 60) |  | 9 |
| Select one Global/Cultural and Language Elective (Note B)(p. 60) |  | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |


| HIS 448 | Slavery in the Alantic Basin | 3 |
| :--- | :--- | :--- |
| HUM 210 | Humanties | 3 |
| HUM 211 | Humanities | 3 |
| MUS 301 | Music Appreciation | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |


| BUS 367 | Consumer Behavior | 3 |
| :--- | :--- | :--- |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |
| Note E |  |  |

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |


| BUS 493 | Special Topics in Business | 3 |
| :--- | :--- | :--- |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note S

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

## Bachelor of Science in Business Entrepreneurship, Concentration

| Summary of Graduation Requirements <br> Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BUS 175 |  <br>  <br>  <br> Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one Science Lab Elective (Note A) (p. 63) | 1 |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| BUS 284 | Advanced Microcomputing | 3 |
| MTH 131 | Pre-Calculus for Business Majors | 3 |
| MTH 132 | Calculus for Business Majors | 3 |
| Select one of the following: | 1 |  |
| PED 100 | Fundametals of Fitness for Life |  |
| PED 101 | Modified Physical Education |  |
| PED 102 | Modified Physical Education |  |
| Modified PED |  | $\mathbf{3 0}$ |
|  | Credits |  |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one Humanities Elective (Note B) (p. 63) | 3 |  |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| BUS 330 | Business Communication | 3 |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| BUS 386 | New Venture Finance | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |


| BUS 375 | Management Information Systems \& E- <br> Commerce | 3 |
| :--- | :--- | ---: |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 366 | Principles of Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Business Elective (Note D) (p. 64) | 3 |  |
| Credits |  |  |
| Fourth Year |  | $\mathbf{3 0}$ |
| BUS 417 | International Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| Select one Business Elective (Note D) (p. 64) | 9 |  |
| Select one Global/Cultural and Language Elective (Note B) | 3 |  |
| (p. 63) |  |  |
|  | Credits | $\mathbf{3 0}$ |
|  | Total Credits | $\mathbf{1 2 1}$ |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 448 | Colonial Latin American | 3 |
| HUM 210 | Slavery in the Alantic Basin | 3 |
| HUM 211 | Humanties | 3 |


| MUS 301 | Music Appreciation | 3 |
| :--- | :--- | :--- |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |


| BUS 413 | Principles of Retailing | 3 |
| :--- | :--- | :--- |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |


| BUS 465 | Small Business Management | 3 |
| :--- | :--- | :--- |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives ( 6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note S

BUS 390 Business Database Management 3

## Code

BUS 417 International Business 3
BUS 415 International Management 3
BUS 416 International Marketing 3
SOC 325 Sociology of Business \& Internationalism 3

# Bachelor of Science in Business Finance, Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | :---: |
| First Year |  | 2 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 |  |
| BUS 175 |  <br>  <br>  <br> Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one Science Lab Elective (Note A) (p. 66) | 1 |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| BUS 284 | Advanced Microcomputing | 3 |
| MTH 131 | Pre-Calculus for Business Majors | 3 |
| MTH 132 | Calculus for Business Majors | 3 |

Select one of the following: 1

| PED 100 | Fundametals of Fitness for Life |  |
| :--- | :--- | :--- |
| PED 101 | Modified Physical Education |  |
| Modified PED |  | $\mathbf{3 0}$ |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| ENG 210 | Practical English Grammar | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 285 | Public Speaking | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| Select one Humanities Elective (Note B) (p. 66) | 3 |  |
|  | Credits | $\mathbf{3 1}$ |

Third Year

| BUS 330 | Business Communication | 3 |
| :--- | :--- | :--- |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |
| BUS 362 | Investments | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |


| BUS 366 | Principles of Marketing | 3 |
| :---: | :---: | :---: |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Business Elective (Note E) (p. 67) |  | 6 |
|  | Credits | 30 |
| Fourth Year |  |  |
| BUS 363 | Financial Institutions | 3 |
| BUS 488 | International Finance | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 499 | Cases in Financial Management | 3 |
| BUS 375 | Management Information Systems \& ECommerce | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| Select one Business Elective (Note E) (p. 67) |  | 6 |
| Select one Global/Cultural and Language Elective (Note B)(p. 66) |  | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 448 | Colonial Latin American | 3 |
| HUM 210 | Slavery in the Alantic Basin | 3 |
| HUM 211 | Humanties | 3 |
| MUS 301 | Humanities | 3 |


| MUS 234 | African-American Music | 3 |
| :--- | :--- | :--- |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |


| BUS 368 | Human Resources Management | 3 |
| :--- | :--- | :--- |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |


| BUS 400 | Independent Study | 3 |
| :--- | :--- | ---: |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |
| Note S |  |  |
| Code | Title | Credits |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

## Bachelor of Science in Business Financial Services, Concentration

The NSU School of Business has formed a partnership with Supernova Consulting, several Wall Street investment firms, and selected HBCUs to create a pathway of success to enable African Americans to pass the CFP Certification Examination and enter the Financial Services Wealth Management Industry.

The Bachelor of Science in Business - Financial Services concentration will prepare the students for the CFP Certification Examination and provide qualified students with paid internships offered by the Wall Street partners. This program requires a minimum of 121 hours of undergraduate work.

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |


| Curriculum Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| BUS 175 | Introduction to Business \& Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one Science Lab Elective (Note A) (p. |  | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| BUS 284 | Advanced Microcomputing | 3 |
| MTH 131 | Pre-Calculus for Business Majors | 3 |
| MTH 132 | Calculus for Business Majors | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 30 |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| PSY 210 | Introduction to Psychology | 3 |


| Select one Global/ | /Cultural Elective (Note B) (p. ) | 3 |
| :---: | :---: | :---: |
|  | Credits | 31 |
| Third Year |  |  |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| BUS 362 | Investments | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |
| BUS 375 | Management Information Systems \& ECommerce | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 366 | Principles of Marketing | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| BUS 310 | Risk Management | 3 |
| Select one Global/ (p. ) | /Cultural \& Language Elective (Note B) | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| BUS 330 | Business Communication | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 391 | Introduction to Data Analytics \& Big Data | 3 |
| BUS 430 | Retirement Planning | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| BUS 440 | Taxes and Estate Planning | 3 |
| BUS 499 | Cases in Financial Management | 3 |
| BUS XXX | Business Electives (See Note C) (p. ) | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## Bachelor of Science in Business Management Information Systems, Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 60 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |


| Curriculum <br> Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| BUS 175 | Introduction to Business \& Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one Science Lab Elective (Note A) (p. 70) |  | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| BUS 284 | Advanced Microcomputing | 3 |
| MTH 131 | Pre-Calculus for Business Majors | 3 |
| MTH 132 | Calculus for Business Majors | 3 |
| Select one of the following: |  | 1 |
| PED 100 | Fundametals of Fitness for Life |  |
| PED 101 | Modified Physical Education |  |
| Modified PED |  |  |
|  | Credits | 30 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| ENG 285 | Public Speaking | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| Select one Humanities Elective (Note B) (p. 70) | 3 |  |
|  | Credits | 31 |
| Third Year |  |  |
| BUS 330 | Business Communication | 3 |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |


| BUS 375 | Management Information Systems \& ECommerce | 3 |
| :---: | :---: | :---: |
| BUS 390 | Business Database Management | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 366 | Principles of Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Business Elective (Note G) (p. 71) |  | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| BUS 431 | Information Systems Analysis and Design | 3 |
| BUS 421 | Web Application Development for EBusiness | 3 |
| BUS 419 | Networking | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| Select one Business Elective (Note G) (p. 71) |  | 9 |
| Select one Global/Cultural and Language Elective (Note B)(p. 70) |  | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B <br> Global/Cultural and Language Electives (6 hours)

A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 448 | Colonial Latin American | 3 |


| HUM 210 | Humanties | 3 |
| :--- | :--- | :--- |
| HUM 211 | Humanities | 3 |
| MUS 301 | Music Appreciation | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |


| BUS 413 | Principles of Retailing | 3 |
| :--- | :--- | :--- |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |


| BUS 465 | Small Business Management | 3 |
| :--- | :--- | :--- |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note S

## Code

BUS 417 International Business 3
BUS 415 International Management 3
BUS 416 International Marketing 3
SOC 325 Sociology of Business \& Internationalism 3
BUS $390 \quad$ Business Database Management 3

## Bachelor of Science in Business Management, Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

Course Title Credits

| First Year |  | 2 |
| :--- | :--- | :---: |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BUS 175 |  <br> Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |

Select one Science Lab Elective (Note A) (p. 73) 1

| ENG 101 | College English I | 3 |
| :--- | :--- | :--- |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |

BUS 284 Advanced Microcomputing 3
MTH 131 Pre-Calculus for Business Majors 3
MTH 132 Calculus for Business Majors 3
Select one of the following: 1

| PED 100 | Fundametals of Fitness for Life |  |
| :--- | :--- | :--- |
| PED 101 | Modified Physical Education |  |
| Modified PED |  | $\mathbf{3 0}$ |


| Second Year |  | 1 |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one Humanities Elective (Note B) (p. 73) | 31 |  |
|  | Credits | 3 |
| Third Year |  | 3 |
| BUS 330 | Business Communication | 3 |
| BUS 376 | Statistics \& Quantitative Methods | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 360 | Corporate Finance | 3 |
| BUS 350 | The Ethics of Management | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |


| BUS 368 | Human Resources Management | 3 |
| :---: | :---: | :---: |
| BUS 375 | Management Information Systems \& ECommerce | 3 |
| BUS 366 | Principles of Marketing | 3 |
| Select one Business Elective (Note F) (p. 74) |  | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 478 | Strategic Management | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| Select one Global/Cultural and Language Elective (Note B) (p. 73) |  | 3 |
| Select one Business Elective (Note F) (p. 74) |  | 9 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 448 | Colonial Latin American | 3 |
| HUM 210 | Slavery in the Alantic Basin | 3 |
| HUM 211 | Humanties | 3 |
| MUS 301 | Humanities | 3 |


| MUS 234 | African-American Music | 3 |
| :--- | :--- | :--- |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |


| BUS 368 | Human Resources Management | 3 |
| :--- | :--- | :--- |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives ( 6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |


| BUS 400 | Independent Study | 3 |
| :--- | :--- | ---: |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |
| Note S |  |  |
| Code | Title | Credits |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

# Bachelor of Science in Business Marketing, Concentration 

| Summary of Graduation Requirements <br> Subject Area |  |
| :--- | :--- |
| Credits |  |
| Beneral Education Core (p. 41) | 40 |
| Business Core | 48 |
| Business Electives | 12 |
| Major Requirements | 15 |
| Other Requirements | 6 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | :---: |
| First Year |  | 2 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BUS 175 |  <br>  <br> Entrepreneurship | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |

Select one Science Lab Elective (Note A) (p. 76) 1

| ENG 101 | College English I | 3 |
| :--- | :--- | :--- |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |

BUS 284 Advanced Microcomputing 3
MTH 131 Pre-Calculus for Business Majors 3
MTH 132 Calculus for Business Majors 3
Select one of the following: 1

| PED 100 | Fundametals of Fitness for Life |
| :--- | :--- |
| PED 101 | Modified Physical Education |
| Modified PED |  |
|  | Credits |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 270 | Business Statistics | 3 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 210 | Practical English Grammar | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one Humanities Elective (Note B) (p. 76) | 3 |  |
|  | Credits | $\mathbf{3 1}$ |

Third Year
BUS 330 Business Communication 3
BUS 376 Statistics \& Quantitative Methods 3
BUS 387 Introduction to Entrepreneurship 3
BUS 360 Corporate Finance 3
BUS 375 Management Information Systems \& E- 3

| BUS 365 | Organizational Behavior \& Theory | 3 |
| :--- | :--- | ---: |
| BUS 366 | Principles of Marketing | 3 |
| BUS 367 | Consumer Behavior | 3 |
| Select one | Business Elective (Note H) (p. 78) | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
|  | Credits | $\mathbf{3 0}$ |


| Fourth Year |  |
| :--- | :--- |
| BUS 476 | Operations Management |

BUS 478 Strategic Management 3
BUS 412 Marketing Management 3
BUS 413 Principles of Retailing 3
BUS 422 International Marketing 3
BUS 497 Marketing Research 3
Select one Business Elective (Note H) (p. 78) 9
Select one Global/Cultural and Language Elective (Note B) 3
(p. 76)

| Credits | 30 |
| :--- | ---: |
| Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
| HIS 371 | Beginning of Humankind to 1600 |  |
| HIS 446 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 448 | Colonial Latin American | 3 |
| HUM 210 | Slavery in the Alantic Basin | 3 |
| HUM 211 | Humanties | 3 |
| MUS 301 | Humanities | 3 |


| MUS 234 | African-American Music | 3 |
| :--- | :--- | :--- |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |


| BUS 368 | Human Resources Management | 3 |
| :--- | :--- | :--- |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |


| BUS 400 | Independent Study | 3 |
| :--- | :--- | ---: |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |
| Note S |  |  |
| Code | Title | Credits |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

# Bachelor of Science in Tourism \& Hospitality Management - On Campus \& Online 

| Summary of Graduation Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Area |  | Credits |  |
| General Education Core (p. 41) |  | 40 |  |
| Business Core |  | 21 |  |
| Business Electives |  | 3 |  |
| Major Requirements |  | 54 |  |
| Other Requirements |  | 3 |  |
| Total Credit Hours |  | 121 |  |
| Curriculum |  |  |  |
| First Year |  |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 |  | 2 |
| BUS 175 | Introduction to Business \& Entrepreneurship |  | 3 |
| PED 100 | Fundametals of Fitness for Life |  | 1 |
| HED 100 | Personal and Community Health |  | 2 |
| ENG 101 | College English I |  | 3 |
| ENG 102 | College English II |  | 3 |
| THM 100 | Professional Careers in Hospitality Industry |  | 3 |
| THM 115 | Introduction to Tourism \& Hospitality |  | 3 |
| MTH 103 | Mathematics in General Education |  | 3 |
| BIO 100 | Biological Science |  | 3 |
| SCI 101 | Physical Science for Non-Science Majors |  | 3 |
| Select one Science Lab Elective (Note A) (p. 79) |  |  | 1 |
| Credits |  |  | 30 |


| Second Year |  | 1 |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 3 |
| ECN 200 | Basic Principles of Economics | 3 |
| BUS 284 | Advanced Microcomputing | 3 |
| THM 212 | Fundamentals of Nutrition for Food Service | 3 |
| THM 205 | Sanitation Principles | 3 |
| Select one Tourism and Hospitality Management Elective |  |  |
| (Note P) (p. 81) |  | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| ACC 202 | Introduction to Managerial Accounting | 3 |
| ENG 285 | Public Speaking | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| MTH 105 | Intermediate Algebra | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| BUS 281 | Legal Environment for Business | 3 |
| BUS 330 | Business Communication | 3 |
| THM 200 | Computers in Hospitality | 3 |
| THM 250 | Hotel Operations Management | 3 |
| THM 320 | Cases in Hospitality Management | 3 |
| BUS 360 | Corporate Finance | 3 |


| BUS 365 | Organizational Behavior \& Theory | 3 |
| :---: | :---: | :---: |
| BUS 366 | Principles of Marketing | 3 |
| Select one Global/Cultural and Language Elective (Note B) (p. 79) |  | 3 |
| Select one Tourism and Hospitality Management Elective (Note P) (p. 81) |  | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| THM 280 | Dining Rm \& Beverage Management Operations | 3 |
| THM 440 | Hospitality Sales and Advertising | 3 |
| THM 331/ MTH 105 | Food, Beverage \& Labor Cost Control | 3 |
| THM 300 | Purchasing for the Hospitality Industry | 3 |
| THM 490 | Sr Project | 3 |
| THM 462 | Hospitality Human Resource Management | 3 |
| Select one Hospitality Franchising Elective (Note Q) (p. 81) |  | 3 |
| Select one Work Experience Elective (Note R) (p. 81) |  | 3 |
| Select one Information Systems/International Course Elective (Note S) (p. 81) |  | 3 |
| Select one Global/Cultural and Language Elective (Note B) (p. 79) |  | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## List of Notes for Business Degree Programs

## Note A

A student needs to take one (1) of the following laboratory courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101L | Physical Science Laboratory | 1 |

## Note B

Global/Cultural and Language Electives (6 hours)
A student will choose two (2) courses from the list below. At least one of these must be a non-language course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
|  | Beginning of Humankind to 1600 |  |


| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| :--- | :--- | :--- |
| HIS 446 | Colonial Latin American | 3 |
| HIS 448 | Slavery in the Alantic Basin | 3 |
| HUM 210 | Humanties | 3 |
| HUM 211 | Humanities | 3 |
| MUS 301 | Music Appreciation | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |
| FRN 111/112 | Elementary French I | 3 |
| GRM 111/112 | Elementary German I | 3 |
| JPN 111/112 | Elementary Japanese I | 3 |
| SPN 111/112 | Elementary Spanish | 3 |
| SWA 111/112 | Elementary Swahili | 3 |

## Note C

A student in the Accountancy major needs to take two (6 credit hours) of the following as Business Elective course.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 316 | Federal Income Tax II | 3 |
| ACC 420 | Selected Topics in Accounting | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 417 | International Business | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 474 | Intermediate Financial Management | 3 |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 417 | International Business | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note D

A student in the Entrepreneurship concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 484 | Creativity Innovation and Change Management | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |


| BUS 368 | Human Resources Management | 3 |
| :--- | :--- | :--- |
| BUS 420 | Organizational Change \& Development | 3 |
| BUS 367 | Consumer Behavior | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 390 | Business Database Management | 3 |

## Note E

A student in the Finance concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 315 | Federal Income Tax I | 3 |
| ACC 330 | Accounting Systems | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 417 | International Business | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 476 | Operations Management | 3 |
| BUS 310 | Risk Management | 3 |
| BUS 395 | Intro to Personal Financial Planning | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 497 | Marketing Research | 3 |

## Note F

A student in the Management concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 370 | Total Quality Management | 3 |
| BUS 435 | Compensation | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 421 | Web Application Development for E-Business | 3 |
| BUS 423 | Decision Support \& Expert Systems | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 497 | Marketing Research | 3 |

## Note G

A student in the Management Information Systems concentration needs to take four ( 12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ACC 301 | Intermediate Accounting I | 3 |
| ACC 302 | Intermediate Accounting II | 3 |
| ACC 330 | Accounting Systems | 3 |


| BUS 300 | Internship | 3 |
| :--- | :--- | :--- |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 362 | Investments | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 415 | International Management | 3 |
| BUS 374 | Programming in Visual Basic | 3 |
| BUS 385 | Web 2 Applications | 3 |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 497 | Marketing Research | 3 |

## Note H

A student in the Marketing concentration needs to take four (12 credit hours) of the following as Business Elective courses.

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 493 | Special Topics in Business | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 469 | Entrepreneurship-In-Residence | 3 |
| BUS 477 | Franchising | 3 |
| BUS 362 | Investments | 3 |
| BUS 363 | Financial Institutions | 3 |
| BUS 368 | Human Resources Management | 3 |
| BUS 410 | Leadership \& Diversity in Management | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 411 | Salesmanship | 3 |
| BUS 414 | Advertising | 3 |
| BUS 418 | Internet Marketing | 3 |

## Note P

A student needs to take two of the following courses toward Tourism and Hospitality Management Electives (6 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 381 | Facilities Layout \& Design | 3 |
| THM 401 | Club and Resort Management | 3 |
| THM 481 | Hospitality Property Management | 3 |
| THM 351 | Event Planning and Management | 3 |
| THM 402 | Management by Menu | 3 |

## Note Q

A student needs to take one of the following courses towards Hospitality Franchising Elective (3 credits).

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 387 | Introduction to Entrepreneurship | 3 |
| BUS 465 | Small Business Management | 3 |
| BUS 477 | Franchising | 3 |
| THM 441 | Restaurant Ownership and Operation | 3 |
| THM 494 | Restaurant Franchising | 3 |

## Note R

A student needs to take one of the following courses towards a work experience elective in the Hospitality Industry (3 credit hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| THM 391 | Intenship in Hospitality | 3 |
| BUS 300 | Internship | 3 |
| BUS 400 | Independent Study | 3 |
| BUS 413 | Principles of Retailing | 3 |
| BUS 412 | Marketing Management | 3 |
| BUS 367 | Consumer Behavior | 3 |

## Note S

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUS 417 | International Business | 3 |
| BUS 415 | International Management | 3 |
| BUS 416 | International Marketing | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| BUS 390 | Business Database Management | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |

## Business, Minor

## Curriculum

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) as follows:

| Code | Title | Credits |
| :--- | :--- | ---: |
| Required Courses |  | 3 |
| BUS 175 | Introduction to Business \& Entrepreneurship | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| BUS 366 | Principles of Marketing | 3 |
| BUS 375 | Management Information Systems \& E-Commerce | 3 |
| Elective Courses |  | 3 |
| Select one of the following: |  |  |
| BUS 387 | Introduction to Entrepreneurship |  |
| BUS 360 | Corporate Finance |  |
| BUS 370 | Total Quality Management | $\mathbf{1 8}$ |
| Total Credits |  |  |

## SCHOOL OF EDUCATION

Dr. Denelle Wallace, Associate Dean
(757) 823-8886

## "Preparing competent, compassionate, collaborative, and committed leaders."

The School of Education is responsible for providing leadership, coordination, and evaluation of all programs offered through its three departments 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 world.
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 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 PreK-12 schools. Consistent with the institution's mission, its focus is to prepare competent, compassionate, collaborative, 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 Virginia Department of Education and have been accredited by the National Council for Accreditation of Teacher Education (NCATE), now the Council for the Accreditation of Educator Preparation (CAEP).

Each program is designed to prepare teachers to meet the certification and licensure requirements for the Commonwealth of Virginia as well as requirements for successful study at the graduate school level.

## Organization of Schools

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 departments, centers and laboratories are as follows:

- Department of Early Childhood/Elementary
- Education and Special Education
- Department of Health, Physical Education and Exercise Science
- Department of Secondary Education and School Leadership
- The H.H. Bozeman Integrated Media/ Resource Center
- The Office of Clinical Experiences and Student Services
- The Student Volunteer Center
- The Praxis I Instructional Center
- The NSU Pre-School Academy

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 18-24 semester hour professional education sequence and a 12 -semester hour student teaching experience in the School of Education. The licensure and degree requirements for all programs offered by the School of Education may be revised due to the Virginia Department of Education's regulations, Norfolk State University requirements or regional and national accreditation standards. Department heads and faculty advisors will inform students of the most current information due to changes from any of the agencies which may be different than the information in this catalog.

## School of Education Departments

- Early Childhood, Elementary and Special Education (p. 84)
- Bachelor of Science Education in Elementary Education (p. 86)
- Bachelor of Science Education in Special Education and Teaching (p. 87)
- Early Childhood Education, Child Care (Non-Teaching Certification Option), Concentration (p. 88)
- Health, Physical Education and Exercise Science (p. 89)
- Bachelor of Science in Physical Education and Health Education (p. 90)
- Exercise Science/Health and Physical Education, Bachelor of Science - Health Fitness Instructor (p. 92)
- Exercise Science/Health and Physical Education, Bachelor of Science - Kinesiotherapy (p. 94)
- Exercise Science/Health Wellness and Rehabilitation, Bachelor of Science (p. 95)
- Secondary Education and School Leadership (p. 96)
- The Office of Clinical Experiences and Student Services (p. 99)


# Early Childhood, Elementary and Special Education 

Dr. Kianga Thomas<br>Department Chair (I)<br>(757) 823-2700

The Early Childhood/Elementary and Special Education Department (EESE) provides undergraduate and graduate programs for students seeking preparation to work with young children in the community, agencies, and preK-12 school settings. The goal of the teacher education programs is to prepare competent, compassionate, collaborative, and committed leaders. The teacher education programs are approved by the Virginia Department of Education and accredited by the National Council for the Accreditation of Teacher Education (NCATE) now the Council for the Accreditation of Educator Preparation (CAEP). The early childhood, elementary, and special education programs provide instruction, field experiences, and clinical practices that develop excellence in teaching and skills to serve diversified populations.

The degree and teacher certification endorsement programs in the Department of Early Childhood/Elementary and Special Education are:

- Bachelor of Science in Early Childhood Development - Child Care Non-teaching Option (NCOP)
- Bachelor of Arts in Psychology - Early Childhood/Primary Certification Endorsement PreK-3
- Bachelor of Arts in Psychology - Elementary Education Certification Endorsement PreK-6
- Bachelor of Science in Interdisciplinary Studies Education Certification Endorsement PreK-6 (History Concentration)
- Bachelor of Science in Interdisciplinary Studies Education Certification Endorsement PreK-6 (English Concentration)
- Bachelor of Science in Interdisciplinary Studies Education Certification Endorsement PreK-6 (Mathematics Concentration)
- Bachelor of Arts in Psychology - Special Education General Curriculum K-12 Concentration
- Bachelor of Science in Interdisciplinary Studies - Special Education General Curriculum K-12 Concentration


## Licensure and Baccalaureate Degree Requirements

Students interested in teaching early childhood, elementary, or special education must pursue a degree in psychology or interdisciplinary studies and earn full licensure to teach in the desired teaching discipline. Students who possess an undergraduate degree and desire to earn a teaching license may apply to Norfolk State University as a nondegree seeking student. Admission to Norfolk State University does not guarantee admission to the teacher education program.

The licensure and/or degree requirements are under constant revisions due to either, the Commonwealth of Virginia's regulations, Norfolk State University's requirements, or regional or national accreditation standards. Advisors and the School of Education webpage will inform students of the most current information resulting from changes by any of the agencies. Current guidelines and regulations supersede information in this catalog.

## Tk20 Assessment System Guidelines

All students enrolled in a degree program and seeking teacher licensure are to have access to the web-based portfolio assessment system upon enrolling in the first education course. Candidates are to maintain all field experience, clinical practice, and course assessment data as requested by instructors in the Tk20 system. Information about the use of Tk20 is found on the Center for Professional Development webpage at https:// www.nsu.edu/education/cpd/index (https://www.nsu.edu/education/ cpd/index/).

## General Education Licensure Requirements

To be eligible for the early childhood preK-3, elementary education preK-6, or special education-general curriculum K-12 teaching license, students must have an undergraduate degree in liberal arts and sciences (or equivalent) from a regionally accredited institution. The candidate for the non-degree teaching license certification endorsement only, who has a degree in a liberal arts or science area, must fulfill the following semesterhour requirements:

1. English (must include composition, oral communication, and literature): 12 semester hours;
2. Mathematics: 12 semester hours;
3. Science (including a laboratory course): 8 semester hours in at least two science disciplines;
4. History (must include American history): 9 semester hours;
5. Social science (must include geographyand economics): 6 semester hours; and
6. Arts and humanities: 6 semester hours.

## Assessment Requirements for Teachers

To satisfy the state of Virginia's testing requirements for the initial licensure programs, students must pass the Praxis Core Academic Skills for Educators Tests (or its equivalent) and Praxis II (if applicable to program), the Virginia Communication and Literacy Assessment (VCLA), and the Reading for Virginia Educators (RVE).

The Praxis Core Academic Skills for Educators assessment (or its equivalent) include an academic skills assessment of mathematics, reading, and writing and must be passed before admission to teacher education and enrolling in methods of teaching courses.

Praxis II is a content knowledge exam for teachers and must be passed before program completion, if applicable to your program.

VCLA is a test of communication, reading, and writing skills.
VRE is a test of students' knowledge of reading instruction.
You may see the assessment requirements for Virginia licensure at http://www.doe.virginia.gov/teaching/licensure/ prof_teacher_assessment.pdf/

Students are responsible for providing copies of the Praxis Core or equivalent test results to the program advisor for admission to teacher education and copies of all other assessments are included in the student teaching application packet. When reporting results for Praxis II, students must submit a paper copy of the "Examinee Score Report." to the Center for Professional Development. The Examinee Score Report is sent to the student by ETS, and it provides detailed score information that the Center for Professional Development is required to collect. (This information is not available on the "Designated Institution Score Report" sent to Norfolk State by ETS.) Information about test registration is available on the Center for Professional Development's webpage.

## Meeting the Praxis Requirement

Effective January 1, 2014, the following assessments are required for all candidates who are seeking a license to teach.

The Praxis Core Academic Skills for Educators Tests include Reading (5712), Writing (5722), and Mathematics (5732). These tests require a passing score for each of the three subtests. There is not a composite passing score for the assessments. If a passing score is not obtained on each subtest, a subtest may be retaken as a stand-alone test. The passing score on the reading subtest is 156 ; writing 162 ; and mathematics 150 .

Virginia Communication and Literacy Assessment (VCLA) as a substitute for Praxis (reading and writing) can be used to meet the Praxis requirement along with the Praxis Core Academic Skills for Educators: Mathematics (5732) subtest scores. A composite score of 470 on the VCLA with subtest scores of at least 235 on writing and 235 on reading may be combined with a qualifying score of 150 on the mathematics portion of the Praxis Core Academic Skills for Educators Test.

## Admission to Teacher Education Guidelines

Students applying for admission to the teacher education program must have a minimum 3.0 grade point average with no grade below a " C " and must have passed Praxis I or the equivalent tests. Applicants are required to complete a portfolio that contains two letters of recommendation, a copy of their philosophy of education, an update on any disposition documents on file, as well as participate in an interview, and meet any other requirements as outlined in the guidelines provided at Center for Professional Development webpage https://www.nsu.edu/education/ cpd/index (https://www.nsu.edu/education/cpd/index/)

Students are to be admitted to teacher education prior to enrolling in any professional education observation participation course. Students must continue to maintain a 3.0 GPA and earn at least a grade of " C " for continuance in the teacher education program.

## Observation and Observation Participation Field Placements and Clinical Practice

The introductory course, Foundations of Education has an observation experience that is designed to help students decide if teaching is the right choice for them. All methods of teaching courses have an observation participation requirement that must be met in an appropriate, licensed setting. Students are required to have current negative TB test results and a current background verification form in order to request field experience placements. Students must pass Praxis I and meet the requirements for admission to teacher education before participating in an observation-participation field experience. A provisionally licensed teacher may participate in observation participation if $s / h e ~ h a s ~ a ~ l e t t e r ~$ from the Virginia Department of Education listing the course as a needed requirement and has passing VCLA scores.

## Teacher Education Assessments and Applying to Student Teach or Complete the Practicum

In order to student teach and obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure assessments.

It is recommended that the VCLA be taken after students have completed their English and reading course requirements.

The RVE, if applicable, is required for licensure and should be taken after all reading courses have been completed.

Candidates should take the Exit Examination of Writing Proficiency after completing the English courses.

Candidates must receive training in dyslexia and the recognition of child abuse and neglect and keep the certificate to submit with the student teaching and state licensure applications.

Candidates are required to pass the appropriate Praxis II specialty area assessment with scores established by the Virginia Department of Education.

Candidates are required to complete the Emergency First Aid, Cardiopulmonary Resuscitation (CPR) and Use of Automated External Defibrillators (AED) training. Documentation of training must be submitted to the Office of Clinical Experiences and Student Services (OCESS) before you begin your student teaching.

Obtain the application and due dates to student teach at the Office of Clinical Experiences and Student Services (OCESS) webpage. All coursework and other program requirements must be completed before beginning student teaching.

Prior to placements in practicum or internship, students may be required to complete a universal background check, the Child Protective Service Central Registry Release of Information (032-02-1515/1), and a fingerprint check by the school division. Students may be liable for all costs incurred. Candidates must adhere to guidelines outlined in the field experience handbook and located at the Center for Professional Development's webpage.

## Early Childhood, Elementary and Special Education Programs

- Bachelor of Science Education in Elementary Education (p. 86)
- Bachelor of Science Education in Special Education and Teaching (p. 87)
- Early Childhood Education, Child Care (Non-Teaching Certification Option), Concentration (p. 88)


## Bachelor of Science Education in Elementary Education

The Bachelor of Science Education degree in Elementary Education program provides students the opportunity to develop the required knowledge, skills and dispositions to obtain licensure to teach in PreK-6th grade school settings. The broad curriculum is embedded with researchbased teaching practices in the reading, language arts, mathematics, science and social studies disciplines. The program focuses on equipping preservice teachers with skills and professional experiences to meet the needs of diverse PreK-6 students. Information on program admittance and graduation requirements, field experiences, state license standards, and passing scores on Praxis and State Assessments is posted on the department's website.

Student are prepared to meet the Virginia Licensure Regulations for School Personnel and the Council for the Accreditation of Education Preparation (CAEP) Standards and Assessments, including passing the RVE, VCLA, and Praxis Subject Assessments.

## Summary of Degree Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 42 |
| Electives | 9 |
| Other Requirements | 29 |
| Total Credit Hours | 120 |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| ENG 101 | College English I | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| HED 100 | Personal and Community Health | 2 |
| EED 233 | Critical Thinking and Assessment Skills | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HIS 102 | United States History to 1865 | 3 |
| ENG 102 | College English II | 3 |
| MTH 105 | Intermediate Algebra | $3-4$ |
| or MTH 102 | or Essentials of Algebra |  |
| HIS 103 | United States History Since 1865 | 3 |
| CSC 150 | Computer Literacy | 3 |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
|  | Credits | $\mathbf{3 3 - 3 4}$ |

## Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | :---: |
| EDU 201 | Foundations of Education | 3 |
| XXX XXX | General Elective | 6 |
| ENG 285 | Public Speaking | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 4 |
| \& 101L | and Physical Science Laboratory |  |
| EDU 202 | Human Growth \& Development | 3 |
| ENG 203 | Advanced Communication Skills | 3 |


| XXX XXX | General Elective | 3 |
| :---: | :---: | :---: |
| PSY 210 | Introduction to Psychology | 3 |
| Select one of the following courses: |  | 3 |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
|  | Credits | 32 |
| Third Year |  |  |
| FIA 370 | African/Afro-American Art | 3 |
| SPE 321 | Characteristics, Medical \& Legal Aspects in Special Education,Foundations, Characteristics, Medical \& Legal Aspects in Special Education | 3 |
| EED 360 | Curriculum and Instruction for Primary Grades (pre K-3rd Grade) (*Common Assessment Administered) | 3 |
| EDU 381 | Classroom and Behavior Management (**Level II Observation) | 3 |
| EED 450 | Teaching Literacy in the Elementary School | 3 |
| XXX XXX | General Electives ${ }^{1}$ | 6 |
| INT 350 | Trends and Issues in Diverse Population | 3 |
| EDU 420 | Education Technology | 3 |
| EED 461 | Curriculum and Instruction for Early School (Grades 4-6) | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| XXX XXX | General Elective | 3 |
| EED 490 | Diagnostic Reading | 3 |
| EED 470 | Methods of Teaching Social Studies in the Elementary School | 3 |
| EED 465 | Methods and Materials for Teaching Science, Mathematicsand Technology | 3 |
| EED 499 | Directed Teaching and Seminar | 12 |
|  | Credits | 24 |
|  | Total Credits | 120 |

Note: Students must pass Praxis I (or equivalent) and apply for admission to Teacher Education at the end of 60 hours.

## Bachelor of Science Education in Special Education and Teaching

The Bachelor of Science Education Degree in Special Education and Teaching provides students the opportunity to develop the required knowledge, skills and dispositions to obtain licensure to teach in Special Education General Curriculum K-12 school settings or in community agencies. The broad curriculum is embedded with research-based teaching practices to address the diverse learning requirements and behavior challenges of students with mild disabilities special needs. Information on program admittance and graduation requirements, field experiences, state license standards, and passing scores on Praxis and State Assessments is posted on the department's website.

Students are prepared to meet the Virginia Licensure Regulations for School Personnel and the Council for the Accreditation of Education Preparation (CAEP) Standards and Assessments, including passing the Praxis RVE and VCLA Assessments.

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core | 40 |
| Major Requirements | 50 |
| Other Requirements | 30 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| ENG 101 | College English I | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| EED 233 | Critical Thinking and Assessment Skills | 3 |
| HIS 102 | United States History to 1865 | 3 |
| or HIS 103 | or United States History Since 1865 | 3 |
| ENG 102 | College English II | 3 |
| MTH 102 | Essentials of Algebra |  |
| or MTH 105 | or Intermediate Algebra | 4 |
| MTH 105 | Intermediate Algebra | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| CSC 150 | Computer Literacy | 3 |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
|  | Credits | 37 |


| Second Year |  | 1 |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 3 |
| EDU 201 | Foundations of Education | 3 |
| XXX XXX | General Elective (See Advisor or <br> Department Chair) | 3 |
| ENG 285 | Public Speaking | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 1 |
| SCI 101L | Physical Science Laboratory | 1 |


| $\begin{aligned} & \text { ENG } 207 \\ & \text { or FIA } 201 \\ & \text { or MUS } 301 \end{aligned}$ | Introduction to World Literature or Basic Art Appreciation or Music Appreciation | 3 |
| :---: | :---: | :---: |
| EDU 202 | Human Growth \& Development | 3 |
| ENG 203 or ENG 286 | Advanced Communication Skills or Writing About Literary Texts | 3 |
| XXX XXX | Elective (See Advisor or Department Chair) | 3 |
| SPE 321 | Characteristics, Medical \& Legal Aspects in Special Education,Foundations, Characteristics, Medical \& Legal Aspects in Special Education | 3 |
| PED 365 | Adapted Physical Education | 3 |
|  | Credits | 32 |
| Third Year |  |  |
| INT 350 | Trends and Issues in Diverse Population | 3 |
| XXX XXX | General Elective (See Advisor or Department Chair) | 3 |
| SPE 332 | Curriculum \& Instructional Procedures in Teaching Students With Mild Disabilities | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| SPE 344 | Teaching Reading to Exceptional Learners | 3 |
| XXX XXX | General Elective (See Advisor or Department Chair) | 3 |
| SPE 312 | Educational Psychology \& Behavior Management | 3 |
| SPE 345 | Teaching Math to Execpt Learners | 3 |
| SPE 440 | Collaboration Procedures,Case Managment \&collaboration Procedures | 3 |
| EDU 420 | Education Technology | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| XXX XXX | General Elective (See Advisor or Department Chair) | 3 |
| EED 490 | Diagnostic Reading | 3 |
| SPE 445 | Transition Procedures | 3 |
| SPE 492 | Assessments of Exceptional Students | 3 |
| EDU 499 | Directed Teaching | 12 |
|  | Credits | 24 |
|  | Total Credits | 123 |

Note: Students must pass PRAXIS I (or equivalent) and apply for admission to Teacher Education at the end of 60 hours.

## Early Childhood Education, Child Care (Non-Teaching Certification Option), Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 38 |
| Electives | 8 |
| Other Requirements | 34 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| HIS 100 | History of World Societies I | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| MTH 102 <br> or MTH 105 | Essentials of Algebra or Intermediate Algebra | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| PHY 100L | Physical Science Laboratory | 1 |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |


| Second Year |  |  |
| :--- | :--- | :--- |
| EDU 201 | Foundations of Education | 3 |
| ECE 110 | Introduction to the Profession | 2 |
| ENG 203 | Advanced Communication Skills | 3 |
| HUM 210 | Humanties | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| PSY 228 | Developmental Psychology | 3 |
| EED 274 | Study of Young Children | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one of the following: | 3 |  |

\(\left.\begin{array}{clr}ENG 383 \& African-American Literature, 1940- <br>

\& PRESENT\end{array}\right]\)| FIA 370 | African/Afro-American Art |
| :---: | :--- |
| MUS 234 | African-American Music |
| SEM 201 | Spartan Seminar 201 |
|  | Credits |

Third Year

| ECE 375 | Children's Drama | 3 |
| :--- | :--- | :--- |
| ECS 300 | Introduction to Elementary Special | 3 |
|  | Education |  |


| ECE 224 | Children's Literature for Ece | 3 |
| :--- | :--- | ---: |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| ECE 362 | Mth/Mat of Instr in Math for Young | 3 |
| EED 233 | Critical Thinking and Assessment Skills | 3 |
| ECE 370 | Analyz Behav Chldr | 3 |
| SWK 327 | Interviewing Techniques | 3 |
| XXX XXX | Electives | 8 |
|  | Credits | $\mathbf{3 2}$ |

Fourth Year
ECE 360 Curriculum and Instruction for Primary 3
INT $350 \quad$ Trends and Issues in Diverse Population 3
EED 450 Teaching Literacy in the Elementary School 3
ECE 420 Parent Education 3

ECE 460 Admn of Child \& Family Programs 3

| ECE 495 | Practicum (Child Care Settings) | 9 |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{2 4}$ |

Students must make a grade of "C" or better in all courses.

# Health, Physical Education and Exercise Science 

Dr. Tarin Hampton
Department Chair
(757) 823-8703

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

- Health, Wellness and Rehabilitation (HWR)
- Physical Education - Teacher Certification PreK-12 (PE)
- Health Fitness Instructor (HFI)
- Kinesiotherapy (KT)

Health, Wellness and Rehabilitation (HWR) will provide graduates with the skills and knowledge needed for a range of careers including: the areas of Cardiac Rehabilitation; Pulmonary Rehabilitation; and Sports Medicine (i.e., Physical Therapy, Athletic Training, Orthopedic Rehabilitation, and Exercise Physiology).

The Certified Physical Educator is trained to teach physical education in grades $\mathrm{K}-12$. The teacher certification program in physical education also permits an add-on endorsement in health, aquatics, and/or driver education.

The Health Fitness Instructor (HFI) is trained to deliver fitness training in corporate settings, health spas, and in other areas of the sport and fitness industry.

The Certified Kinesiotherapist (KT) 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.

## Health, Physical Education and Exercise Science Programs

- Bachelor of Science in Physical Education and Health Education (p. 90)
- Exercise Science/Health and Physical Education, Bachelor of Science - Health Fitness Instructor (p. 92)
- Exercise Science/Health and Physical Education, Bachelor of Science - Kinesiotherapy (p. 94)
- Exercise Science/Health Wellness and Rehabilitation, Bachelor of Science (p. 95)


## Bachelor of Science in Physical Education and Health Education Meeting the Praxis Requirement

Effective January 1, 2014, the following assessments are required for all candidates who are seeking a license to teach.

Praxis Core Academic Skills for Educators Tests include Reading (5712), Writing(5722), and Mathematics (5732). These tests require a passing score for each of the three subtests. There is not a composite passing score for the assessments. If a passing score is not obtained on each subtest, a subtest may be retaken as a stand-alone test. The passing score on the reading subtest is 156 ; writing 162; and mathematics 150 .

SAT as a substitute for Praxis Core requires a score of 1000 with at least 450 on the verbal and 510 on the mathematics test if taken prior to April 1,1995 . After April 1, 1995 a score of 1100 with at least 530 on the verbal and 530 on the mathematics tests is required.

ACT as a substitute for Praxis Core requires a composite score of 21 with the ACT mathematics score no less than 21 and an ACT English Plus Reading score no less than 37 if taken prior to April 1, 1995. After April 1, 1995 a composite score of 24 with the ACT mathematics score no less than 22 and an ACT English Plus Reading score no less than 46.

Virginia Communication and Literacy Assessment (VCLA) as a substitute for Praxis (reading and writing) can be used to meet the Praxis requirement along with the Praxis Core Academic Skills for Educators: Mathematics (5732) subtest or equivalent SAT or ACT test scores. A composite score of 470 on the VCLA with subtest scores of at least 235 on writing and 235 on reading may be combined with a qualifying score of 150 on the mathematics portion of the Praxis Core Academic Skills for Educators Test.

## Admission to Teacher Education Guidelines

Students applying for admission to the teacher education program must have a minimum 2.5 grade point average with no grade below a C and must have passed Praxis I or the equivalent tests. Applicants are required to complete a portfolio that contains two letters of recommendation, a copy of their philosophy of education, an update on any disposition documents on file, as well as participate in an interview, and meet any other requirements as outlined in the guidelines provided at Center for Professional Development webpage https://www.nsu.edu/education/ cpd/index (https://www.nsu.edu/education/cpd/index/)

Students are to be admitted to teacher education prior to enrolling in any professional education observation participation course. Students must continue to maintain a 2.5 GPA and earn at least a grade of " C " for continuance I the teacher education program.

## Observation, Observation Participation, Field Placements and Clinical Practice

The introductory course, Foundations of Education has an observation experience that is designed to help students decide if teaching is the right choice for them. All methods of teaching courses have an observation participation requirement that must be met in an appropriate, licensed setting. Students are required to have current negative TB test results and a current background verification form in order to request
field experience placements. Students must pass Praxis I and meet the requirements for admission to teacher education before participating in an observation participation field experience. A provisionally licensed teacher may participate in observation participation if $s / h e$ has a letter from the Virginia Department of Education listing the course as a needed requirement and has passing VCLA scores.

## Teacher Education Assessments and Applying to Student Teach or the Practicum

In order to student teach and obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure assessments.

It is recommended that the VCLA be taken after students have completed their English and reading course requirements.

The RVE is required for licensure and should be taken after all reading courses have been completed, if applicable.

Candidates should take the Exit Examination of Writing Proficiency after completing the English courses.

Candidates must receive training on the recognition of child abuse and neglect in the designated course and keep the certificate to submit with the licensure application.

Candidates are required to pass the appropriate Praxis II specialty area assessment with scores established by the Virginia Department of Education.

Candidates are required to complete the Emergency First Aid, Cardiopulmonary Resuscitation (CPR) and Use of Automated External Defibrillators (AED) training. Documentation of training must be submitted to the Center for Professional Development before you begin your student teaching. Obtain the application and due dates to student teach at the Center for Professional Development's webpage. All coursework and other program requirements must be completed before beginning student teaching.

Prior to placements in practicum or internship, candidates must earn a 3.0 GPA and may be required to complete a universal background check, the Child Protective Service Central Registry Release of Information (032-02-1515/1), and a fingerprint check by the school division. Students may be liable for all costs incurred. Candidates must adhere to guidelines outlined in the field experience handbook and located at the Center for Professional Development's webpage.

## Summary of Graduation Requirements

Subject Area Credits

General Education Core (p. 41) 40
Major Requirements 53

Electives 0
Other Requirements 28
Total Credit Hours 121

## Curriculum

Course Title Credits
First Year
BIO 100
Biological Science
\& 100L and Biological Science Lab


## Bachelor of Science in Exercise Science/Health and Physical Education - Health Fitness Instructor

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 57 |
| Other Requirements | 23 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| $\begin{aligned} & \text { BIO } 110 \\ & \text { or BIO } 100 \end{aligned}$ | General Biology or Biological Science | 3 |
| $\begin{aligned} & \text { BIO } 110 \mathrm{~L} \\ & \text { or BIO 100L } \end{aligned}$ | General Biology Laboratory or Biological Science Lab | 1 |
| ENG 101 | College English I | 3 |
| MTH 103/105 | Mathematics in General Education | 3 |
| PED 200 | Beginning Fitness Though Weight Training | 2 |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CSC 150 | Computer Literacy | 3 |
| ENG 102 | College English II | 3 |
| HED 170 | Personal and Community Health | 3 |
| PED 133/134 | Beginning Swimming | 1 |
| PED 158/159 | Fundamentals of Physical Education | 1 |
| PED 170 | Introduction to Physical Education | 3 |
| XXX | Social Sciences | 3 |
|  | Credits | 31 |


| Second Year |  |  |
| :---: | :---: | :---: |
| HUM 210/211 | Humanties | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| SCI 101L | Physical Science Laboratory | 1 |
| CHM 100L | Chemistry: Man \& Environment Laboratory |  |
| PED 107 | Aerobics | 1 |
| PED 251 | Modern Dance I | 1 |
| $\begin{aligned} & \text { PED } 261 / 262 \\ & \text { or PED } \\ & 158 / 159 \end{aligned}$ | Team Sports I: Invasion Games or Fundamentals of Physical Education | 1 |
| $\begin{aligned} & \text { PED } 287 \\ & \text { or BIO } 165 \end{aligned}$ | Human Anatomy or Human Anatomy and Physiology | 3 |
| $\begin{aligned} & \text { PED 287L } \\ & \text { or BIO } 165 \mathrm{~L} \end{aligned}$ | Human Anatomy Laboratory or Human Anatomy and Physiology Laboratory | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| FSN 110 | The Science of Human Nutrition | 3 |
| PED 220 or PED 220H | Eval in Phys Educ or Evaluation in Physical Education Honors | 3 |
| PED 179 | First Aid, Cpr \& AED | 2 |
| $\begin{aligned} & \text { PED } 288 \\ & \text { or BIO } 166 \end{aligned}$ | Human Physiology or Human Anatomy and Physiology | 3 |



# Bachelor of Science in Exercise Science/Health and Physical Education - Kinesiotherapy 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 79 |
| Other Requirements | 9 |
| Total Credit Hours | $\mathbf{1 2 8}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I | 3 |
| HRP 120 | Medical Terminology | 3 |
| EXS 170 | Introduction to Exercise Science | 3 |
| HED 170 | Personal and Community Health | 3 |
| PED 287 | Human Anatomy | 4 |
| \& 287L | and Human Anatomy Laboratory |  |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| ENG 102 | College English II | 3 |
| CSC 150 | Computer Literacy | 3 |
| MTH 151 | College Algebra | 3 |
| PED 133 | Beginning Swimming | 1 |
| PED 158 | Fundamentals of Physical Education | 1 |
| PED 288 | Human Physiology | 4 |
| \& 288L | and Human Physiology Laboratory | 4 |
|  | Credits | 33 |


| Second Year |  |  |
| :--- | :--- | ---: |
| FSN 110 | The Science of Human Nutrition | 3 |
| EXS 291 | Care \& Prevention of Athletic Injuries | 3 |
| EXS 355 | Anatomical Kinesiology | 3 |
| EXS 300 | Exercise Physiology |  |
| \& 300L | and Exercise Physiology Lab | 4 |
| EXS 292 | Stress Management | 3 |
| SEM 201 | Spartan Seminar 201 (or SEM 201H) | 1 |
| CHM 215 | Chemistry I |  |
| \& 215L | and Chemistry I Laboratory | 4 |
| PSY 210 | Introduction to Psychology |  |
| EXS 267 | Therapeutic Exercise \& Sports | 3 |
| XXX | Social Sciences | 4 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 |  <br>  <br> ECN 200 | Entrepreneurship |
| Basic Principles of Economics |  |  |
| EXS 356 | Biomechanics of Human Motion |  |
|  | Credits | $\mathbf{3 4}$ |

Third Year
PSY 228
Developmental Psychology

| ENG 285 | Public Speaking | 3 |
| :--- | :--- | ---: |
| EXS 363 | Clinical Aspects of Aging | 2 |
| PED 365 <br> or PED 365H | Adapted Physical Education <br> or Adapted Physical Education- Honors | 3 |
| EXS 430 | Neurological and Pathological Foundations <br> in Exercise | 3 |
| EXS 483 | Clinical Kinesiology I | 3 |
| PSY 280 | Abnormal Psychology | 3 |
| HUM XXX | Humanities Elective | 3 |
| EXS 364 | Clinical Experience Practicum |  |
| EXS 369 | Research Methods and Statistical <br> Evaluation | 3 |
| EXS 484 | Clinical Kinesiology II | 3 |
| PED 450 | Motor Learning |  |
| or PED 450H | or Motor Learning- Honors | 3 |
|  | Credits | 3 |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| XXX XXX | Cultural Perspectives | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HRP 320 | African American Health |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| EXS 493G | Clinical Internship in Exercise Science I ((all didactic course work) *Lab Hrs - 500 Cardiac) | 10 |
| XXX XXX | Cultural Perspectives (online) | 3 |
| EXS 493J | Clinical Internship in Exercise Science II ():: All didactic course work **Lab Hrs - 500 Clinical Specialization) | 10 |
|  | Credits | 26 |
|  | Total Credits | 128 |

Note: Communication and Literacy Assessment to exit the program (EXE/ HPE). Students must pass Praxis I, for entrance into the teacher education program. Students must pass Praxis II and the Virginia.
** Must have completed all didactic coursework. Advised to have current certifications: CPR, First Aid, and AED. Preapproved required (See KT Program Director) for course registration.

Lifeguarding Certification: PED 325 (PED 133/134 and/or instructor's approval).

Additional Prerequisites for Graduate School:
CHM 216 and CHM 216L or CHM 221 and CHM 221L
PHY 153 and PHY 153L
PED 179

# Bachelor of Science in Exercise Science/Health Wellness and Rehabilitation 

| Summary of Graduation Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Area |  | Credits |  |
| General Education Core <br> Requirements (p. 41) |  | 42 |  |
| Major Requirements |  | 40 |  |
| HWR Concentration Requirements |  | 38 |  |
| Total Credit Hours |  | 120 |  |
| Curriculum |  |  |  |
| First Year |  |  |  |
| BIO 110 | General Biology |  | 3 |
| BIO 110L | General Biology L | aboratory | 1 |
| ENG 101 | College English I |  | 3 |
| ENG 102 | College English I |  | 3 |
| CSC 150 | Computer Literacy |  | 3 |
| HED 170 | Personal and Co | mmunity Health | 3 |
| EXS 170 | Introduction to E | xercise Science | 3 |
| CHM 221 | General Chemist |  | 3 |
| CHM 221L | General Chemist | y I Laboratory | 1 |
| MTH 153 | College Algebra | Trigonometry | 3 |
| PED 100 | Fundametals of | Fitness for Life | 1 |
| SEM 101 <br> \& SEM 102 | Spartan Semina and Spartan Sem | 101 <br> inar 102 | 2 |


| Second Year |  |  |
| :--- | :--- | ---: |
| XXX | Social Sciences $^{2}$ | 3 |
| FSN 110 | The Science of Human Nutrition $^{2}$ | 3 |
| HUM 210/211 | Humanties ${ }^{1}$ | 3 |
| PED 200 | Beginning Fitness Though Weight Training | 2 |
| PED 287 | Human Anatomy | 3 |
| PED 287L | Human Anatomy Laboratory | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| ENG 285 | Public Speaking | 3 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| PED 288 | Human Physiology | 3 |
| PED 288L | Human Physiology Laboratory | 1 |
| PSY 210 | Introduction to Psychology | 3 |
| PED 133 | Beginning Swimming | 1 |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| EXS 237 | Care \& Prevention of Athletic Injuries | 3 |
| EXS 355 | Anatomical Kinesiology | 3 |
| PSY 228 | Developmental Psychology | 3 |
| PED 251 | Modern Dance I | 1 |
| PED 365 | Adapted Physical Education | 3 |
| HED 368A | Cur/Meth Health Ed | 3 |


| EXS 369 | Research Methods and Statistical Evaluation | 3 |
| :---: | :---: | :---: |
| PED 300 | Advanced Fitness Through Weight Training | 2 |
| EXS 356 | Biomechanics of Human Motion | 3 |
| EXS 447 | Physiology of Muscular Exercise | 3 |
| EXS 447L | Physiology of Muscular Exercise | 1 |
| XXX | Cultural Perspectives ${ }^{3}$ | 3 |
|  | Credits | 31 |
| Fourth Year |  |  |
| EXS 483 | Clinical Kinesiology I | 3 |
| EXS 380 | Stress Management | 3 |
| EXS 363 | Clinical Aspects of Aging | 2 |
| EXS 430 | Neurological and Pathological Foundations in Exercise | 3 |
| XXX | Cultural Perspectives ${ }^{3}$ | 3 |
| PED 450 | Motor Learning | 3 |
| PED 496 | Exercise Science Internship ${ }^{4}$ | 2 |
|  | Credits | 29 |
|  | Total Credits | 120 |
| Humanities: (ENG 207 Introduction to World Literature/FIA 201 Basic Art Appreciation/MUS 301 Music Appreciation) HUM 210 Humanties and HUM 211 Humanities accepted but not recommended |  |  |
| 2 Social Sciences: (SOC 101 Introduction to the Social Sciences/HIS 101 History of World Societies II/HIS 103 United States History Since 1865/BUS 175 Introduction to Business \& Entrepreneurship/ECN 200 Basic Principles of Economics) HIS 100 History of World Societies I and HIS 102 United States History to 1865 are accepted but not recommended |  |  |
| 3 Cultural Perspectives: (ENG 383 African-American Literature, 1940-PRESENT/ /MUS 234 African-American Music/HIS 335 African-American History/HIS 336 African-American History Since 1865/HRP 320 African American Health and HIS 371 Modern African History \& Cultures 1600-PRESENT) FIA 370 African/Afro-American Art/POS 315 African American Politics/PSY 340 Psychology of the African-American/SOC 237 Racial \& Ethnic Minorities and HIS 370 Early African History and Cultures, From the Beginning of Humankind to 1600 are accepted but not recommended. |  |  |
| PED XXX: (Aerobics, Bowling, Dance, Golf, Life Saving, Tennis, Water Aerobics, Weight Lifting) |  |  |

## Driver's Education Endorsement

$\left.\begin{array}{llr}\text { Code } & \text { Title } & \text { Credits } \\ \text { PED 440 } & \text { Driver Education } & 3 \\ \text { PED 444/440 } & \text { Principles and Methods of Classroom and In-Car } & 3 \\ & \text { Instruction }\end{array}\right]$

## Lifeguarding Certification

| Code | Title | Credits |
| :--- | :---: | ---: |
| Select one of the following: | $2-3$ |  |
| PED 325 | Lifeguard Training |  |


| PED 133 |  |
| :--- | :--- |
| \& PED 134 | Beginning Swimming <br> and Advanced Swimming (and/or instructor's <br> approval) |

## Total Credits

## Additional Prerequisites for Graduate School

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select one of the following: | 4 |  |
| CHM 216 | Chemistry II |  |
| $\& 216 \mathrm{~L}$ | and Chemistry II Lab |  |
| CHM 222 | General Chemistry II |  |
| \& 222L | and General Chemistry II Laboratory |  |
| PHY 153 | General Physics <br> \& 153L | and General Physics Laboratory II |

Check additional admission requirements for graduate school of your preference

# Secondary Education and School Leadership 

Dr. Angel Dowden
Department Head
(757) 823-2926

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

## Teacher Licensure Endorsement in Secondary Education

1. Candidates must take the General Education Core before applying to teacher education (https://www.nsu.edu/education/cpd/index (https://www.nsu.edu/education/cpd/index/))
2. Candidates are required to enroll in an undergraduate degree in the field in which they plan to teach:

- Art/Fine Arts
- Biology
- Chemistry
- English
- Health and Physical Education
- History and Social Science
- Mathematics
- Music/Instrumental
- Music/Vocal
- Physics

3. During the second semester of their sophomore year, candidates interested in teaching should submit an application for Admissions to Teacher Education to the Center for Professional Development. The criteria for admissions are as follows:
a. Passing Praxis Core Skills Test or the equivalent SAT/ACT board approved passing scores; or Virginia Communication and Literacy Assessment (VCLA) and PRAXIS Core Skills for Math individually.

Please note, Elementary and Special Education candidates are required to pass the Reading for Virginia Educators (RVE) in addition to the PRAXIS Core Skills Test.
b. Candidates must pass EDU 201 Foundations of Education (see below), show earned 60 semester hours of credit with a 3.0 gradepoint average in total hours attempted at NSU in their major and in all college work attempted; no grade below C; Candidates must submit:

- two current letters of recommendation
- a typed biography
- a written philosophy of education statement
- Universal Background Check
- Confer with an advisor for the guidelines used to complete your binder
c. They must also complete the following certifications:
- CPR
- First Aid
- AED (Automatic External Defibrillator)
- Child Abuse Awareness Certificate
d. Candidates who have not met this requirement are not eligible to take SED 300-level Methods Courses or SED 499 Directed Teaching (internship) in the Teacher Education Program.
*** Milestones to Completing a Teacher Education Program (https:// www.nsu.edu/ocess/)

| Code | Title Cre | Credits |
| :---: | :---: | :---: |
| EDU 201 | Foundations of Education | 3 |
| SED 384 | Curriculum \& Instructional Procedures in Mathematics | 3 |
| SED 385 | Curriculum and Instructional Procedures in Science | 3 |
| SED 386 | Curriculum \& Instructional Procedures in Fine Arts | rts 3 |
| SED 387 | Curriculum \& Instructional Procedures in English | h 3 |
| SED 390 | Curriculum \& Instructional Procedures in History \& Social Studies | $y \& 3$ |
| SED 405 | Reading in the Content Area | 3 |
| SED 420 | Educational Technology | 3 |
| EDU 486 | Human Growth and Development | 3 |
| SED 499 | Directed Teaching (internship) | 12 |
| Total Cred |  | 39 |

Throughout the program, candidates must also complete the Methods of Teaching (Curriculum and Instructional Procedures) in their content area and other licensure courses.

## Meeting the Praxis Requirement

Effective January 1, 2014, the following assessments are required for all candidates who are seeking a license to teach.

The Praxis Core Academic Skills for Educators Tests include Reading (5712), Writing (5722), and Mathematics (5732). These tests require a passing score for each of the three subtests. There is not a composite passing score for the assessments. If a passing score is not obtained on each subtest, a subtest may be retaken as a stand-alone test. The passing score on the reading subtest is 156 ; writing 162; and mathematics 150 .

Virginia Communication and Literacy Assessment (VCLA) as a substitute for Praxis (reading and writing) can be used to meet the Praxis requirement along with the Praxis Core Academic Skills for Educators: Mathematics (5732) subtest is required. A composite score of 470 on the VCLA with subtest scores of at least 235 on writing and 235 on reading may be combined with a qualifying score of 150 on the mathematics portion of the Praxis Core Academic Skills for Educators Test.

## Admission to Teacher Education Guidelines

Students applying for admission to the teacher education program must have a minimum grade point average of 3.0 and are required to complete a portfolio that contains two letters of recommendation, a copy of their philosophy of education, and an update on any disposition documents on file. They are required to participate in an interview, and meet any other requirements as outlined in the guidelines provided at Center for Professional Development webpage https:// www.nsu.edu/education/ cpd/index (https://www.nsu.edu/education/cpd/index/).

Students are to be admitted to teacher education prior to enrolling in any professional education observation participation course.

## Observation, Observation Participation, Field Placements and Clinical Practice

The introductory course, Foundations of Education has an observation experience that is designed to help students decide if teaching is the right choice for them. All methods of teaching courses have an observation participation requirement that must be met in an appropriate, licensed setting. Students are required to have current negative TB test results and a current background verification form in order to request field experience placements. Students must pass Praxis I and meet the requirements for admission to teacher education before participating in an observation-participation field experience. A provisionally licensed teacher may participate in observation participation if $s /$ he has a letter from the Virginia Department of Education listing the course as a needed requirement and has passing VCLA scores.

## Teacher Education Assessments and Applying to Student Teach or the Practicum

In order to student teach and obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure assessments.

It is recommended that the VCLA be taken after students have completed their English and reading course requirements.

The RVE, if applicable, is required for licensure and should be taken after all reading courses have been completed, if applicable.

Candidates should take the Exit Examination of Writing Proficiency after completing the English courses.

Candidates must receive training on the recognition of child abuse and neglect in the designated course and keep the certificate to submit with the licensure application.

Candidates are required to pass the appropriate Praxis II specialty area assessment with scores established by the Virginia Department of Education.

Candidates are required to complete the Emergency First Aid, Cardiopulmonary Resuscitation (CPR) and Use of Automated External Defibrillators (AED) training. Documentation of training must be submitted to the Center for Professional Development before you begin your student teaching. Obtain the application and due dates to student teach at the Center for Professional Development's webpage. All coursework and other program requirements must be completed before beginning student teaching.

Prior to placements in practicum or internship, students may be required to complete an universal background check, the Child Protective Service Central Registry

Release of Information (032-02-1515/1), and a fingerprint check by the school division. Students may be liable for all costs incurred. Candidates must adhere to guidelines outlined in the field experience handbook and located at the Center for Professional Development's webpage.

## List of Notes for Secondary Education and School Leadership

## Note A

A student needs to take the two following courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Note B |  |  |
| A student needs to take one (1) of the following laboratory courses. The |  |  |
| laboratory course must be in the same area as one of the science lecture |  |  |
| courses taken: |  |  |
| Code | Title | Credits |
| BIO 100L | Biological Science Lab | 1 |
| CHM 100L | Chemistry: Man \& Environment Laboratory | 1 |
| PHY 100L | Physical Science Laboratory | 1 |

## Note C

A student with 600 on the quantitative section of SAT I or a score of 3 or higher on the advanced placement test in mathematics need not take MTH 131 Pre-Calculus for Business Majors. Instead, the student will take MTH 132 Calculus for Business Majors and then proceed to take either MTH 300 Linear Algebra or a course in natural science or a course from the Global/ Cultural and Language Electives listed in Note D.

## Note D

Humanities (3 credit hours)
A student will choose one (1) course from the list below.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| GEO 141 | World Regional Geography | 3 |
| GEO 336 | Political Geography | 3 |
| GEO 337 | Geography of Africa | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 361 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
|  | Beginning of Humankind to 1600 |  |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 446 | Colonial Latin American | 3 |
| HIS 448 | Slavery in the Alantic Basin | 3 |
| HUM 210 | Humanties | 3 |
| HUM 211 | Humanities | 3 |
| MUS 301 | Music Appreciation | 3 |
| POS 315 | African American Politics | 3 |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 468 | A Survey of Contemporary Governments of Asia | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 242 | Introduction to Anthropology | 3 |


| GRM 111 | Elementary German I | 6 |
| :--- | :--- | ---: |
| \& GRM 112 | and Elementary German II |  |
| JPN 111 | Elementary Japanese I | 6 |
| \& JPN 112 | and Elementary Japanese II | 6 |
| SPN 111 | Elementary Spanish |  |
| \& SPN 112 | and Elementary Spanish II | 3 |
| REL 210 | Major World Religions |  |

## Note E

Cultural Perspectives (6 credit hours)
A student will choose one (1) course from the list below.

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| MUS 234 | African-American Music | 3 |

A student will choose one (1) course from the list below:

| Code | Title | Credits |
| :--- | :--- | ---: |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
|  | Beginning of Humankind to 1600 |  |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| JRN 299 | Multiculturalism and Mass Media | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |

## Note F

Candidates must pass the PRAXIS Core prior to enrolling in SED 300level courses and SED 499 Directed Teaching (internship): https:// www.nsu.edu/assests/websites/cpd/teacher-education/ milestones-to-completing-a-teacher-education-program.pdf (https://www.nsu.edu/ ocess/).

Teacher Licensure Endorsement is 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.

A student must pass the PRAXIS Core Exam to be admitted to teacher education and directed teaching listed above. See other requirements under admission to teacher education and directed teaching listed above.

# The Office of Clinical Experiences and Student Services 

Dr. Jill Ardley, Director<br>757) 823-8715

The Office of Clinical Experiences and Student Services (OCESS) has the responsibility of providing all formal field experiences, observation/ participation, directed teaching, and internships for persons 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.

## 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. Students admitted to the pre-professional program are required to apply for admission to the professional education program after completion of the sophomore courses (student must have 60 credit hours, have passed Praxis Core Academic Skills for Educators assessment or its equivalent, and obtained a 3.0 G.P.A.).

## Criteria for Admission to Teacher Education Professional Level

Applicant must have done the following:

1. Completed all prescribed (per curricula) freshman and sophomore courses and earned a grade point average of 3.0 or better in all lower level (freshman and sophomore) courses
2. Earned a grade of " $C$ " or better in all English and math courses, exhibited physical and mental health requisite to the responsibilities and duties of the teaching profession.
3. Evidenced character and dispositions appropriate for the duties and responsibilities for the teaching profession and exhibited a professional interest in teaching.
4. Earned a grade of "C" or better in EDU 201 Foundations of Education, PED 280 - Introduction to Physical Education or SPE 210 American School and the Teaching Profession and submitted proof of completion of the level I field experience in the Tk20 system.
5. Passed the PRAXIS Core Academic Skills for Educators assessment or its equivalent and submitted original copy of score report.
6. Received departmental recommendations to be admitted to teacher education.
7. Submitted a portfolio containing items specified in departmental handbook.
8. Verified no felony or misdemeanor charge or pending for drugs, or against children, and indicate any other law offenses by submitting the results of an universal background check.

## 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).
2. Special forms are provided by the School of Education on the Office of Clinical Experiences and Student Services (OCESS) website:
https://www.nsu.edu/Academics/Faculty-and-Academic-Divisions/ Schools-and-Colleges/School-of-Education/Departments/Center-for-Professional-Development (https://www.nsu.edu/Academics/Faculty-and-Academic-Divisions/Schools-and-Colleges/School-of-Education/ Departments/Center-for-Professional-Development/).
3. Applications will be evaluated as "Approved" or "Rejected." Applicants "Rejected" may reapply the next semester.
4. The student must receive "Approved" admission to teacher education before registering for upper level professional courses.
5. The student must verify no felony or misdemeanor charge or pending for drugs, or against children, and indicate any other law offenses by submitting the results of an universal background check.

## Retention in Teacher Education

Once admitted to teacher education, the following conditions apply:

1. The teacher candidate 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 at least a 3.0 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.

The prerequisites for admission to directed teaching are as follows:

1. Admission to teacher education.
2. Satisfactory results from the Praxis Core Academic Skills for Educators assessment or its equivalent.
3. Passing scores on Praxis II Content Area Assessment.
4. Passing scores on the Reading for Virginia Educators (RVE), if applicable, and also a passing score on the Virginia Communication and Literacy Assessment (VCLA).
5. Proof of 10 hours of observation and at least 40 hours of observation/participation field experiences must be submitted with the application to student teach.
6. Submission of all field experience reports in the Tk20 ${ }^{\text {TM }}$ assessment system.
7. Evidence of above average academic accomplishment in major subject field.
8. Evidence of above average academic accomplishment in professional education, including both general and special courses.
9. An overall average scholastic record of 3.0 or better for all undergraduate work completed.
10. Departmental endorsement (major subject field area advisor and department head). See Student Teaching Application at the Office of Clinical Experiences and Student Services (OCESS).
11. Status as a graduating senior in December or May of the school semester in which directed teaching is to begin as verified by the department head advisor.
12. Evidence of above average achievement in written and oral communication, to include meeting all communications' requirements for earning a baccalaureate degree from the University.
13. Satisfactory disposition and character references by advisor or department head.
14. Completion of required methods of teaching courses within the last two semesters prior to making application for admission to directed teaching.
15. Evidence of training in child abuse/neglect.
16. Submission of a negative current $T B$ test result, an universal background check, and a Search of the Central Registry from Social Services (if applicable).
17. Verification of no pending felony or misdemeanor for drugs, or offenses against children, and any other law offenses.
18. For transfer students, completion of 30 minimal hours of coursework at Norfolk State University, including at least one methodology course, before approval for student teaching (department head).
19. Candidates are required to complete the Emergency First Aid, Cardiopulmonary Resuscitation (CPR), Use of Automated External Defibrillators (AED) training, and Dyslexia and Child Abuse Training. Documentation of training must be submitted to the Office of Clinical Experiences and Student Services (OCESS).

## 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 at the University that sponsor teacher preparation programs.

## H. H. Bozeman Teacher Education Research Center

The H. H. Bozeman Integrated Media/Resource Center provides supplementary materials and instructional media for the School of Education. The center has resources and equipment appropriate for use from preschool through adult education levels, with emphasis on the training and professional development of the teacher.

## COLLEGE OF LIBERAL ARTS

Dr. Cassandra Newby-Alexander,
Dean
Dr. Chindeu Okala
Interim Associate Dean
(757) 823-8118

The College of Liberal Arts is comprised of a broad range of academic disciplines in the humanities and social sciences with undergraduate and graduate degrees housed in seven departments:

- English and Foreign Languages,
- Mass Communications and Journalism,
- History and Interdisciplinary Studies,
- Political Science,
- Psychology,
- Sociology, and
- Visual and Performing Arts (Fine Arts and Music).

In addition, WNSB 91.1 FM is housed in the College of Liberal Arts.
The mission of the college is to provide a transformative education that enables students to maximize their potential to become creative, independent thinkers and lifelong learners who adapt and contribute ethically to evolving national and international societies.

The College of Liberal Arts impacts every student who matriculates through Norfolk State University. In addition to ten undergraduate academic degree programs and seven graduate academic degree programs, the college serves as a service area for students taking introductory courses in the general education core. Exposure to courses in the areas of English, Music, Fine Arts, History, Sociology, and Psychology affords students many opportunities to appreciate and understand their role in a global society.

Within the context of the University's strategic plan, the overall goals of the College of Liberal Arts are to:

1. Provide students with a liberating education that is conducive to lifelong learning.
2. Impart knowledge, strengthen communicative and quantitative abilities, and enhance research and inquiry skills in the various subject matter areas.
3. Develop habits of independent thought and critical thinking.
4. Promote attitudes of understanding, respect, and tolerance for one's own culture and the cultures of other people.
5. Engender in students an appreciation of the moral and ethical components of life.
6. Define educational standards that address the changing paradigms and diverse needs of students in a changing global society.
7. Provide highly qualified graduates for the global workforce.
8. Contribute to the social consciousness, civic engagement, and cultural enrichment of the community through the provision of programs, exhibits and workshops in the arts, humanities, and social sciences.

## Technological Proficiency

The College of Liberal Arts realizes that technological proficiency is an integral component of career preparation and life-long learning.

Accordingly, all curricula in the College of Liberal Arts incorporate basic and discipline-appropriate technological instruction.

## College of Liberal Arts Departments

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- Minor in English (p. 105)
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- Bachelor of Arts in History - Teacher Licensure Endorsement in History and Social Science (p. 113)
- Bachelor of Science in Interdisciplinary Studies (p. 115)
- Bachelor of Science in Interdisciplinary Studies - 3 Year Degree Concentration (p. 116)
- Bachelor of Science in Interdisciplinary Studies - Military Concentration (p. 117)
- Bachelor of Science in Interdisciplinary Studies - Online (p. 118)
- Certificate in African and African Diasporan Studies (p. 119)
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- Online Programs (p. 121)
- Mass Communications and Journalism (p. 122)
- Bachelor of Science in Mass Communications - General Broadcast Concentration (p. 123)
- Bachelor of Science in Mass Communications - Journalism Concentration (p. 124)
- Minor in Mass Communications (p. 125)
- Political Science (p. 125)
- Bachelor of Arts in Political Science (p. 127)
- Certificate in International Studies (p. 128)
- Minor in Political Science (p. 129)
- Psychology (p. 131)
- Bachelor of Arts in Psychology (p. 132)
- Minor in CyberPsychology (https://catalog.nsu.edu/ undergraduate/liberal-arts/psychology/cyberpsychology-minor/)
- Minor in Psychology (p. 133)
- Sociology (p. 134)
- Bachelor of Arts in Sociology (p. 135)
- Minor in Criminal Justice (https://catalog.nsu.edu/ undergraduate/liberal-arts/sociology/criminal-justice-minor/)
- Minor in Sociology (p. 137)
- Visual and Performing Arts (p. 138)
- Bachelor of Arts in Drama and Theatre - Design and Technology Concentration (p. 140)
- Bachelor of Arts in Drama and Theatre - Performance Concentration (p. 141)
- Bachelor of Arts in Fine Arts and Graphic Design (p. 142)
- Bachelor of Arts in Fine Arts and Graphic Design - Specializing in Education Concentration (p. 143)
- Bachelor of Music in Music - Media Concentration (p. 146)
- Bachelor of Music in Music Education - Instrumental/Keyboard/

Vocal Concentration (p. 145)

- Minor in Fine Arts (p. 144)


## English and Foreign Languages

Dr. Gary C. Wilkens

Department Chair
(757) 823-8891

The English and Foreign Languages Department aims to develop in students an understanding of language development and of the structure and uses of language in their various written and spoken forms. The Department aims 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, power and utility of language in varied media. The Department offers its majors opportunities to concentrate in English, English with a Secondary Endorsement, Creative Writing, French Literature and Spanish Literature.

The Foreign Languages program in the Department seeks to develop students' fundamental skills in French, Spanish, and other languages, including Arabic, as staff resources permit. It seeks also to generate or broaden student interest in world cultures through language study.

## English Requirements

Requirements for the major: Sixty-five or more hours are required in discipline-related courses in all of the concentrations 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 Commonwealth of Virginia include: A minimum of thirty-six semester hours (including ENG 101 College English I, ENG 102 College English II, American and British literature, language and related courses).

## Foreign Language Requirements

English majors are required to complete 12 credit hours of a foreign language, usually French or Spanish, with a grade of C or better. 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.

All prospective English graduates will be required to take a comprehensive examination prior to 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.

## Note:

Descriptions of general education humanities courses (HUM 210 Humanties and HUM 211 Humanities) are listed at the end of the course offerings for music

## English and Foreign Languages Programs

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- Minor in English (p. 105)
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- Secondary Education Endorsement (p. 106)

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## Bachelor of Arts in English

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 65 |
| Electives | 15 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| BIO 100 | Biological Science |  |
| BIO 100L | Biological Science Lab | 3 |
| CSC 150 | Computer Literacy | 1 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| ENG 114 | Techniques of Vocabulary Building | 3 |
| FRN 111 | Elementary French I |  |
| or SPN 111 | or Elementary Spanish | 2 |
| FRN 112 | Elementary French II <br> or SPN 112 | or Elementary Spanish II |
| Sem |  |  |

Select one of the following: 3

| HIS 100 | History of World Societies I |  |
| :---: | :--- | :--- |
| HIS 101 | History of World Societies II |  |
| HIS 102 | United States History to 1865 |  |
| HIS 103 | United States History Since 1865 | 2 |
| SEM 101 | Spartan Seminar 101 <br> \& SEM 102 | and Spartan Seminar 102 |

Second Year

| CSC 200 | Advanced Computer Concepts | 3 |
| :--- | :--- | ---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 210 | Practical English Grammar | 3 |
| ENG 286 | Writing About Literary Texts | 3 |
| FRN 211 | Intermediate French I |  |
| or SPN 211 | or Intermediate Spanish I | 3 |
| FRN 212 | Intermediate French II |  |
| or SPN 212 | or Intermediate Spanish II | 3 |
| PED 100 | Fundametals of Fitness for Life |  |
| HED 100 | Personal and Community Health | 1 |
| MTH 103 | Mathematics in General Education | 2 |
| ENG 285 | Public Speaking | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| SEM 201 | Spartan Seminar 201 | 3 |
|  | Credits | 1 |


| Third Year |  |  |
| :--- | :--- | :--- |
| ENG 306 | Introduction to Literary Criticism | 3 |
| ENG 315 | Survey of English Literature I | 3 |
| ENG 316 | Survey of English Literature II | 3 |
| ENG 341 | American Literature I | 3 |


| ENG 342 | American Literature II | 3 |
| :---: | :---: | :---: |
| ENG 350 | Seminar in Literary Analysis and Interpretation | 3 |
| ENG 383 | African-American Literature, 1940PRESENT | 3 |
| XXX XXX | Restricted Elective | 3 |
| ENG 410 | History of the English Language | 3 |
| XXX XXX | Restricted Elective | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| ENG 412 | Chaucer | 3 |
| ENG 413 | Shakespeare | 3 |
| ENG 419 | Contemporary American English Grammar | 3 |
| $\begin{aligned} & \text { ENG } 449 \\ & \text { or ENG } 460 \end{aligned}$ | Teaching of Composition or Assessment \& Evaluation of Writing | 3 |
| ENG 450 | Research Seminar and Sr Thesis | 3 |
| ENG 454 | Young Adult Literature | 3 |
| $\begin{aligned} & \text { ENG } 456 \\ & \text { or ENG } 459 \end{aligned}$ | Women's Studies: Myths and Images or International Women's Literature | 3 |
| XXX XXX | Restricted Electives | 9 |
|  | Credits | 30 |
|  | Total Credits | 120 |

## 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, 1940-PRESENT in the Cultural Elective category under the General Education Requirements in the Catalog.

## CURRICULUM

The 18 credit hours for the minor in English should be distributed as follows:
Code Title Credits

Core Courses

| Select two of the following: | 6 |  |
| :--- | :--- | ---: |
| ENG 210 | Practical English Grammar |  |
| ENG 341 | American Literature I |  |
| ENG 342 | American Literature II |  |
| ENG 306 | Introduction to Literary Criticism |  |
| Electives |  | 9 |
| Select nine hours of ENG electives at the 300-400 level | $\mathbf{1 8}$ |  |
| Total Credits |  |  |

## Minor in Spanish

| Curriculum |  |  |
| :--- | :--- | ---: |
| Code <br> Core Courses | Title | Credits |
| SPN 215 | Intermediate Conversation | 3 |
| SPN 454 | Advanced Grammar and Composition | 3 |
| SPN 220 | Spanish Civilization | 3 |
| Electives |  | 9 |
| Select nine hours of Electives at the 300-400 level | $\mathbf{9}$ |  |
| Total Credits | $\mathbf{1 8}$ |  |

## Secondary Education Endorsement

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 43 |
| Major Requirements | 59 |
| Professional Education Core | 15 |
| Student Teaching | 12 |
| Total Credit Hours | $\mathbf{1 2 9}$ |

## Curriculum

Course Title Credits

| First Year |  |  |
| :---: | :---: | :---: |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| ENG 114 | Techniques of Vocabulary Building | 2 |
| FRN 111 or SPN 111 | Elementary French I or Elementary Spanish | 3 |
| FRN 112 or SPN 112 | Elementary French II or Elementary Spanish II | 3 |

Select one of the following:

| HIS 100 | History of World Societies I |
| :---: | :--- |
| HIS 101 | History of World Societies II |
| HIS 102 | United States History to 1865 |
| HIS 103 | United States History Since 1865 |
| PED 100 | Fundametals of Fitness for Life |
|  | Credits |


| Second Year |  |  |
| :---: | :---: | :---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 210 | Practical English Grammar | 3 |
| ENG 286 | Writing About Literary Texts | 3 |
| FRN 211 or SPN 211 | Intermediate French I or Intermediate Spanish I | 3 |
| FRN 212 or SPN 212 | Intermediate French II or Intermediate Spanish II | 3 |
| EDU 201 | Foundations of Education | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 103 | Mathematics in General Education | 3 |
| ENG 285 | Public Speaking | 3 |
| HUM 210 or HUM 211 | Humanties or Humanities | 3 |


| Third Year |  |  |
| :--- | :--- | :--- |
| ENG 306 | Introduction to Literary Criticism | 3 |
| ENG 315 | Survey of English Literature I | 3 |
| ENG 316 | Survey of English Literature II | 3 |


| ENG 341 | American Literature I | 3 |
| :---: | :---: | :---: |
| ENG 342 | American Literature II | 3 |
| ENG 350 | Seminar in Literary Analysis and Interpretation | 3 |
| ENG 383 | African-American Literature, 1940PRESENT | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| SED 387 | Curriculum \& Instructional Procedures in English | 3 |
| ENG 419 | Contemporary American English Grammar | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| ENG 410 | History of the English Language | 3 |
| ENG 413 | Shakespeare | 3 |
| ENG 430 | Romantic Writers | 3 |
| EDU 486 | Human Growth and Development | 3 |
| ENG 450 | Research Seminar and Sr Thesis (and Senior Thesis) | 3 |
| ENG 454 | Young Adult Literature | 3 |
| ENG 456 | Women's Studies: Myths and Images | 3 |
| SED 405 | Reading in the Content Area | 3 |
| SED 499 | Directed Teaching (internship) | 12 |
|  | Credits | 36 |
|  | Total Credits | 129 |

## Teacher Licensure Endorsement in English and Foreign Language

Students wishing to pursue a career in teaching must take the following steps:

1. Take ENG 101 College English I, ENG 102 College English II, and pass Praxis I freshman year. Then, confer with an academic advisor in the Department of Secondary Education and School Leadership about requirements for admission to the Teacher Education Program.
2. Complete requirements for admission to the Teacher Education Program.
3. Take the following professional education courses, totaling 27 credit hours:

| Code | Title | Credits |
| :--- | :--- | ---: |
| EDU 201 | Foundations of Education | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| EDU 486 | Human Growth and Development | 3 |
| SED 405 | Reading in the Content Area | 3 |
| SED 387 | Curriculum \& Instructional Procedures in | 3 |
|  | English |  |
| SED 499 | Directed Teaching (internship) | $\mathbf{1 2}$ |
| Total Credits |  | $\mathbf{2 7}$ |

# History and Interdisciplinary Studies 

Dr. E. Arnold Modlin, Jr.<br>Department Chair

## History Division

The Division of History provides students with a critical intellectual framework for assessing and understanding human affairs. The Division offers a broad spectrum of history and geography courses leading to the Bachelor of Arts degree in history. Curriculum sequences are available in History (General), History (Online), History-Social Science (Pre-Licensure), and History-Military Science (Army and Navy).

The general objectives of the Division are as follows:

1. To provide its students with a thorough grounding in the past, as seen from both social scientific and humanistic perspectives, and in the nature of history and historical analysis. The Division prepares undergraduates for a variety of career options which rely upon a sound liberal arts education in both academic and professional fields. The study of history prepares students for a variety of paths, including but not limited to those in fields such as law, education, religion, journalism and media ventures, business and government service.
a. To accomplish its objectives, the Division offers five programs leading to the B.A. In addition, the Division offers one certificate program in African and African Diaspora History.
b. The skills necessary for the study of history are highly practical and prized by graduate schools, professional schools, and employers. NSU history majors have moved on to careers in business, law, government service, education, and social work.
2. To articulate to potential employers the value of a liberal arts education, history trains students to be creative and flexible problem solvers who can make sound judgments and communicate their ideas effectively.
3. Upon completion of the required history and geography courses, students should be able to identify and discuss the major civilizations that have shaped human behavior over time and space. They should be able to compare and assess the principal values and ideologies of major world civilizations and contextualize current events.
4. Upon completion of the required degree in history-social sciences, students will have a firm grasp of American and global history with a depth and range that covers the major global regions and societies, and of the processes that have increasingly connected them worldwide.
5. Upon completion of the Division's required courses in addition to the general core's English courses, students should be able to write in clear prose, including analyzing and evaluating primary source documents as well as secondary sources. They should also be able to identify, define, and defend a point of view.
6. Upon completion of the Division's required courses, students will have a working knowledge of the world's cultural diversity. The Division's emphasis on appreciating diversity is designed "to equip students with the capability to become productive citizens who continuously contribute to a global and rapidly changing society," as per the University's mission statement.

Accordingly, the Division's primary learning outcomes for its majors to acquire are:

1. To trace and analyze change over time.
2. To compare and contrast cultures and traditions from the same time period.
3. To write and argue clearly with a thesis statement.
4. To appreciate the contributions of African-Americans to American history.
5. To appreciate the contributions of the African diaspora to world history.

The divisional history 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 University 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 Division.

It is the policy of the History Division that History majors take the required 100-level and 200-level classes (HIS 100 History of World Societies I, HIS 101 History of World Societies II, HIS 102 United States History to 1865, HIS 103 United States History Since 1865, and HIS 205 Introduction to the Study of History) prior to registering for any upperlevel (HIS 300+) classes. In order to take upper-level classes before the completion of the 100-level surveys, students must receive permission from the program coordinator. HIS 205 Introduction to the Study of 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 United States History to 1865 and HIS 103 United States History Since 1865.

Each academic year, students' papers from HIS 205 Introduction to the Study of History, HIS 305 The Three R's of History: Reading, Writing and Research and HIS 497 Historical Research are reviewed by the faculty for development of writing, research and critical thinking skills. Students whose papers do not demonstrate competency in these areas must retake HIS 497 Historical Research.

For further information, contact the History Division: Phone (757) 823 8198 or e-mail sjrichmond@nsu.edu or elbennett@nsu.edu.

## Interdisciplinary Studies

A Bachelor of Science degree in Interdisciplinary Studies is obtained through this program. It is designed to provide a strong liberal arts foundation that enables students to develop 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. It offers a flexible curriculum that maximizes students' experience; yet, it is a rigorous critical thinking, research and writing intensive program that focuses on developing and applying tangible and transferable life-long skills.

## Core Courses

(Courses to be completed with grade of " C " or better)

| Code | Title | Credits |
| :--- | :--- | ---: |
| Core Courses |  |  |
| INT 210 | Introduction to Interdisciplinary Studies | 3 |
| INT 311 | Principles of Interdisciplinary Studies | 3 |


| INT 360 | Foundations of Research in Interdisciplinary Studies | 3 |
| :---: | :---: | :---: |
| INT 322 | Approaches to Critical Analysis | 3 |
| INT 375 | Language and Society | 3 |
| INT 411 | Ideas and Their Influences | 3 |
| or INT 412 | Contemporary Globalization |  |
| INT 470 | Sr Seminar | 3 |
| Optional Core Courses |  |  |
| INT 399A | The Black Woman | 3 |
| INT 475 | Interdisciplinary Studies Internship | 3 |
| Select one of the following: |  | 3 |
| INT 470 | Sr Seminar |  |
| INT 477 | Sr Thesis |  |

Note: INT Core courses are to be taken in numerical order. INT 308 Introduction to Interdisciplinary Studies is the prerequisite for all INT courses, except INT 412 Contemporary Globalization.

## Option: (Approval of Department Head and Social Dean)

Students are encouraged to explore new relationships among 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 College Dean are required.

## Additional Information

Interdisciplinary Studies courses (INT 308 Introduction to
Interdisciplinary Studies, INT 322 Approaches to Critical Analysis, INT 360 Foundations of Research in Interdisciplinary Studies, INT 375 Language and Society, INT 411 Ideas and Their Influences, INT 412 Contemporary Globalization, and INT 470 Sr Seminar) cannot be substituted or transferred in; all core INT classes must be taken at NSU for the Bachelor of Science Degree.

Currently enrolled NSU students must have a minimum GPA of 2.0 in order to transfer into the Interdisciplinary Studies Program; exceptions to the rule are at the discretion of the Department Head.

In order to demonstrate proficiency in concentration areas, students are to take a combined total of at least 30 hours (within the two/three concentration areas at the 300-400 level (considered upper levels).

## History and InterDisciplinary Studies Programs

- Bachelor of Arts in History (p. 109)
- Bachelor of Arts in History - Military Science (NAVY) Concentration (p. 110)
- Bachelor of Arts in History - Online (p. 111)
- Bachelor of Arts in History - Teacher Licensure Endorsement in History and Social Science (p. 113)
- Bachelor of Science in Interdisciplinary Studies (p. 115)
- Bachelor of Science in Interdisciplinary Studies - 3 Year Degree Concentration (p. 116)
- Bachelor of Science in Interdisciplinary Studies - Military Concentration (p. 117)
- Bachelor of Science in Interdisciplinary Studies - Online (p. 118)
- Certificate in African and African Diasporan Studies (p. 119)
- Minor in Africana Studies (p. 120)
- Minor in History (p. 120)
- Minor in Interdisciplinary Studies (p. 121)
- Online Programs (p. 121)

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## Bachelor of Arts in History

Note: Students in this curriculum may tailor their electives to include an emphasis on African and African Diaspora Studies. See corresponding certificate program below.

| Summary of Degree Requirements | Credits |  |
| :--- | :--- | :--- |
| Subject Area | 40 |  |
| General Education Core (p. 41) | 57 |  |
| Major Requirements | 23 |  |
| Electives | 0 |  |
| Other Requirements | $\mathbf{1 2 0}$ | Credits |
| Total Credit Hours |  |  |
| Curriculum <br> Course$\quad$ Title |  |  |


| First Year |  |  |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HIS 100 | History of World Societies I | 3 |
| HIS 101 | History of World Societies II | 3 |
| HED 100 | Personal and Community Health | 2 |
| HIS 102 | United States History to 1865 | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 33 |


| Second Year |  |  |
| :---: | :---: | :---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| $\begin{aligned} & \text { ENG } 207 \\ & \text { or FIA } 201 \\ & \text { or MUS } 301 \end{aligned}$ | Introduction to World Literature or Basic Art Appreciation or Music Appreciation | 3 |
| $\begin{aligned} & \text { ENG } 214 \\ & \text { or INT } 375 \\ & \text { or INT } 399 F \end{aligned}$ | Introduction to Creative Writing <br> or Language and Society <br> or Africant American Language and Culture | 3 |
| SPN 111 <br> or GRM 111 <br> or FRN 111 <br> or JPN 111 | Elementary Spanish <br> or Elementary German I <br> or Elementary French I <br> or Elementary Japanese I | 3 |
| GEO 130 | Principles of Geography | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| $\begin{aligned} & \text { POS } 100 \\ & \text { or BUS } 175 \\ & \text { or ECN } 200 \\ & \text { or SOC } 101 \end{aligned}$ | American National Government <br>  <br> Entrepreneurship <br> or Basic Principles of Economics or Introduction to the Social Sciences | 3 |
| HIS 205 | Introduction to the Study of History | 3 |
| ENG 285 | Public Speaking | 3 |


| HIS 335 <br> or HIS 336 <br> or HIS 370 <br> or HIS 371 | African-American History or African-American History Since 1865 or Early African History and Cultures, From the Beginning of Humankind to 1600 <br> or Modern African History \& Cultures 1600-PRESENT | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ENG } 383 \\ & \text { or MUS } 234 \\ & \text { or FIA } 370 \end{aligned}$ | African-American Literature, 1940PRESENT <br> or African-American Music or African/Afro-American Art | 3 |
|  | Credits | 31 |
| Third Year XXX-XXX | Electives (See Advisor or Department Chair) | 5 |
| HIS 305 | The Three R's of History: Reading, Writing and Research | 3 |
| Geography Elective |  | 3 |
| Select two History Electives at the 300-400 level |  | 6 |
| HIS 313 | United States Early National Period, 1788-1815 |  |
| HIS 314 | Antebellum America, 1815-1850 |  |
| HIS 328 | History of Virginia |  |
| HIS 337 | United States Women's History |  |
| HIS 364 | Readings in American History |  |
| HIS 377 | Black Leaders, Then and Now |  |
| HIS 380 | American Military History |  |
| HIS 439 | Black Lives Matter: the Long Civil Right |  |
| HIS 490M | Special Topics: Black Lives Matter |  |
| HIS 490Z | The History of Love and Marriage |  |
| Select two Atlantic World History |  | 6 |
| HIS 310 | Age of Encounter, 1415-1607 |  |
| HIS 320 | Independent Latin America |  |
| HIS 346 | Twentieth-Century Europe |  |
| HIS 350 | Borders and Moving People |  |
| HIS 360 | Latin America: Readings in Latin-American History |  |
| HIS 361 | Latin America: Readings in Latin-American History |  |
| HIS 365 | Caribbean History |  |
| HIS 372 | African Diaspora History and Culture |  |
| HIS 490 | Special Topics |  |
| XXX XXX | History Elective (300-400 Level) | 3 |
| XXX XXX | Skill-based Elective | 3 |
| $\begin{aligned} & \text { CSC } 200 \\ & \text { or GEO } 360 \\ & \text { or ENG } 410 \end{aligned}$ | Advanced Computer Concepts or Introduction to Gis or History of the English Language |  |
| or any POS 3XX or 4XX |  |  |
|  | Credits | 29 |
| Fourth Year |  |  |
| GEO 430 | Geography of Atlantic World Slavery | 3 |
| XXX XXX | Electives (See Advisor or Department Chair) | 6 |
| GEO XXX | Geography Elective | 3 |
| HIS 497 | Historical Research | 3 |


| HIS 494 or INT 475 | Internship or Interdisciplinary Studies Internship | 3 |
| :---: | :---: | :---: |
| HIS XXX | History Electives (300-400 level) | 9 |
|  | Credits | 27 |
|  | Total Credits | 120 |

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.

## Bachelor of Arts in History - Military Science (NAVY) Concentration

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.

| Summary of Degree Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 54 |
| Electives | 0 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BIO 100 | Biological Science | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HIS 102 | United States History to 1865 | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| NSC 111 | Naval Laboratory I | 1 |
| NSC 112 | Naval Laboratory II | 1 |
| NSC 101 | Naval Orientation | 2 |
| NSC 102 | Seapower \& Maritime Affairs | 3 |
| MTH 184 | Calculus I | 4 |
| MTH 251 | Calculus II | 4 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| ENG 285 | Public Speaking | 3 |
| HIS 205 | Introduction to the Study of History | 3 |
| HIS 100 | History of World Societies I | 3 |
| HIS 101 | History of World Societies II | 3 |
| POS 100 | American National Government | 3 |
| NSC 201 | Navalship Systems I (Engineering) | 3 |
| NSC 202 | Navalship Systems II (Weapons) | 3 |
| ENG 207 | Introduction to World Literature | 3 |
| NSC 211 | Naval Laboratory III | 1 |
| NSC 212 | Naval Laboratory IV | 1 |
| PHY 160 | University Physics I | 4 |
|  | Credits | $\mathbf{3 1}$ |

## Third Year

| CSC 150 <br> or CSC 200 | Computer Literacy <br> or Advanced Computer Concepts | 3 |
| :---: | :--- | :---: |
| HIS 305 | The Three R's of History: Reading, Writing <br> and Research | 3 |
| HIS 380 | American Military History | 3 |


| Select seven credits of History Electives (300-400 levvel, NonWestern) |  | 7 |
| :---: | :---: | :---: |
| NSC 301 | Navigation \& Naval Operations I | 3 |
| NSC 302 | Navigation \& Naval Operations II | 3 |
| NSC 311 | Naval Laboratory V | 1 |
| NSC 312 | Naval Laboratory Vi | 1 |
| ENG 285 | Public Speaking | 3 |
| PHY 161 | University Physics II | 4 |
|  | Credits | 31 |
| Fourth Year |  |  |
| $\begin{aligned} & \text { HIS } 335 / 336 \\ & \text { or HIS } \\ & 370 / 371 \end{aligned}$ | African-American History or Early African History and Cultures, From the Beginning of Humankind to 1600 | 3 |
| HIS 497 | Historical Research | 3 |
| HIS 439 | Black Lives Matter the Long Civil Right | 3 |
| GEO 130 | Principles of Geography | 3 |
| Select three credits of History Electives at 300-400 level |  | 3 |
| NSC 401 | Leadership \& Management I | 3 |
| NSC 402 | Leadership \& Ethics | 3 |
| NSC 411 | Naval Laboratory Vii | 1 |
| NSC 412 | Naval Laboratory Viii | 1 |
|  | Credits | 23 |
|  | Total Credits | 117 |

## Bachelor of Arts in History - Online

Note: Students in this curriculum must comply with all School of and basic knowledge of computers and internet usage. See Extended Learning policies (https://www.nsu.edu/policy/admin-34-01.aspx), inc/uding those on computer access.

| Summary of Degree Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 57 |
| Electives | 23 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HIS 100 | History of World Societies I | 3 |
| HIS 101 | History of World Societies II | 3 |
| HED 100 | Personal and Community Health | 2 |
| HIS 102 | United States History to 1865 | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 33 |

## Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { ENG } 207 \\ & \text { or FIA } 201 \\ & \text { or MUS } 301 \end{aligned}$ | Introduction to World Literature or Basic Art Appreciation or Music Appreciation | 3 |
| $\begin{aligned} & \text { ENG } 214 \\ & \text { or INT } 375 \\ & \text { or INT } 399 F \end{aligned}$ | Introduction to Creative Writing or Language and Society or Africant American Language and Culture | 3 |
| SPN 111 <br> or GRM 111 <br> or FRN 111 <br> or JPN 111 | Elementary Spanish or Elementary German I or Elementary French I or Elementary Japanese I | 3 |
| GEO 130 | Principles of Geography | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| $\begin{aligned} & \text { POS } 100 \\ & \text { or BUS } 175 \\ & \text { or ECN } 200 \\ & \text { or SOC } 101 \end{aligned}$ | American National Government or Introduction to Business \& Entrepreneurship or Basic Principles of Economics or Introduction to the Social Sciences | 3 |
| HIS 205 | Introduction to the Study of History | 3 |
| ENG 285 | Public Speaking | 3 |


| HIS 335 <br> or HIS 336 <br> or HIS 370 <br> or HIS 371 | African-American History <br> or African-American History Since 1865 <br> or Early African History and Cultures, | 3 |
| :---: | :--- | :---: |
|  | From the Beginning of Humankind to <br> 1600 <br> or Modern African History \& Cultures <br> $1600-P R E S E N T$ |  |
| ENG 383or MUS 234 <br> or FIA 370 | African-American Literature, 1940- <br> PRESENT <br> or African-American Music <br> or African/Afro-American Art | 3 |

## Credits

Third Year

| XXX-XXX | Electives (See Advisor or Department <br> Chair) | 5 |
| :--- | :--- | :--- |
| HIS 305 | The Three R's of History: Reading, Writing <br> and Research | 3 |

Geography Elective 3
Select two History Electives at the 300-400 level 6

| HIS 313 | United States Early National Period, <br> $1788-1815$ |
| :--- | :--- |
| HIS 314 | Antebellum America, 1815-1850 |
| HIS 328 | History of Virginia |
| HIS 337 | United States Women's History |
| HIS 364 | Readings in American History |
| HIS 377 | Black Leaders, Then and Now |
| HIS 380 | American Military History |
| HIS 439 | Black Lives Matter: the Long Civil Right |
| HIS 490M | Special Topics: Black Lives Matter |
| HIS 490Z | The History of Love and Marriage |

Select two Atlantic World History 6

| HIS 310 | Age of Encounter, 1415-1607 |
| :--- | :--- |
| HIS 320 | Independent Latin America |
| HIS 346 | Twentieth-Century Europe |
| HIS 350 | Borders and Moving People |
| HIS 360 | Latin America: Readings in Latin-American |
|  | History |

HIS 361 Latin America: Readings in Latin-American History

| HIS 365 | Caribbean History |  |
| ---: | :--- | :--- |
| HIS 372 | African Diaspora History and Culture |  |
| HIS 490 | Special Topics | 3 |
| XXX XXX | History Elective (300-400 Level) | 3 |
| XXX XXX | Skill-based Elective |  |

CSC 200 Advanced Computer Concepts or GEO 360 or Introduction to Gis or ENG 410 or History of the English Language
or any POS $3 X X$ or $4 X X$
Credits

| Fourth Year |  |  |
| :--- | :--- | :--- |
| GEO 430 | Geography of Atlantic World Slavery | 3 |
| XXX XXX | Electives (See Advisor or Department Chair) | 6 |
| GEO XXX | Geography Elective | 3 |
| HIS 497 | Historical Research | 3 |


| HIS 494 or INT 475 | Internship or Interdisciplinary Studies Internship | 3 |
| :---: | :---: | :---: |
| HIS XXX | History Electives (300-400 level) | 9 |
|  | Credits | 27 |
|  | Total Credits | 120 |

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.

# Bachelor of Arts in History - Teacher Licensure Endorsement in History and Social Science Endorsement Requirements 

The Division requires 27 hours in history including 15 hours in lower level U.S. history, world civilization, and introduction to history courses, as well as 12 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, SEM 101 Spartan Seminar 101, and ENG 101 College English I, ENG 102 College English II, and ENG 203 Advanced Communication Skills courses. These requirements apply to all areas of endorsement.
*Students must pass the PRAXIS I Test prior to applying for admission to the School of Education and enrollment in upper level professional education courses. SED 233 Seminar in Assessment and Evaluation, while not required, may be taken before taking the PRAXIS Test.

Prior to enrolling for SED 499 Directed Teaching (internship), students must pass the PRAXIS II Test for Social Studies and must give the Division a hard copy of both their overall scores and content-specific subscores from this examination. Failure to pass the content areas of the Praxis II Test and to give the Division a hard copy of those Praxis II scores and sub-scores for verification will prevent the student from graduating.

## **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, 18 semester hours in Political Science, 9 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).

## Summary of Degree Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 43 |
| Major Requirements | 39 |
| Electives | 23 |
| Other Requirements | 22 |
| Total Credit Hours | 127 |

## Curriculum

Course Title Credits
First Year
SEM 101
\& SEM 102
Spartan Seminar 101
BIO 100 and Spartan Seminar 102 Biological Science 3

| BIO 100L | Biological Science Lab | 1 |
| :--- | :--- | ---: |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| HIS 102 | United States History to 1865 | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| EDU 201 | Foundations of Education | 3 |
|  | Credits | $\mathbf{3 0}$ |

## Second Year

SEM 201 Spartan Seminar 201
POS 100 American National Government 3
GEO 130 Principles of Geography 3
HIS $100 \quad 3$
HIS 101 History of World Societies II 3

HIS 205 Introduction to the Study of History 3
Select one of the following: 3

| FIA 201 | Basic Art Appreciation |
| :---: | :--- |
| MUS 301 | Music Appreciation |
| Select one of the following: | 3 |


| FRN 111 | Elementary French I |
| :--- | :--- |
| GRM 111 | Elementary German I |
| SPN 111 | Elementary Spanish |

Select one of the following: 3

| FRN 112 | Elementary French II |  |
| :---: | :--- | ---: |
| GRM 112 | Elementary German II |  |
| SPN 112 | Elementary Spanish II | 3 |
| ENG 285 | Public Speaking | 3 |
| HIS 328 | History of Virginia | 3 |
| POS 231 | American State and Local Government | 3 |
| POS 360 | International Politics | $\mathbf{3 7}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| ECN 211 | Principles of Microeconomics |  |

ECN 212 Principles of MacRoeconomics 3
EDU 381 Classroom and Behavior Management 3

Select one of the following: 3

| ENG 286 | Writing About Literary Texts |
| :--- | :--- |
| ENG 203 | Advanced Communication Skills |
| ENG 207 | Introduction to World Literature |
| ENG 303 | Professional \& Technical Writing |

Select one of the following: 3

HIS 335 African-American History
HIS 336 African-American History Since 1865
HIS 370 Early African History and Cultures, From the Beginning of Humankind to 1600
HIS 371 Modern African History \& Cultures 1600- PRESENT
CSC 150 Computer Literacy 3
Select three credits of History Elective at the 300-400 level 3

| SED 390 | Curriculum \& Instructional Procedures in History \& Social Studies | 3 |
| :---: | :---: | :---: |
| SED 420 | Educational Technology | 3 |
| POS XXX | Political Science Elective | 3 |
| Select three credits of Geography Elective at 300-400 level |  | 3 |
|  | Credits | 33 |
| Fourth Year |  |  |
| ENG 383 | African-American Literature, 1940PRESENT | 3 |
| Select three credits of Geography Elective at 300-400 level |  | 3 |
| HIS 497 | Historical Research | 3 |
| $\begin{aligned} & \text { POS } 430 \\ & \text { or POS } 431 \end{aligned}$ | Political Theory or Modern Theory | 3 |
| POS XXX | Political Science Elective | 3 |
| SED 405 | Reading in the Content Area | 3 |
| $\begin{aligned} & \text { SED } 486 \\ & \text { or PSY } 228 \end{aligned}$ | Human Growth and Development or Developmental Psychology | 3 |
| SED 499 | Directed Teaching (internship) | 12 |
|  | Credits | 33 |
|  | Total Credits | 133 |

## Teacher Licensure Endorsement in History and Social Science - Early Childhood

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):

| Code | Title | Credits |
| :--- | :--- | ---: |
| PSY 228 | Developmental Psychology | 3 |
| EED 450 | Teaching Literacy in the Elementary School | 3 |
| EED 499 | Directed Teaching and Seminar | 12 |
| ECE 460 | Admn of Child \& Family Programs | 3 |
| EED 461 | Curriculum and Instruction for Early School | 3 |
| EDU 201 | Foundations of Education | 3 |
| SED 233 | Seminar in Assessment and Evaluation | 3 |

## Teacher Licensure Endorsement in History and Social Science -- Special Education

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

| Code | Title | Credits |
| :--- | :--- | ---: |
| CSSE 423 | Rehab Techniques | 3 |
| EDU 201 | Foundations of Education | 3 |
| SED 233 | Seminar in Assessment and Evaluation | 3 |
| SED 405 | Reading in the Content Area | 3 |
| SED 486 | Human Growth and Development | 3 |
| SPE 410 | Introduction to Exceptional Individuals | 3 |
| SPE 371 | Med Asp Hndcp Cond | 2 |
| SPE 440 | Collaboration Procedures,Case Managment | 3 |


| SPE 490 | Assessments of Exceptional Students | 3 |
| :--- | :--- | ---: |
| SPE 499 | Directed Teaching | $6-12$ |

## Bachelor of Science in Interdisciplinary Studies

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements (including <br> concentrations) | 54 |
| Electives | 23 |
| Technology Supplement | 3 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |
| :--- | :--- |
| Course | Title |

First Year
Select one of the following: 3

| BIO, PHY, CHM, SCI Biological Science ${ }^{1}$ |
| :--- |
| BIO 110 General Biology <br> Select one of the following:  <br> BIO XXXL Biological Science Lab ${ }^{1}$ <br> CHM 100L Chemistry: Man \& Environment Laboratory $^{\text {PHY 100L }}$ |

Select one of the following: 3

| CSC 150 | Computer Literacy $^{1}$ |  |
| :--- | :--- | :--- |
| CLM 165 | Computer Literacy for Musicians |  |
| CSC 169 | Introduction to Computer Science |  |
| CIT 150 | Computer Principls |  |
| FIA 280 | Computer Applications in the Arts |  |
| TED 170 | Society/Technology | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 2 |
| HED 100 | Personal and Community Health | 3 |

Select one of the following Social Science: 3

| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| SOC 110 | Introduction to Sociology |
| HIS 100 | History of World Societies I |
| HIS 101 | History of World Societies II |
| HIS 102 | United States History to 1865 |
| HIS 103 | United States History Since 1865 |
| BUS 175 |  <br> Entrepreneurship |
| ECN 200 | Basic Principles of Economics |
| Select one of the following Humanities: |  |


| Select one of the following Humanities: | 3 |  |
| :--- | :--- | :--- |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| MTH 103 | Mathematics in General Education (or <br> higher) | 3 |
| PED 100 | Fundametals of Fitness for Life ${ }^{1}$ | 1 |
| XXX XXX | Free Electives | 2 |


| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 <br> and Spartan Seminar 102 | 2 |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{2 9}$ |
| Second Year |  | 3 |
| XXX XXX | Any Natural Science | 3 |
| CSC 200 $^{\text {A }}$ | Advanced Computer Concepts ${ }^{1}$ | 3 |
| XXX XXX | Cultural Perspective A $^{1}$ | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Cultural Perspective B | 15 |
| XXX XXX | Concentration I Courses | 1 |
| SEM 201 | Spartan Seminar 201 | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | ---: |
| INT 308 | Introduction to Interdisciplinary Studies |  |
| INT 322 | Approaches to Critical Analysis | 3 |
| INT 360 | Foundations of Research in | 3 |
|  | Interdisciplinary Studies |  |
| INT 375 | Language and Society | 3 |
| XXX XXX | Concentration II Courses | 15 |
| XXX XXX | Cultural Elective (300-400 level) | 3 |
|  | Credits | $\mathbf{2 7}$ |

Fourth Year
INT 411 Ideas and Their Influences 3
or INT 412 or Contemporary Globalization
INT 470 Sr Seminar 3
Select two of the following: 6

| INT 399A | The Black Woman |  |
| :--- | :--- | ---: |
| INT 477 | Sr Thesis |  |
| Upper Level |  | 18 |
| XXX XXX | Free Electives (300-400 level) | $\mathbf{3 0}$ |
|  | Credits | $\mathbf{1 1 7}$ |

Substitutions approved by College Dean and Department Chair may apply.

# Bachelor of Science in Interdisciplinary Studies - 3 Year Degree Concentration 

| Summary of Graduation Requirements |  |  |
| :--- | :--- | :--- |
| Subject Area | Credits |  |
| General Education Core (p. 41) | 40 |  |
| Major Requirements (including <br> concentrations) | 54 |  |
| Electives | 23 |  |
| Technology Supplement | 3 |  |
| Total Credit Hours | 120 | Credits |
| Curriculum |  |  |
| Course | Title |  |

First Year
Select one of the following:
BIO, PHY, CHM, SCI Biological Science ${ }^{1}$

| BIO 110 | General Biology |
| :--- | :--- |
| Select one of the following: |  |
| BIO XXXL | Biological Science Lab ${ }^{1}$ |
| CHM 100L | Chemistry: Man \& Environment Laboratory $^{\text {PHY 100L }}$ | Physical Science Laboratory

Select one of the following: 3

| CSC 150 | Computer Literacy $^{1}$ |  |
| :--- | :--- | :--- |
| CLM 165 | Computer Literacy for Musicians |  |
| CSC 169 | Introduction to Computer Science |  |
| CIT 150 | Computer Principls |  |
| FIA 280 | Computer Applications in the Arts |  |
| TED 170 | Society/Technology | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 2 |
| HED 100 | Personal and Community Health | 3 |
| Select one of the following Social Science: |  |  |


| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| SOC 110 | Introduction to Sociology |
| HIS 100 | History of World Societies I |
| HIS 101 | History of World Societies II |
| HIS 102 | United States History to 1865 |
| HIS 103 | United States History Since 1865 |
| BUS 175 |  |
|  | Entrepreneurship |
| ECN 200 | Basic Principles of Economics |
| Select one of the following Humanities: |  |


| HUM 210 | Humanties |  |
| :---: | :--- | :--- |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| MTH 103 | Mathematics in General Education (or <br> higher) | 3 |
| PED 100 | Fundametals of Fitness for Life ${ }^{1}$ | 1 |


| XXX XXX | Free Electives | 2 |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |29

Summer

| XXX XXX | Cultural Perspective $^{1}$ | 3 |
| :--- | :--- | :--- |
| Credits | 6 |  |

Second Year
SCI 101 Physical Science for Non-Science Majors 3
CSC 200 Advanced Computer Concepts ..... 3
XXX XXX Cultural Perspective 3
XXX XXX Concentrations I and II ..... 21
NT 308 Introduction to Interdisciplinary Studies

Approaches to Critical Analysis 3Credits 33
$\left.\begin{array}{llr}\text { Summer } & & \\ \text { INT 360 } & \text { Foundations of Research in } \\ \text { Interdisciplinary Studies }\end{array}\right)$

Third Year
INT 411 Ideas and Their Influences 3
INT 412 Contemporary Globalization ..... 3
INT 470 Sr Seminar ..... 3
Select one of the following: ..... 3

| INT 399A | The Black Woman |  |
| :--- | :--- | ---: |
| INT 399E | Interdisciplinarity of Religion |  |
| INT 399F | Africant American Language and Culture |  |
| INT 477 | Sr Thesis |  |
| Upper Level |  | 9 |
| XXX XXX | Concentration II (300-400 level) |  |
| XXX XXX | Free Electives (300-400 level) | 15 |
|  | Credits | $\mathbf{3 6}$ |
|  | Total Credits | $\mathbf{1 1 3}$ |

[^0]
## Bachelor of Science in Interdisciplinary Studies - Military Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements includes INT <br> Core Courses and other courses in <br> concentrations | 63 |
| Electives | 17 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |
| :--- | :--- | :--- |
| Course | Title Credits |

First Year
BIO, PHY, CHM, Biological Science ${ }^{1}$

SCI
Select one of the following:

| BIO XXXL | Biological Science Lab |
| :--- | :--- |${ }^{1}$

CHM 100L
PHY 100L
Chemistry: Man \& Environment Laboratory
Select one of the following:

| CSC 150 | Computer Literacy $^{1}$ |  |
| :--- | :--- | :--- |
| CLM 165 | Computer Literacy for Musicians |  |
| CSC 169 | Introduction to Computer Science |  |
| CIT 150 | Computer Principls |  |
| FIA 280 | Computer Applications in the Arts |  |
| TED 170 | Society/Technology | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 2 |
| HED 100 | Personal and Community Health | 3 |


| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| SOC 110 | Introduction to Sociology |
| HIS 100 | History of World Societies I |
| HIS 101 | History of World Societies II |
| HIS 102 | United States History to 1865 |
| HIS 103 | United States History Since 1865 |
| BUS 175 |  |
|  | Entrepreneurship |
| ECN 200 | Basic Principles of Economics |
| Select one of the following Humanities: | 3 |


| HUM 210 | Humanties |  |
| :---: | :--- | :--- |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation | 3 |
| MTH 103 | Mathematics in General Education (or <br> higher) |  |
| PED 100 | Fundametals of Fitness for Life |  |


| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| :---: | :---: | :---: |
|  | Credits | 29 |
| Second Year |  |  |
| XXX 100 | Any Natural Science ${ }^{1}$ | 3 |
| CSC 200 | Advanced Computer Concepts | 3 |
| XXX XXX | Cultural Perspective A ${ }^{1}$ | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Concentration I Courses | 15 |
| XXX XXX | Cultural Perspective B | 3 |
|  | Credits | 30 |


| Third Year |  |  |
| :--- | :--- | ---: |
| INT 308 | Introduction to Interdisciplinary Studies |  |
| INT 322 | Approaches to Critical Analysis | 3 |
| INT 360 | Foundations of Research in |  |
|  | Interdisciplinary Studies | 3 |
| INT 375 | Language and Society | 3 |
| XXX XXX | Concentration II Courses | 15 |
| XXX XXX | Free Electives (300-400 level) | $\mathbf{3}$ |
|  | Credits | $\mathbf{2 7}$ |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| INT 411 | Ideas and Their Influences |  |
| or INT 412 | or Contemporary Globalization | 3 |
| XXX XXX | Concentration III Courses | 15 |
| INT 470 | Sr Seminar | 3 |
| XXX XXX | Free Electives (300-400 level) | 9 |
|  | Credits | $\mathbf{3 0}$ |
|  | Total Credits | $\mathbf{1 1 6}$ |

[^1]
# Bachelor of Science in Interdisciplinary Studies - Online 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements includes INT 63 <br> Core Courses and other courses in  <br> concentrations  |  |
| Electives | 17 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |
| :--- | :--- |
| Course | Title Credits |

First Year

| Select one of the following: |  | 3 |
| :---: | :---: | :---: |
| BIO, PHY, CHM, SCI Biological Science ${ }^{1}$ |  |  |
| BIO 110 | General Biology |  |
| Select one of the following: |  | 1 |
| BIO XXXL | Biological Science Lab ${ }^{1}$ |  |
| CHM 100L | Chemistry: Man \& Environment Laboratory |  |
| PHY 100L | Physical Science Laboratory |  |
| Select one of the following: |  | 3 |
| CSC 150 | Computer Literacy ${ }^{1}$ |  |
| CLM 165 | Computer Literacy for Musicians |  |
| CSC 169 | Introduction to Computer Science |  |
| CIT 150 | Computer Principls |  |
| FIA 280 | Computer Applications in the Arts |  |
| TED 170 | Society/Technology |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| Select one of the following Social Science: |  | 3 |


| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| SOC 110 | Introduction to Sociology |


| SEM 101 | Spartan Seminar 101 |  |
| :--- | :--- | ---: |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
|  | Credits | $\mathbf{2 9}$ |
| Second Year |  |  |
| XXX XXX | Any Natural Science ${ }^{1}$ | 3 |
| CSC 200 | Advanced Computer Concepts $^{1}$ | 3 |
| XXX XXX | Cultural Perspective A $^{1}$ | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Cultural Perspective B | 3 |
| XXX XXX | Concentration I Courses | 12 |
| INT 210 | Introduction to Interdisciplinary Studies | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | ---: |
| INT 322 | Approaches to Critical Analysis | 3 |
| INT 308 | introduction to Interdisciplinary Studies |  |
| INT 360 | Foundations of Research in <br> Interdisciplinary Studies | 3 |
| INT 375 | Language and Society | 3 |
| XXX XXX | Concentration II Courses | 15 |
| XXX XXX | Free Elective (300-400 level) | $\mathbf{3}$ |
| INT 308 | Introduction to Interdisciplinary Studies |  |
|  | Credits | $\mathbf{2 7}$ |

Fourth Year
INT 411 Ideas and Their Influences 3

| or INT 412 | or Contemporary Globalization |  |
| :--- | :---: | :--- |
| XX XXX | Concentration III Courses | 15 |

INT $470 \quad 3$

| XXX XXX | Free Electives (300-400 level) | 9 |
| :--- | :--- | ---: |
| Credits | $\mathbf{3 0}$ |  |

Total Credits 117
Substitutions approved by College Dean and Department Chair may apply.

## Certificate in African and African Diasporan Studies

This certificate program is designed for those students who are interested in the study of the cultures of people 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 their national and international political, cultural, and economic contexts.


## Minor in Africana Studies

The Minor in Africana Studies offered by the Department of History and Interdisciplinary Studies provides students with 18 multi-disciplinary credit hours in courses across the curriculum that explore the vast field of African Studies.

| Required Course: |  |  |
| :---: | :---: | :---: |
| Code | Title | Credits |
| INT 290 | Principles of Africana Studies | 3 |
| Total Credits |  | 3 |
| Determined Elective Courses: |  |  |
| Code | Title | Credits |
| HIS 335 | African-American History | 3 |
| or HIS 336 | African-American History Since 1865 |  |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 | 3 |
| or HIS 371 | Modern African History \& Cultures 1600-PRES |  |
| Any upper level GEO course 3 |  |  |
| GEO 420 | Disability Geographies |  |
| GEO 430 | Geography of Atlantic World Slavery |  |
| GEO 450 | Cultural Geography |  |

Total Credits

Credits

| Code | Title | Credits |
| :--- | :--- | ---: |
| Select any two courses from the following: | 6 |  |
| ENG 383 | African-American Literature, 1940-PRESENT |  |
| MUS 234 | African-American Music |  |
| FIA 370 | African/Afro-American Art |  |
| INT 399A | The Black Woman |  |
| INT 412 | Contemporary Globalization |  |
| HIS 372 | African Diaspora History and Culture |  |
| HIS 492 | Race and Gender in Cuba and Latin America |  |
| HIS 490M | Special Topics: Black Lives Matter |  |
| POS 463 | Politics of African Nations |  |
| GEO 337 | Geography of Africa |  |
| GEO 338 | Caribbean Geography |  |
| SOC 237 | Racial \& Ethnic Minorities |  |
| PSY 340 | Psychology of the African-American |  |
| Total Credits |  |  |

## Minor in History

## Curriculum

For those students in other majors seeking a minor in history, the following program is offered:

| Code | Title | Credits |
| :--- | :--- | ---: |
| HIS 205 | Introduction to the Study of History | 3 |
| Select four History Electives at the $300-400$ level | 12 |  |
| Total Credits | $\mathbf{1 5}$ |  |
| Total Degree Hours Required: $\mathbf{1 8}$ |  |  |

## Minor in Interdisciplinary Studies

## Curriculum

Eighteen (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.

| Code | Title | Credits |
| :--- | :--- | ---: |
| INT 210 | Introduction to Interdisciplinary Studies | 3 |
| INT 311 | Principles of Interdisciplinary Studies | 3 |
| Approaches to Critical Analysis | 3 |  |
| INT 360 | Foundations of Research in Interdisciplinary | 3 |
|  | Studies | 3 |
| INT 375 | Language and Society | $\mathbf{3}$ |
| INT 470 | Sr Seminar | $\mathbf{3}$ |
| Total Credits |  | $\mathbf{1 8}$ |

## Online Programs

The Department of Interdisciplinary Studies offers all core courses online, face to face, and in accelerated (8 week) sessions; as possible.

## 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 eLearning at the NSU website, click on Student Support, and 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:

Go to the NSU web-site (www.nsu.edu (http://www.nsu.edu)).
Click on E-Learning; then click on Student Support; click on e-mail login information.
4. Students registered for online classes should use their Blackboard (Bb) login and access Blackboard. Once in Blackboard, the students should transmit an e-mail to the class instructor to ensure that they can access the class and that their e-mail is functioning properly.
5. 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 to send and receive attachments
6. 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 School of Extended Learning.

## B.S. in Interdisciplinary Studies

## 1) Reclamation Program at Virginia Beach Higher

 Education Center(Please see NSU Website, http://www.nsu.edu/vbhec/reclamation (http://www.nsu.edu/vbhec/reclamation/))

## 2) Norfolk Naval Base

(Please see NSU Website, http://www.nsu.edu/vbhec/navalclasses (http://www.nsu.edu/vbhec/navalclasses/).)

## Mass Communications and Journalism

Dr. William Hart
Department Chair
(757) 823-2261

The mission of the Department of Mass Communications and Journalism is to advance the academic and professional excellence of undergraduate and graduate students, alumni, and media practitioners through programs of teaching, research, and public service that combine strong liberal arts and science studies with professional preparation for media careers. The Department shall produce graduates who meet high standards of performance in gathering, editing, interpreting, and disseminating information that may determine the public discourse.

The Department offers an undergraduate degree program leading to the Bachelor of Science in Mass Communications in either of two tracks: General Broadcast or Journalism, and a graduate degree program leading to the Master of Arts in Media and Communications.

The curriculum is designed to meet the requirements of the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC).

In addition to the major coursework, ACEJMC standards require undergraduate students to complete at least 72 hours outside of the major, as well as the general education requirements in the liberal arts and sciences at Norfolk State University.

## Curriculum Regulations

Mass Communications and Journalism students must earn " C " or better in every departmental course and in:

| Code | Title | Credits |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 | 1 |
| SEM 102 | Spartan Seminar 102 | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| ENG 203 | Advanced Communication Skills | 3 |
| ENG 285 | Public Speaking | 3 |

## Transfer Credit Policy

The Department will accept no more than 12 hours credit in a comparable undergraduate major taken at another institution. It shall accept credits for courses outside the major when approved by the Office of Admissions and the Registrar's Office.

## Mass Communications and Journalism Programs

- Bachelor of Science in Mass Communications - General Broadcast Concentration (p. 123)
- Bachelor of Science in Mass Communications - Journalism Concentration (p. 124)
- Minor in Mass Communications (p. 125)
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757-823-2384

# Bachelor of Science in Mass Communications - General Broadcast Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 59 |
| Electives | 21 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| MCM 111 | Media and Society | 3 |
| MCM 250 | Television Production | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| HIS 100 | History of World Societies I | 3 |
| $\begin{aligned} & \text { ENG } 101 \\ & \quad \text { or ENG 101H } \end{aligned}$ | College English I or Honors College English I | 3 |
| $\begin{aligned} & \text { ENG } 102 \\ & \quad \text { or ENG 102H } \end{aligned}$ | College English II or Honors College English II | 3 |
| POS 100 | American National Government | 3 |
| $\begin{aligned} & \text { SOC } 101 \\ & \text { or SOC } 110 \end{aligned}$ | Introduction to the Social Sciences or Introduction to Sociology | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 29 |
| Second Year |  |  |
| SEM 201 | Spartan Seminar 201 | 1 |
| CSC 150 | Computer Literacy | 3 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one of the | following: | 1 |


| BIO 100L | Biological Science Lab |  |
| :---: | :--- | ---: |
| CHM 100L | Chemistry: Man \& Environment Laboratory |  |
| SCI 101L | Physical Science Laboratory |  |
| HUM 210 <br> or HUM 211 | Humanties <br> or Humanities | 3 |
| ENG 203 | Advanced Communication Skills |  |
| ENG 285 | Public Speaking <br> or ENG 285H <br> or Honors Public Speaking | 3 |
| ENG 207 | Introduction to World Literature | 3 |
| MUS 301 | Music Appreciation | 3 |
| MCM 261 | Introduction to Media Writing | 3 |
| CSC 200 | Advanced Computer Concepts | 3 |
|  | Credits | 3 |

## Third Year

Select one of the following:
3
HIS 335
HIS 336
HIS 370

HIS 371

ENG 383

MUS 234
POS 315
PSY 210
ECN 211
or ECN 200
or ECN 212
JRN 290
or MCM 280
or MCM 330
MCM 310
or MCM 363
or MCM 476
ENG 114
MCM 350
or MCM 315
or MCM 390

African-American History
African-American History Since 1865
Early African History and Cultures, From the Beginning of Humankind to 1600
Modern African History \& Cultures 1600PRESENT
African-American Literature, 1940PRESENT

| African-American Music |  |
| :--- | ---: |
| African American Politics | 3 |
| Introduction to Psychology | 3 |
| Principles of Microeconomics |  |

or Basic Principles of Economics
or Principles of MacRoeconomics
Digital Photography 3
or Film History
or Electronic Field Production \& Editing
History of Mass Communications 3
or Audio Production
or Media Sales
Techniques of Vocabulary Building 2
Television Directing 3
or Interviewing
or Global Media

| XXX XXX | Elective within the Major | 3 |
| :---: | :--- | ---: |
| JRN 299 | Multiculturalism and Mass Media |  |
| MCM 420 | Intercultural Communication |  |
| XXX XXX | Electives outside the Major | 6 |
|  | Credits | $\mathbf{2 9}$ |

## Fourth Year

GEO $130 \quad$ Principles of Geography 3
MCM 440 Media Law 3
MCM 491 Introduction to the Internet/Web Page 3

MCM 351 Introduction to Broadcast \& Film Criticism 3
or MCM 450
or MCM 450H
or MCM 485
MCM 445
or MCM 464
or MCM 470
MCM 460
or MCM 362
or MCM 489

| XXX XXX | Elective Within the Major | 3 |
| :---: | :--- | ---: |
| JRN 299 | Multiculturalism and Mass Media |  |
| MCM 420 | Intercultural Communication |  |
| XXX XXX | Elective Outside the Major | $\mathbf{9}$ |
|  | Credits | $\mathbf{3 0}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

# Bachelor of Science in Mass Communications - Journalism Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 39 |
| Electives | 15 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| MCM 111 | Media and Society | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| HIS 100 <br> or HIS 101 <br> or HIS 102 <br> or HIS 103 | History of World Societies I or History of World Societies II or United States History to 1865 or United States History Since 1865 | 3 |
| ENG 101 or ENG 101H | College English I or Honors College English I | 3 |
| JRN 220 | Basic Writing | 3 |
| ENG 102 or ENG 102H | College English II or Honors College English II | 3 |
| POS 100 | American National Government | 3 |
| $\begin{aligned} & \text { SOC } 101 \\ & \text { or SOC } 110 \end{aligned}$ | Introduction to the Social Sciences or Introduction to Sociology | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |

$\square$

|  | Credits | 29 |
| :---: | :---: | :---: |
| Second Year |  |  |
| SEM 201 | Spartan Seminar 201 | 1 |
| CSC 150 | Computer Literacy | 3 |
| BIO 100 | Biological Science | 3 |
| $\begin{aligned} & \text { BIO } 100 \mathrm{~L} \\ & \quad \text { or SCI } 101 \mathrm{~L} \end{aligned}$ | Biological Science Lab or Physical Science Laboratory | 1 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| JRN 210 | Advertising Principles | 3 |
| HUM 210 or HUM 211 | Humanties or Humanities | 3 |
| $\begin{aligned} & \text { ENG } 203 \\ & \text { or ENG } 286 \\ & \text { or ENG } 303 \end{aligned}$ | Advanced Communication Skills or Writing About Literary Texts or Professional \& Technical Writing | 3 |
| $\begin{aligned} & \text { ENG } 285 \\ & \text { or ENG 285H } \end{aligned}$ | Public Speaking or Honors Public Speaking | 3 |


| MUS 301 or FIA 201 | Music Appreciation or Basic Art Appreciation | 3 |
| :---: | :---: | :---: |
| JRN 290 | Digital Photography | 3 |
| CSC 200 | Advanced Computer Concepts | 3 |
|  | Credits | 32 |
| Third Year |  |  |
| ENG 207 | Introduction to World Literature | 3 |
| XXX XXX | Cultural Electives | 3 |
| MUS 234 | African-American Music |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| POS 315 | African American Politics |  |
| PSY 340 | Psychology of the African-American |  |
| PSY 210 | Introduction to Psychology | 3 |
| $\begin{aligned} & \text { ECN } 211 \\ & \text { or ECN } 200 \end{aligned}$ | Principles of Microeconomics or Basic Principles of Economics | 3 |
| ENG 114 | Techniques of Vocabulary Building | 2 |
| JRN 330 | Copy Editing | 3 |
| JRN 341 <br> or JRN 313 <br> or JRN 323 | Public Relations Practice or Advertising/ Public Campaigns or Writing Special Articles | 3 |
| XXX XXX | Elective within the Major | 3 |
| JRN 299 | Multiculturalism and Mass Media |  |
| MCM 420 | Intercultural Communication |  |
| XXX XXX | Electives outside the Major | 9 |
|  | Credits | 32 |
| Fourth Year |  |  |
| MCM 440 <br> or MCM 445 <br> or MCM 445H | Media Law or Media Ethics or Honors Media Ethics | 3 |
| JRN 332 or JRN 342 | Graphics Design or Promotional Writing | 3 |
| GEO 130 | Principles of Geography | 3 |
| MCM 310 <br> or MCM 460 <br> or MCM 310H | History of Mass Communications or Contemporary Issues in Media or Honors History of Mass Communications | 3 |
| MCM 450 or MCM 450 H | Media Theory and Research or Media Theory and Research | 3 |
| MCM 491 | Introduction to the Internet/Web Page | 3 |
| XXX XXX | Elective within the Major | 3 |
| JRN 299 | Multiculturalism and Mass Media |  |
| MCM 420 | Intercultural Communication |  |
| XXX XXX | Electives outside the Major | 6 |
|  | Credits | 27 |
|  | Total Credits | 120 |

## Minor in Mass Communications



Total Credits

## Political Science

Dr. Olusoli Akomolafe
Department Chair
(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: 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 fundamental training for students planning careers in law, public management, political 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 prepare students with the appropriate academic background (i.e., knowledge base and communication skills), which can aid them in performing well in graduate/professional school, in their careers and in the global community.

## Career Areas of Interest

The following courses represent career areas of interest to increase student's preparedness for specific career goals. Students are encouraged to work closely with their advisor prior to taking courses in the career areas of interest. Twelve (12) credit hours are needed to fulfill the requirements for each career area of interest.

| LAW |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| POS 332 | Introduction to Jurisprudence | 3 |
| POS 337 | American Constitutional Development | 3 |
| POS 338 | American Constitutional Law | 3 |
| POS 443 | Administrative Law | 3 |
| CJS 200 | Introduction to Criminial Justice | 3 |
| CJS 313 | American Ct Systems Honors | 3 |

## PUBLIC ADMINISTRATION

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 250 | Introduction to Public Administration | 3 |
| POS 350 | Organization Theory and Behavior | 3 |
| POS 451 | Public Personnel Administration | 3 |
| POS 493 | Internship | 9 |
| POS 230 | American Public Policy | 3 |
| POS 443 | Administrative Law | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |
| URBAN PLANNING | Credits |  |
| Code | Title | 3 |
| URP 192 | Introduction Urban Planning | 3 |


| URP 285 | Urban Land Use Planning | 3 |
| :--- | :--- | :--- |
| URP 380 | Housing and Community Development | 3 |
| URP 355 | Urban Economic Development Planning | 3 |

## U.S. POLITICS AND THEORY

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 100 | American National Government | 3 |
| POS 325 | American Foreign Policy | 3 |
| POS 315 | African American Politics | 3 |
| POS 431 | Modern Theory | 3 |
| POS 430 | Political Theory | 3 |
| POS 320 | The American Party System | 3 |

## INTERNATIONAL RELATIONS

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 464 | African Crises | 3 |

## Political Science Programs

- Bachelor of Arts in Political Science (p. 127)
- Certificate in International Studies (p. 128)
- Minor in Political Science (p. 129)

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## Bachelor of Arts in Political Science

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 51 |
| Major Requirements | 48 |
| Political Science Electives | 6 |
| Free Electives | 15 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| URP 192 | Introduction Urban Planning (Spring only) | 3 |
| $\begin{aligned} & \text { BIO } 100 \\ & \quad \text { or SCI } 101 \end{aligned}$ | Biological Science or Physical Science for Non-Science Majors | 3 |
| $\begin{aligned} & \text { BIO 110L } \\ & \text { or BIO } 105 \mathrm{~L} \\ & \text { or SCI } 101 \mathrm{~L} \end{aligned}$ | General Biology Laboratory (or CHM XXXL or PHY XXXL) <br> or Human Biology <br> or Physical Science Laboratory | 1 |
| Select one of the following: |  | 3 |
| CSC 150 | Computer Literacy |  |
| CLM 165 | Computer Literacy for Musicians |  |
| FIA 280 | Computer Applications in the Arts |  |
| TED 170 | Society/Technology |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 103 | Mathematics in General Education | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| POS 100 | American National Government | 3 |
| POS 180 | Introduction to Political Science | 3 |
| SEM 101 | Spartan Seminar 101 | 1 |
| SEM 102 | Spartan Seminar 102 | 1 |
|  | Credits | 30 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Select one of the following: |  | 3 |
| BIO 105 | Human Biology |  |
| CHM 1XX, PHY 1XX, or SCI 1XX |  |  |
| ENG 114 | Techniques of Vocabulary Building | 2 |
| Select one of the following: |  | 3 |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| HIS 102 | United States History to 1865 |  |
| HIS 103 | United States History Since 1865 |  |
| Select one of the following: |  | 3 |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| SOC 101 | Introduction to the Social Sciences | 3 |
| URP 292 | Urban Planning Law (Fall only) | 3 |


| POS 231 | American State and Local Government | 3 |
| :---: | :---: | :---: |
| SOC 101 | Introduction to the Social Sciences | 3 |
| ENG 203 | Advanced Communication Skills | 3 |
| ENG 285 | Public Speaking | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 30 |
| Third Year |  |  |
| ECN 211 or ECN 212 | Principles of Microeconomics or Principles of MacRoeconomics | 3 |
| POS 230 | American Public Policy | 3 |
| POS 250 | Introduction to Public Administration | 3 |
| POS 332 | Introduction to Jurisprudence | 3 |
| POS 333 | Research Methods | 3 |
| POS 345 | Statistics and Data Processing | 3 |
| Select six credits | of the following Cultural Electives: | 6 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| FIA 370 | African/Afro-American Art |  |
| MUS 234 | African-American Music |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| SOC 237 | Racial \& Ethnic Minorities |  |
| POS 315 | African American Politics |  |
| PSY 340 | Psychology of the African-American |  |
| POS 3XX or 4XX | Political Science Elective | 3 |
| XXX XXX | Free Elective | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| POS 337 | American Constitutional Development (Fall only) | 3 |
| POS 350 | Organization Theory and Behavior | 3 |
| POS 360 | International Politics | 3 |
| POS 499 | Sr Project, Sr Seminar ${ }^{1}$ | 3 |
| POS 431 | Modern Theory | 3 |
| POS 451 | Public Personnel Administration | 3 |
| POS 3 XX or 4XX | Political Science Elective | 3 |
| XXX XXX | Free Electives | 9 |
|  | Credits | 30 |
|  | Total Credits | 120 |

1 Prerequisites: POS 100 American National Government, POS 230 American Public Policy, POS 332 Introduction to Jurisprudence, POS 333 Research Methods, and POS 345 Statistics and Data Processing

## Areas of Interest

The following courses represent career areas of interest to increase students' preparedness for specific career goals. Students are encouraged to work closely with their advisor prior to taking courses in
the career areas of interest. Twelve (12) credit hours are needed to fulfill the requirements for each career area of interest.

| Law |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| POS 332 | Introduction to Jurisprudence | 3 |
| POS 337 | American Constitutional Development | 3 |
| POS 338 | American Constitutional Law (POS 3XX) | 3 |
| POS 443 | Administrative Law (POS 4XX) | 3 |
| CJS 200 | Introduction to Criminial Justice (Free Elective) | 3 |
| CJS 313 | American Ct Systems Honors (Free Elective) | 3 |

## Public Administration

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 250 | Introduction to Public Administration | 3 |
| POS 350 | Organization Theory and Behavior | 3 |
| POS 451 | Public Personnel Administration | 3 |
| POS 493 | Internship (POS 4XX) | 9 |
| POS 230 | American Public Policy ${ }^{1}$ | 3 |
| POS 443 | Administrative Law (POS 4XX) | 3 |
| ACC 201 | Principles of Financial Accounting | 3 |


| Urban Planning |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| URP 192 | Introduction Urban Planning | 3 |
| URP 292 | Urban Planning Law | 3 |
| URP 285 | Urban Land Use Planning (URP 2XX) | 3 |
| URP 380 | Housing and Community Development (URP 3XX) | 3 |
| URP 355 | Urban Economic Development Planning (URP 3XX) | 3 |


| U.S. Politics and Theory |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| POS 100 | American National Government | 3 |
| POS 325 | American Foreign Policy (POS-3XX) | 3 |
| POS 315 | African American Politics (POS 3XX) | 3 |
| POS 431 | Modern Theory | 3 |
| POS 430 | Political Theory | 3 |
| POS 320 | The American Party System | 3 |


| International | Relations |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| POS 323 | Compartative Government | 3 |
| POS 360 | International Politics | 3 |
| POS 442 | International Law (POS 4XX) | 3 |
| POS 463 | Politics of African Nations (POS 4XX) | 3 |
| POS 464 | African Crises (newly added) |  |
| 2,3 | 3 |  |
| GEO 130 | Principles of Geography | 3 |

${ }^{1}$ POS 230 American Public Policy Added
2 POS 464 African Crises Added
3 Newly Added

## Certificate in International Studies

The certificate in International Studies is designed to supplement a student's major with a comprehensive introduction to the interdependence of nations, America's role in the world, and contemporary trends in the globalization of interdisciplinary knowledge, politics, institutions, and economics.

This program equips students with the interdisciplinary approach, critical thinking skills and international perspectives necessary to address real world challenges. Students will acquire a complementary approach to their discipline which explores contemporary globalization and its challenges, thus, grounding their knowledge of how comparative perspectives can be applied to the understanding of different cultural perspectives.

Without forsaking their major field, students may complement it with a distinction that prepares them for the global marketplace. In addition, they may select two elective courses from a variety of disciplines according to their individual academic interest:

- Business
- Geography
- History
- Tourism and Hospitality Management
- Journalism and Mass Communications
- Political Science

```
The Certificate in International Studies consists of eighteen (18)
    credits.
```

| Group I: CIS Core Requirements - twelve (12) credits |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| HIS 100 | History of World Societies I | 3 |
| POS 325 | American Foreign Policy | 3 |
| POS 360 | International Politics | 3 |
| INT 412 | Contemporary Globalization | 3 |
| Total Credits |  | $\mathbf{1 2}$ |

** All CIS students must satisfy the following Core Requirements.
Group II: Area Studies/Foreign Language Electives - Three (3)
Credits

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 323 | Compartative Government | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 464 | African Crises | 3 |
| GEO 337 | Geography of Africa | 3 |
| GEO 360 | Introduction to Gis | 3 |
| HIS 346 | Twentieth-Century Europe | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the | 3 |
|  | Beginning of Humankind to 1600 |  |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| HIS 446 | Colonial Latin American | 3 |
| HIS 490A | Special Topics in History | 3 |
| CHI 111 | Elementary Chinese I | 3 |


| ARA 111 | Elementary Arabic I | 3 |
| :--- | :--- | :--- |
| FRN 111 | Elementary French I | 3 |
| SPN 111 | Elementary Spanish | 3 |

** Students must choose three (3) credits out of the following courses.
Group III: CIS Electives - three(3) credits

| Code | Title Cr | Credits |
| :---: | :---: | :---: |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 459 | International Women's Literature | 3 |
| MCM 390 | Global Media | 3 |
| MCM 420 | Intercultural Communication | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| HRM 490 | Sr Project | 3 |
| CHI 112 | Elementary Chinese II | 3 |
| ENG 207 | Introduction to World Literature | 3 |
| ENG 459 | International Women's Literature | 3 |
| FRN 112 | Elementary French II | 3 |
| GEO 337 | Geography of Africa | 3 |
| GEO 360 | Introduction to Gis | 3 |
| HIS 346 | Twentieth-Century Europe | 3 |
| HIS 360 | Latin America: Readings in Latin-American History | ory 3 |
| HIS 365 | Caribbean History | 3 |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 | 3 |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | NT 3 |
| HIS 446 | Colonial Latin American | 3 |
| THM 350 | International Tourism | 3 |
| MCM 390 | Global Media | 3 |
| MCM 420 | Intercultural Communication | 3 |
| POS 323 | Compartative Government | 3 |
| POS 463 | Politics of African Nations | 3 |
| POS 464 | African Crises | 3 |
| SOC 325 | Sociology of Business \& Internationalism | 3 |
| SPN 112 | Elementary Spanish II | 3 |

** Students must choose three (3) credits out of the following courses.

## Minor 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.

## NOTE:

In order to complete the Minor in Political Science, 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 ( 18 credits total).

- ENG 210 (Practical Grammar) and ENG 303 (Professional and Technical Writing) are recommended electives.
- Students interested in careers which require a specific proficiency (such as mastery of a foreign language) are encouraged to take electives consistent with those career options.
- POS 451 - Public Personnel Administration is a prerequisite for POS 493.
- POS 493 - Public Administration Internship - This course provides field experience in a public or nonprofit agency. Please contact the Public Administration Internship Coordinator for additional requirements.
- POS 494 - Pre-law Internship - Please contact the Pre-law Internship Coordinator for the requirements. This course provides field experience in a public agency, such as a public defender's office or legislative body, as well as private law firms.

| Curriculum <br> Code | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| POS 100 | American National Government | 3 |
| POS 180 | Introduction to Political Science (newly added) | 3 |
| POS 230 | American Public Policy | 3 |
| POS 250 | Introduction to Public Administration | 3 |
| POS 431 | Modern Theory | 3 |
| POS XXX | Political Science Elective 3XX, POS 4XX | 3 |
| Total Credits |  | 18 |

## Note:

In order to complete the Minor in Political Science, 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 (18 credits total).

- ENG 210 Practical English Grammar and ENG 303 Professional \& Technical Writing are recommended electives.
- Students interested in careers which require a specific proficiency (such as mastery of a foreign language) are encouraged to take electives consistent with those career options.
- POS 451 Public Personnel Administration is a prerequisite for POS 493 Internship.
- POS 493 Internship - This course provides field experience in a public or non- profit agency. Please contact the Public Administration Internship Coordinator for additional requirements.


## Psychology

Dr. Karen Y. Holmes
Department Chair
(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 Department also offers a Master of Arts in Community/Clinical Psychology (currently inactive) and is part of the Virginia Consortium Program in Clinical Psychology that offers the Doctor of Philosophy in Clinical Psychology degree. 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 prepare students thoroughly to render services initially as entrylevel professionals, 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.

## Psychology Programs

- Bachelor of Arts in Psychology (p. 132)
- Minor in CyberPsychology (https://catalog.nsu.edu/undergraduate/ liberal-arts/psychology/cyberpsychology-minor/)
- Minor in Psychology (p. 133)

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Karen Holmes, Ph.D., Professor
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757-823-2228
Ronald Thomas rethomas@nsu.edu 757-823-9058 Ph.D. Professor

## Bachelor of Arts in Psychology



## Second Year

| BIO, CHM or PHY XXX Biological Science, Chemistry or |  |  |
| :--- | :--- | :--- |
| Physical Science |  | 6 |
| BIO, CHM or PHY Lab | 1 |  |
| CSC 200 | Advanced Computer Concepts | 3 |
| ENG 207 | Introduction to World Literature | 3 |
| PSY 270 | Psychological Statistics | 3 |
| PSY 280 | Abnormal Psychology | 3 |
| PSY XXX | Psychology Electives | 6 |
| ENG 285 | Public Speaking | 3 |
| PSY 381 | Topics in Psychology | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 2}$ |


| Third Year |  |  |
| :--- | :--- | ---: |
| PSY 360 | Experimental Psychology | 3 |
| ECN 200 | Basic Principles of Economics |  |
| or ECN 211 | or Principles of Microeconomics | 3 |
| PSY XXX | Psychology Electives | 9 |
| XXX XXX | Free Electives | 12 |
| PSY 392 | Seminar in Community Resources | 1 |
| XXX XXX | Social Science Elective | 3 |
|  | Credits | $\mathbf{3 1}$ |

## Fourth Year

Select one of the following: 3

| HIS 335 | African-American History |
| :--- | :--- |
| HIS 336 | African-American History Since 1865 |


| HIS 370 | Early African History and Cultures, From <br> the Beginning of Humankind to 1600 |  |
| ---: | :--- | ---: |
| HIS 371 | Modern African History \& Cultures 1600- |  |
|  | PRESENT |  |
| PSY 492 | Psychology Seminar | 3 |
| PSY XXX | Psychology Electives | 9 |
| PSY 495 | Practicum in Psychology | $\mathbf{3}$ |
| XXX XXX | Free Electives | $\mathbf{1 0}$ |
|  | Credits | $\mathbf{2 8}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

## Minor in Psychology

| Curriculum |  |  |
| :--- | :--- | ---: |
| Students must earn a minimum grade of $\mathbf{C}$ in all major courses. | Credits |  |
| Code | Title | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| PSY 211 | Basic Principles of Psychology | 3 |
| PSY 280 | Abnormal Psychology | 6 |
| PSY 3XX/PSY | 300-400 level of Psychology Courses |  |
| 4 XX |  | 3 |
| PSY XXX | 400 level Psychology Course | $\mathbf{1 8}$ |

## Sociology

Dr. Carlene Turner
Department Chair
(757) 823-8436

Sociology provides many distinctive perspectives of the social world, generating new ideas and critiquing the old. The field also offers a range of research techniques that can be applied to virtually any issue: street crime and delinquency, corporate downsizing, the alleviation of poverty and homelessness, welfare or education reform, or problems of peace and war. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose research and scholarship is increasingly tapped by those who craft policies and create programs. Sociology is an exciting discipline with expanding opportunities for a wide range of career paths.

As such, the NSU Department of Sociology offers students a high quality education, providing knowledge and skills to strive in a competitive, diverse and ever-changing world. The main goal of the department is to not only share our knowledge and professional experiences, but to encourage and challenge students to develop their full academic potential. The department will accomplish this by increasing the understanding of social behavior, promoting original research and teaching the principles and methodologies of sociology. Consequently, the overall goal of the Sociology Department is the pursuit of excellence in the areas of teaching, research, scholarly activities and community service. The Department is committed to student excellence, preparing students to address these issues in society by working closely with them to encourage and develop their skills. Through research and scholarly activities, faculty contribute to the further understanding of human behavior and involve students in these activities. Simultaneously, the Department seeks to serve as an interface between the theoreticallyoriented university and the pragmatically-oriented community and to be involved in community service.

The Department offers the Bachelor of Arts degree in Sociology with concentrations in Crime and Criminal Justice, Social Justice and Social Inequality, Family and Social Relationships, and Population Studies. In addition, the Department offers two Master of Arts degrees in Urban Affairs and Criminal Justice.

## Sociology Programs

- Bachelor of Arts in Sociology (p. 135)
- Minor in Criminal Justice (https://catalog.nsu.edu/undergraduate/ liberal-arts/sociology/criminal-justice-minor/)
- Minor in Sociology (p. 137)

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David Spinner, Ph.D., Associate Professor
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757-368-6373
Carlene Turner, Ph.D., Associate Professor
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757-823-9078

## Bachelor of Arts in Sociology

$\left.\begin{array}{lll}\hline \begin{array}{l}\text { Summary of Graduation Requirements } \\ \text { Subject Area }\end{array} & \text { Credits }\end{array}\right]$

First Year
Select two of the following: 6

| BIO 100 | Biological Science |
| :--- | :--- |
| BIO 105 | Human Biology |
| BIO 110 | General Biology |
| SCI 101 | Physical Science for Non-Science Majors |

Select one of the following: 1

| BIO 100L | Biological Science Lab |  |
| :---: | :--- | ---: |
| CHM 100L | Chemistry: Man \& Environment Laboratory |  |
| PHY 100L | Physical Science Laboratory |  |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |

HED 100 Personal and Community Health 2

| MTH 103 <br> or MTH 105 | Mathematics in General Education <br> or Intermediate Algebra |
| :---: | :---: |
| PED 100 | Fund |

PED $100 \quad$ Fundametals of Fitness for Life 1

| SOC 101 | Introduction to the Social Sciences | 3 |
| :--- | :--- | :--- |
| SOC 110 | Introduction to Sociology | 3 |

SEM 101 Spartan Seminar 1012

| \& SEM 102 | and Spartan Seminar 102 |  |
| :--- | :--- | :--- |
|  | Credits | $\mathbf{3 0}$ |

## Second Year

Select one of the following:
HIS 100 History of World Societies I
HIS 101 History of World Societies II
HIS 102 United States History to 1865
HIS 103 United States History Since 1865
Select two of the following: 6

| HUM 210 | Humanties |  |
| :--- | :--- | :--- |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| MUS 301 | Music Appreciation |  |
| Foreign Language | 3 |  |
| SOC 234 Urban Sociology <br> or SOC 228 or Demographic Principles |  |  |

Select one of the following:

| PSY 210 | Introduction to Psychology |
| :--- | :--- |
| POS 100 | American National Government |
| ECN 211 | Principles of Microeconomics |


| ENG 285 | Public Speaking | 3 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { SOC } 237 \\ & \text { or CJS } 200 \end{aligned}$ | Racial \& Ethnic Minorities or Introduction to Criminial Justice | 3 |
| SOC 230 | Social Problems | 3 |
| XXX XXX | Free Elective | 3 |
| CSC 200 | Advanced Computer Concepts | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 31 |
| Third Year |  |  |
| $\begin{aligned} & \text { SOC } 338 \\ & \quad \text { or SOC } 331 \end{aligned}$ | Sociology of Families or Social Psychology | 3 |
| Select one of the following: |  | 3 |


| ENG 383 | African-American Literature, 1940PRESENT |  |
| :---: | :---: | :---: |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 |  |
| HIS 377 | Black Leaders, Then and Now |  |
| POS 315 | African American Politics |  |
| SOC 344 | Methods of Social Research | 3 |
| SOC 355 | Elementary Social Statistics,Social Statistics | 3 |
| SOC 3xx | Sociology or CJS Elective | 9 |
| XXX XXX | Free Electives | 9 |
|  | Credits | 30 |
| Fourth Year |  |  |
| SOC 446 | Sociological Theory | 3 |
| XXX XXX | Approved Elective | 3 |
| SOC 393 | Internship | 6 |
| SOC 462 | Complex Organizations | 3 |
| SOC 499 | Applied Sociology | 3 |
| XXX XXX | Free Electives | 11 |
|  | Credits | 29 |
|  | Total Credits | 120 |

## Career Areas in Sociology

Students may follow the general curriculum (above) or specialize in courses relevant to career areas to increase their preparedness for specific career goals using the following guidelines and working closely with an advisor.

## Crime and Criminal Justice

| Code | Title | Credits |
| :--- | :--- | ---: |
| POS 100 | American National Government | 3 |
| or PSY 210 | Introduction to Psychology |  |
| Select three of the following CJS Electives: | 9 |  |
| CJS 200 | Introduction to Criminial Justice | 3 |
| CJS 220 | Juvenile Delinquency |  |
| CJS 225 | Law Enforcement |  |
| CJS 230 | Introduction to Correctioms |  |
| CJS 310 | Criminology |  |
| CJS 313 | American Ct Systems Honors |  |


| CJS 315 | Sociology of Drug Usage |
| :---: | :--- |
| CJS 492 | Topics in Criminal Justice |
| Choose three of the following Approved/Free Electives: |  |
| POS 332 | Introduction to Jurisprudence |
| SOC 458 | Social Stratification |
| SOC 237 | Racial \& Ethnic Minorities |
| CJS XXX |  |
|  |  |
| Instead of SOC 137 Social Problems. |  |

## Family and Social Relations

| Code | Title | Credits |
| :---: | :---: | :---: |
| PSY 210 | Introduction to Psychology ${ }^{1}$ | 3 |
| SOC 230 | Social Problems | 3 |
| Select three of the following SOC XXX: |  | 9 |
| SOC 338 | Sociology of Families |  |
| SOC 331 | Social Psychology |  |
| SOC 205 | Human Sexuality |  |
| SOC 415 | Sociology of Health \& Health Care |  |
| CJS 220 | Juvenile Delinquency |  |
| CJS 315 | Sociology of Drug Usage | 3 |
| SOC 458 | Social Stratification | 3 |
| Select one of the following Approved Electives: |  | 3 |
| PSY 220 | Child Psychology |  |
| PSY 225 | Adolescent Psycholgy |  |
| SOC 228 | Demographic Principles |  |


| Select two of the following Free Electives: |
| :--- | :--- |
| Any Approved Elective above  <br> SOC 458 Social Stratification <br> SWK 327 Interviewing Techniques <br> SOC 237 Racial \& Ethnic Minorities <br> SOC 415 Sociology of Health \& Health Care |

1 Instead of POS 100 American National Government.
2 Instead of CJS 200 Introduction to Criminial Justice.

## Social Inequality and Social Justice

| Code | Title | Credits |
| :--- | :--- | ---: |
| ECN 210 | Economics 1 | 3 |
| or POS 100 | American National Government |  |
| SOC 230 | Social Problems 2 | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |
| SOC 458 | Social Stratification | 3 |
| Select one of the following: | 3 |  |
| SOC 228 | Demographic Principles |  |
| SOC 234 | Urban Sociology |  |
| SOC 325 | Sociology of Business \& Internationalism |  |
| SOC 326 | Native American Societies |  |
| Select three of the following Approved Electives/Free Electives: |  |  |
| CJS 310 | Criminology |  |
| CJS 230 | Introduction to Correctioms |  |
| CJS 200 | Introduction to Criminial Justice |  |
| POS | (Housing) |  |


| POS 315 | African American Politics |
| :--- | :--- |
| GEO 130 | Principles of Geography |
| INT 411 | Ideas and Their Influences |
| SOC 415 | Sociology of Health \& Health Care |
| 1 | Instead of PSY 210 Introduction to Psychology. |
| 2 | Instead of CJS 200 Introduction to Criminial Justice. |

## Population Studies and International Development

| Code | Title | Credits |
| :--- | :--- | ---: |
| ECN 211 | Principles of Microeconomics ${ }^{1}$ | 3 |
| or POS 100 | American National Government |  |
| SOC 230 | Social Problems $^{2}$ | 3 |
| SOC 228 | Demographic Principles ${ }^{3}$ | 3 |
| Select one of the following: | 3 |  |
| SOC 301 | Demographic Methods I |  |
| SOC 302 | Migration |  |
| SOC 303 | Fertility and Family Planning |  |
| SOC 304 | Mortality |  |
| SOC 401 | Socio-Cybersecurity |  |
| SOC 402 | Family Demography |  |
| SOC 403 | Population Growth, Food and Environment |  |
| SOC 404 | Population and Socioeconmic Development |  |
| SOC 234 | Urban Sociology |  |
| SOC 325 | Sociology of Business \& Internationalism |  |
| SOC 326 | Native American Societies |  |

Select three of the following Approved/Free Electives: 9

| SOC 458 | Social Stratification |
| :--- | :--- |
| SOC 237 | Racial \& Ethnic Minorities |
| INT 411 | Ideas and Their Influences |
| HIS | International Focus |
| GEO 130 | Principles of Geography |

1 Instead of PSY 210 Introduction to Psychology.
2 Instead of CJS 200 Introduction to Criminial Justice.
3 Instead of SOC 234 Urban Sociology.

## Minor in Sociology



# Visual and Performing Arts 

Dr. Susan Ha
Department Head
(757) 823-8582

## Drama Division

Mr. Anthony Stockard
Program Director
(757) 823-2897

The Bachelor of Arts degree in Drama and Theatre requires 120 credit hours and provides students with comprehensive training in drama and theatre. The degree program also offers 18 hours of unrestricted electives to permit the student to receive a true liberal arts education. Students may elect to use the 18 elective hours to satisfy the requirements of an available minor in another discipline. The curriculum offers two areas of emphasis to equip students with concentrated training in either Design and Technology or Performance.

- The Design and Technology emphasis is designed to expand the career preparation of students by providing knowledge, skills, and practical experience in stagecraft as well as costume, scenic, sound and lighting design.
- The Performance emphasis is designed to expand the career preparation of students by providing knowledge, skills, and practical experience in script analysis, voice, movement, acting theory and period styles of performance.


## Fine Arts Division

Mr. Solomon Isekeije
Program Coordinator
(757) 823-8844

The Division 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, while continuing the infusion of relevant technologies in hardware and software. This has placed greater emphasis on a wider spectrum of courses and programs, more varied technology, and a neoteric pedagogy. The role of the creative enterprise in society is explored in special projects.

## Assessment Requirements

All students majoring in the 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" and other cocurricular activities scheduled by the Division of Fine Arts is required of all graduates. Continuous verifiable engagement with the local art community is required by the Division.

## Music Division

Dr. Harlan Zackery
Program Coordinator
(757) 823-8565

The Division of Music offers one undergraduate degree with two emphases and one graduate degree with three concentrations. The Bachelor of Music in Music Education is designed to prepare teachers
of music in 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/Orchestral instruments.

The Bachelor of Music with an 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 courses in 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 Division is an accredited institutional member of the National Association of Schools of Music.

## Undergraduate Admission to Music

All students who desire entry into programs in music must audition. The audition can be arranged by contacting the music office or any music faculty member. Upon acceptance into the University, the candidate's request to enter Pre - Music is granted conditionally by the Office of Admission. However, final approval is granted by the Division of Music.

At freshman orientation, diagnostic examinations in music fundamentals and sight-singing, an audition on a principal instrument (if not previously auditioned), and a piano placement examination is conducted. The document Auditions and Preliminary Tests in Music on the Division of Music website should be reviewed prior to freshman orientation. Consequently, approved candidates are enrolled in the Pre - Music Curriculum. Taken during the first semester of enrollment, these courses are utilized to canvass the potential of the candidate to fulfill the requirements of the Bachelor of Music (B.M.) curriculum. The courses in the Pre - Music Curriculum are also a part of the Bachelor of Music degree.

## Pre - Music Curriculum

| Code | Title | Credits |
| :--- | :--- | ---: |
| MUS 140 | Music Fundamentals | 3 |
| MUS 103 | Recitals Class | 0 |
| MUS 125A | Applied Major/Voice | 2 |
| MUS 100B/121B | Piano | 0 |
| MUS 110A | Band | 1 |
| ENG 101 | College English I | 3 |
| SEM 101 | Spartan Seminar 101 | 1 |
| MTH 103 | Mathematics in General Education | 3 |
| HED 100 | Personal and Community Health | 2 |
| Total Credits |  | $\mathbf{1 5}$ |

If the Diagnostic Examination is completed successfully, the sequence below is taken.

| Code | Title | Credits |
| :--- | :--- | ---: |
| MUS 145 | Harmony and Keyboard | 2 |
| MUS 141 | Sight-Singing \& Ear Training | 2 |
| MUS 125B | Applied Major/Piano | 2 |
| MUS 103 | Recitals Class | 0 |
| MUS 100B/121B | Piano | 0 |
| MUS 110A | Band | 1 |


| ENG 101 | College English I | 3 |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 | 1 |
| MTH 103 | Mathematics in General Education | 3 |
| HED 100 | Personal and Community Health | $\mathbf{2}$ |
| Total Credits |  | $\mathbf{1 6}$ |

Following mid-semester course examinations, a committee comprised of the student's major teacher, theory instructor, and ensemble director will provide a preliminary recommendation to the Director of the Division for program (B.M.) admission. Final approval is forwarded to the Chair by the Committee upon the successful completion of the Pre-music track.

## Visual and Performing Arts Programs

- Bachelor of Arts in Drama and Theatre - Design and Technology Concentration (p. 140)
- Bachelor of Arts in Drama and Theatre - Performance Concentration (p. 141)
- Bachelor of Arts in Fine Arts and Graphic Design (p. 142)
- Bachelor of Arts in Fine Arts and Graphic Design - Specializing in Education Concentration (p. 143)
- Bachelor of Music in Music - Media Concentration (p. 146)
- Bachelor of Music in Music Education - Instrumental/Keyboard/Vocal Concentration (p. 145)
- Minor in Fine Arts (p. 144)

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# Bachelor of Arts in Drama and Theatre - Design and Technology Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Core | 38 |
| Area of Emphasis | 21 |
| Electives | 3 |
| Minor or Unrestricted Electives | 18 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | :--- |
| First Year |  |  |
| FIA 114 | Basic Design | 3 |
| DRM 114 | Introduction to Theatre | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| DRM 115 | Dramatic Theory \& Criticism | 3 |
| DRM 120 | Stagecraft I | 3 |
| DRM 123 | Theory and Techniques of Acting | 3 |
| DRM 219 | African-American Drama | 3 |
| CSC 150 | Computer Literacy | 3 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |


|  | Credits | 29 |
| :--- | :--- | :--- |
| Second Year |  |  |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| SCI 101L | Physical Science Laboratory | 1 |
| DRM 240 | Theatre Management | 3 |
| FIA 120 | Drawing | 3 |
| HED 100 | Personal and Community Health | 2 |
| ENG 285 | Public Speaking | 3 |
| PED 251 | Modern Dance I | 1 |
| PED 254 | Jazz Dance | 1 |
| Select one of the following HUM XXX: | 3 |  |


| ENG 207 | Introduction to World Literature |  |
| :---: | :--- | :---: |
| FIA 201 | Basic Art Appreciation |  |
| MUS 103 | Recitals Class | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| Select one of the following SOC/SCI: |  |  |


| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| HIS 101 | History of World Societies II |
| HIS 103 | United States History Since 1865 |
| BUS 175 |  <br>  <br> ECN 200 |
| Entrepreneurship |  |
| PED 100 | Fasic Principles of Economics |


| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :---: | :---: | :---: |
| DRM 220 | Stagecraft II | 3 |
| DRM 238 | Stage Management | 3 |
| DRM 310 | Stage Make-Up | 3 |
| DRM 315 | History of Theater I | 3 |
| DRM 320 | Lighting Design | 3 |
| DRM 321 | Stage Design | 3 |
| ENG 410 | History of the English Language | 3 |
| DRM 426 <br> or DRM 450 | Special Project in Theater I or Research Seminar | 3 |
| Select one of the following CUL 1: |  |  |


| ENG 383 | African-American Literature, 1940- <br> PRESENT |
| :--- | :--- | :--- |
| MUS 234 | African-American Music |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| DRM XXX | Drama Elective | 3 |
| DRM 420 | Play Production | 3 |
| DRM 425 | Direction of Plays | 3 |
| XXX XXX | Minor or Unrestricted Electives | $\mathbf{1 8}$ |
| DRM 436 | Sound Design | 3 |
|  | Credits | $\mathbf{3 0}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

## Bachelor of Arts in Drama and Theatre - Performance Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Core | 38 |
| Area of Emphasis | 21 |
| Electives | 3 |
| Minor or Unrestricted Electives | 18 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| DRM 113 | Theater Movement I | 3 |
| DRM 114 | Introduction to Theatre | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| DRM 115 | Dramatic Theory \& Criticism | 3 |
| DRM 120 | Stagecraft I | 3 |
| DRM 123 | Theory and Techniques of Acting | 3 |
| DRM 219 | African-American Drama | 3 |
| CSC 150 | Computer Literacy | 3 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
|  | Crit |  |


|  | Credits | 29 |
| :--- | :--- | :--- |
| Second Year |  |  |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| SCI 101L | Physical Science Laboratory | 1 |
| DRM 240 | Theatre Management | 3 |
| DRM 200 | Intermediate Acting | 3 |
| HED 100 | Personal and Community Health | 2 |
| ENG 285 | Public Speaking | 3 |
| PED 251 | Modern Dance I | 1 |
| PED 254 | Jazz Dance | 1 |
| Select one of the following HUM XXX: | 3 |  |


| ENG 207 | Introduction to World Literature |  |
| :--- | :--- | :--- |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| Select one of the following SOC/SCI: |  |  |


| SOC 101 | Introduction to the Social Sciences |  |
| :---: | :--- | :--- |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 | Introduction to Business \& |  |
|  | Entrepreneurship |  | | ECN 200 | Basic Principles of Economics |
| :--- | ---: |
| PED 100 | Fundametals of Fitness for Life |
| SEM 201 | Spartan Seminar 201 |
|  | Credits |

Third Year

| DRM 212 | Improvisation for the Theatre | 3 |
| :--- | :--- | :--- |
| DRM 238 | Stage Management | 3 |
| DRM 310 | Stage Make-Up | 3 |
| DRM 315 | History of Theater I | 3 |
| DRM 324 | Advanced Acting Theory | 3 |
| ENG 413 | Shakespeare | 3 |
| DRM 426 | Special Project in Theater I | 3 |
| or DRM 450 | or Research Seminar |  |

Select one of the following CUL 1: 3
\(\left.$$
\begin{array}{ll}\text { ENG 383 } & \begin{array}{l}\text { African-American Literature, 1940- } \\
\text { PRESENT }\end{array}
$$ <br>

MUS 234 \& African-American Music\end{array}\right]\)| HIS 371 | Modern African History \& Cultures 1600- <br> PRESENT |
| :--- | :--- |
| HRP 320 | African American Health |


| ENG 383 | African-American Literature, 1940- |  |
| :---: | :--- | ---: |
|  | PRESENT |  |
| MUS 234 | African-American Music |  |
| HIS 371 | Modern African History \& Cultures 1600- |  |
|  | PRESENT |  |
| HRP 320 | African American Health |  |
| SCM 350 | Voice and Diction | 3 |
|  | Credits | $\mathbf{3 0}$ |


| Fourth Year |  |
| :--- | :--- |
| DRM XXX $\quad$ Drama Elective | 3 |

DRM 420 Play Production 3
DRM 425 Direction of Plays 3
XXX XXX Minor or Unrestricted Electives 18
DRM $413 \quad$ Shakespeare for the Stage 3

| Credits | 30 |
| :--- | ---: |
| Total Credits | 120 |

## Bachelor of Arts in Fine Arts and Graphic Design

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 62 |
| Electives | 18 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| FIA 114 | Basic Design | 3 |
| FIA 115 | Basic Design II | 3 |
| FIA 120 | Drawing | 3 |
| FIA 110 | Introduction to Art | 3 |
| HED 100 | Personal and Community Health | 2 |
| FIA 280 | Computer Applications in the Arts | 3 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| PED 100 | Fundametals of Fitness for Life | 1 |
| XXX XXX | Foreign Language | 3 |
|  | Credits | $\mathbf{2 9}$ |


| Second Year |  | 3 |
| :--- | :--- | :--- |
| BIO 100 | Biological Science | 3 |
| CHM 100 | Man/Environment |  |
| or SCI 101 | or Physical Science for Non-Science <br> Majors | 3 |
| Sel |  |  |


| Select one of the following: <br> CHM 100L | 1 |  |
| :--- | :--- | ---: |
| PHY 100L | Chemistry: Man \& Environment Laboratory |  |
| BIO 100L | Biological Science Laboratory |  |
| FIA 140 | Ceramics |  |
| or FIA 240 | or Sculpture |  |
| FIA 220 | Life Drawing | 3 |
| SEM 201 | Spartan Seminar 201 | 3 |
| HUM 210 | Humanties |  |
| or HUM 211 | or Humanities |  |
| FIA 234 | Painting | 1 |
| FIA 295 | Sophomore/Junior Review | 3 |
| FIA 201 | Basic Art Appreciation | 3 |
| MTH 103 | Mathematics in General Education | 1 |
| HIS 100 | History of World Societies I | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
|  | Credits | 3 |


| Third Year |  |  |
| :--- | :--- | :--- |
| FIA 270 | History of Art Survey I | 3 |
| FIA 271 | History of Art Survey II | 3 |
| ENG 285 | Public Speaking | 3 |


| FIA 370 | African/Afro-American Art | 3 |
| :---: | :---: | :---: |
| Select one of the following FIA XXX Electives: |  | 3 |
| FIA 165 | Foundations of Photo 1 |  |
| FDM 149 | Apparel Production I |  |
| FIA 260 | Introduction to Graphic Design |  |
| Select one of the following FIA XXX Electives: |  | 3 |
| FIA 265 | Studio Lighting 1 |  |
| FDM 250 | Pattern-Making I |  |
| FIA 360 | Typography |  |
| Select one of the following Electives: |  | 3 |
| FIA 365 | Fashion Photography I |  |
| FDM 362 | Fashion Forecasting and Sourcing |  |
| FIA 362 | Graphic Design I |  |
| XXX XXX | Cultural Elective | 3 |
| XXX XXX | General Education Elective | 3 |
| XXX XXX | General Education or Foreign Language Elective | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| FIA 470 | Printmaking Workshop 2 | 3 |
| FIA 491 | Advanced Studio Problems | 3 |
| FIA 495 | Portfolio Preparation and Sr Exhibition | 2 |
| $\begin{aligned} & \text { FIA } 465 \\ & \quad \text { or FIA } 460 \end{aligned}$ | Studio Workshop 1 or Advanced Graphic Design | 3 |
| $\begin{aligned} & \text { FIA } 466 \\ & \quad \text { or FIA } 461 \end{aligned}$ | Studio Workshop 2 or Advanced Graphic Design | 3 |
| $\begin{aligned} & \text { FIA } 467 \\ & \quad \text { or FIA } 462 \end{aligned}$ | Studio Workshop 3 or Design in Commerce | 3 |
| $\begin{aligned} & \text { FIA } 468 \\ & \text { or FIA } 469 \end{aligned}$ | Studio Workshop 4 <br> or Printmaking Workshop 1 - Intalglio Printmaking | 3 |
| XXX XXX | General Education Elective | 6 |
| XXX XXX | Free Elective | 3 |
|  | Credits | 29 |
|  | Total Credits | 121 |

A non-art minor can be established by choosing carefully with your advisor the 15-18 necessary hours of electives.

| Specific Courses Required for the Curriculum: |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| FIA 116 | Basic Design III | 3 |
| FIA 262 | Printmaking Workshop | 3 |
| FIA 235 | Painting | 3 |
| FIA 165 | Foundations of Photo 1 | 3 |
| FIA 166 | Foundations of Photo 2 | 3 |
| FIA 260 | Introduction to Graphic Design | 3 |
| FIA 265 | Studio Lighting 1 | 3 |
| FIA 266 | Studio Lighting 2 | 3 |
| FIA 295 | Sophomore/Junior Review | 1 |
| FIA 321 | Intermediate Drawing | 3 |
| FIA 360 | Typography | 3 |
| FIA 361 | Advance Printmaking | 3 |
| FIA 362 | Graphic Design I | 3 |


| FIA 363 | Graphic Design II | 3 |
| :--- | :--- | :--- |
| FIA 380 | Computer Imaging | 3 |
| FIA 420 | Advanced Drawing | 3 |
| FIA 460 | Advanced Graphic Design | 3 |
| FIA 461 | Advanced Graphic Design | 3 |
| FIA 462 | Design in Commerce | 3 |
| FIA 463 | Design in Commerce | 3 |
| FIA 465 | Studio Workshop 1 | 3 |
| FIA 469 | Printmaking Workshop 1 - Intalglio Printmaking | 3 |
| FIA 470 | Printmaking Workshop 2 (A/B) | 3 |
| FIA | Advanced Studio Problems | 3 |
| 492/492A/492B |  | 3 |
| FDM 149 | Apparel Production I | 3 |
| FDM 250 | Pattern-Making I | 3 |
| FDM 334 | Textiles | 3 |
| FDM 449 | Design Collections | 3 |
| FIA 221 | Life Drawing | 3 |
| FIA 211 | Fashion Drawing | 3 |
| FDM 149 | Apparel Production I | 3 |
| FDM 250 | Pattern-Making I | 3 |
| FDM 362 | Fashion Forecasting and Sourcing | 3 |
| FDM 496 | Fashion Merchandising Internship | 3 |


| Cultural Electives |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| PSY 340 | Psychology of the African-American | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |

Fine Arts Electives
May be any FIA or FDM 100, 200, 300, or 400 level courses listed in the:

1. NSU Student Handbook
2. Department of Fine Arts Handbook, or 3. NSU Semester Schedule Book .

## Bachelor of Arts in Fine Arts and Graphic Design - Specializing in Education Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 59 |
| Electives | 9 |
| Other Requirements | 16 |
| Total Credit Hours | $\mathbf{1 2 4}$ |


| Curriculum Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| FIA 114 | Basic Design | 3 |
| FIA 115 | Basic Design II | 3 |
| FIA 116 | Basic Design III | 3 |
| FIA 120 | Drawing | 3 |
| FIA 121 | Drawing | 3 |
| FIA 140 | Ceramics | 3 |
| FIA 160 | Lettering | 3 |
| HED 100 | Personal and Community Health | 2 |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| BIO 100 | Biological Science | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| Select one of the following: | 1 |  |


| CHM 100L | Chemistry: Man \& Environment Laboratory |  |
| :--- | :--- | ---: |
| PHY 100L | Physical Science Laboratory |  |
| BIO 100L | Biological Science Lab | 3 |
| FIA 141 | Ceramics | 3 |
| FIA 280 | Computer Applications in the Arts | 3 |
| FIA 214 | Craft Design Workshop | 3 |
| FIA 220 | Life Drawing | 3 |
| FIA 240 | Sculpture | 3 |
| FIA 261 | Printmaking Workshop | 3 |
| HIS 102 | United States History to 1865 | 3 |
| MTH 103 | Mathematics in General Education | $\mathbf{3 2}$ |
|  | Credits | 3 |
| Third Year |  | 3 |
| EDU 201 | Foundations of Education | 3 |
| FIA 234 | Painting | 3 |
| FIA 270 | History of Art Survey I |  |
| FIA 271 | History of Art Survey II |  |


| HUM 210 <br> or HUM 211 | Humanties <br> or Humanities | 3 |
| :--- | :--- | ---: |
| PSY 228 | Developmental Psychology |  |
| ENG 285 | Public Speaking | 3 |
| SED 405 | Reading in the Content Area | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| XXX XXX | Cultural Elective ${ }^{1}$ | 3 |
|  | Credits | 3 |
| Fourth Year |  | $\mathbf{3 0}$ |
| FIA 320 | Intermediate Drawing |  |
| FIA 365 | Fashion Photography I |  |
| SED 386 | Curriculum \& Instructional Procedures in | 3 |
|  | Fine Arts | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| SED 499 | Directed Teaching (internship) | 3 |
| XXX XXX | Elective ${ }^{1}$ | 12 |
| XXX XXX | Elective ${ }^{1}$ | 3 |
|  | Credits | 3 |
|  | Total Credits | $\mathbf{3 0}$ |

1 Recommended Electives: ENG 383 African-American Literature, 1940-PRESENT, FIA 370 African/Afro-American Art, HIS 335 AfricanAmerican History, HIS 336 African-American History Since 1865, HIS 371 Modern African History \& Cultures 1600-PRESENT, MUS 234 AfricanAmerican Music, POS 315 African American Politics, SED 233 Seminar in Assessment and Evaluation, SED 420 Educational Technology, SOC 237 Racial \& Ethnic Minorities

## Teacher Licensure Endorsement in Fine <br> Arts

Students wishing to pursue a career in teaching art must take the following steps:

- Follow the curriculum for the degree in Fine Arts.
- Use elective hours for professional courses.
- See the academic advisor in their major department.
- See the academic advisor in the School of Education.
- Pass the PRAXISI Examination in the First Year or Sophomore Year.
- Pass the PRAXIS II Examination before graduation.

Note: Endorsement is for K through 12.

## Recommended Electives

| Code | Title | Credits |
| :--- | :--- | ---: |
| ENG 383 | African-American Literature, 1940-PRESENT | 3 |
| FIA 370 | African/Afro-American Art | 3 |
| HIS 335 | African-American History | 3 |
| HIS 336 | African-American History Since 1865 | 3 |
| HIS 371 | Modern African History \& Cultures 1600-PRESENT | 3 |
| MUS 234 | African-American Music | 3 |
| POS 315 | African American Politics | 3 |
| SED 233 | Seminar in Assessment and Evaluation | 3 |
| SED 420 | Educational Technology | 3 |
| SOC 237 | Racial \& Ethnic Minorities | 3 |

## Minor in Fine Arts Curriculum

(For students majoring in other departments.)

| Code | Title | Credits |
| :--- | :--- | ---: |
| FIA 115 | Basic Design II | 3 |
| FIA 120 | Drawing | 3 |
| FIA 260 | Introduction to Graphic Design | 3 |
| FIA 3XX | Dept. Elective (FDM or FIA) | 3 |
| FIA 3XX | Dept. Elective (FDM or FIA) | 3 |
| FIA XXX | Department Elective (300 or 400 level) | 3 |
| Total Credits |  | $\mathbf{1 8}$ |

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 art classes.

# Bachelor of Music in Music Education - Instrumental/Keyboard/Vocal Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 87 |
| Electives | 0 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 7}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| MUS 103 | Recitals Class | 0 |
| MUS 104 | Recitals Class | 0 |
| MUS 110D | Concert Choir | 1 |
| MUS 111D | Concert Choir | 1 |
| MUS 121A | Voice Minor | 1 |
| MUS 122A | Voice Minor | 1 |
| MUS 122B | Piano Minor | 1 |
| MUS 125A | Applied Major/Voice | 2 |
| MUS 126A | Applied Major/Voice | 2 |
| MUS 131 | Music Literature ${ }^{2}$ | 2 |
| MUS 132 | Music Literature ${ }^{2}$ | 2 |
| MUS 141 | Sight-Singing \& Ear Training | 2 |
| MUS 142 | Sight-Singing \& Ear Training | 2 |
| MUS 145 | Harmony and Keyboard | 2 |
| MUS 146 | Harmony and Keyboard | 2 |
| HED 100 | Personal and Community Health | 2 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | $\mathbf{3 4}$ |
|  | Credits |  |


| Second Year |  |  |
| :--- | :--- | :--- |
| CLM 165 | Computer Literacy for Musicians | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| MUS 151 | Elementary Conducting | 2 |
| MUS 203 | Recitals Class | 0 |
| MUS 204 | Recitals Class | 0 |
| MUS 241 | Sight-Singing \& Ear Training | 2 |
| MUS 242 | Sight-Singing \& Ear Training | 1 |
| MUS 245 | Harmony/Keyboard | 2 |
| MUS 246 | Harmony/Keyboard | 2 |
| MUS 260 | Band Instrument Survey (Instrumental) <br> or MUS 261 <br> or Percussion Class | 1 |
| MUS 271 | Vocal Diction (Instrumental) <br> or MUS 273 <br> or Voice Class | 1 |
| MUS 272 | Vocal Diction (Instrumental/Keyboard) | 1 |


| MUS 161 | String Class (Instrumental or Music Elective (Keyboard/Vocal)) | 1 |
| :---: | :---: | :---: |
| EDU 201 | Foundations of Education | 3 |
| PSY 228 | Developmental Psychology | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
| MUS 210D | Concert Choir | 1 |
| MUS 211D | Concert Choir | 1 |
| MUS 221A | Voice Minor | 1 |
| MUS 222A | Voice Minor | 1 |
| MUS 225A | Applied Major/Voice | 2 |
| MUS 226A | Applied Major/Voice | 2 |
|  | Credits | 32 |
| Third Year |  |  |
| $\begin{aligned} & \text { BIO } 100 \\ & \quad \text { or SCI } 101 \end{aligned}$ | Biological Science <br> or Physical Science for Non-Science Majors | 3 |
| $\begin{aligned} & \text { BIO } 100 \mathrm{~L} \\ & \quad \text { or PHY } 100 \mathrm{~L} \end{aligned}$ | Biological Science Lab or Physical Science Laboratory | 1 |
| Select one of the following: |  | 3 |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| HIS 102 | United States History to 1865 |  |
| HIS 103 | United States History Since 1865 |  |
| MUS 234 | African-American Music | 3 |
| MUS 303 | Recitals Class | 0 |
| MUS 304 | Recitals Class | 0 |
| MUS 331 | Music History ${ }^{2}$ | 2 |
| MUS 332 | Music History ${ }^{2}$ | 2 |
| MUS 346 or MUS 247 | Composition or Introduction to World Music | 3 |
| MUS 351 | Advanced Conductng | 2 |
| MUS 362 | Brassswind Class (Instrumental or music elective, Vocal and Keyboard) | 1 |
| MUS 383I/383V | Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (instrumental) (Vocal or Instrumental) ${ }^{3}$ | 2 |
| MUS 384I/384V | Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (instrumental) (Vocal or Instrumental) ${ }^{3}$ | 2 |
| SED 405 | Reading in the Content Area | 3 |
| MUS 310F | Jazz Ensemble | 1 |
| MUS 311 F | Jazz Ensemble | 1 |
| MUS 325B | Applied Major/Piano | 2 |
| MUS 326B | Applied Major/Piano | 2 |
|  | Credits | 33 |
| Fourth Year |  |  |
| MUS 403 | Recitals Class | 0 |
| MUS 410F | Jazz Ensemble | 1 |
| MUS 425B | Applied Major/Piano | 2 |
| MUS 426B | Applied Major/Piano | 2 |
| SED 499 | Directed Teaching (internship) ${ }^{3}$ | 12 |
| PHY 154 | Physics of Music | 3 |
| ENG 285 | Public Speaking | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |


| Select one of the following: | 3 |  |
| :--- | :--- | ---: |
| SOC 110 | Introduction to Sociology |  |
| SOC 101 | Introduction to the Social Sciences |  |
|  | Credits | $\mathbf{2 9}$ |
|  | Total Credits | $\mathbf{1 2 8}$ |

1 The minimum ensemble requirement for Music Education majors who play band instruments is four semesters of University Band and three semesters of other instrumental ensembles such as jazz ensemble/combo, or percussion woodwind, or brass ensemble.

3 Students must pass the PRAXIS I and II tests prior to applying for admission to MUS 383 Meth Pub Sch Music and MUS 384I Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (instrumental) - Methods in Public School Music. SED 499 Directed Teaching (internship) may be taken before taking the PRAXIS Exam.

4 Senior Recital or Senior Jury Required.
New
Footnote
++In addition to MUS 234 African-American Music, satisfies the core cultural requirement.
${ }^{3}$ Bachelor of Music in Music - Media Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 82 |
| Electives | 0 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 2}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 103 | Mathematics in General Education | 3 |
| MUS 103 | Recitals Class | 0 |
| MUS 104 | Recitals Class | 0 |
| MUS 131 | Music Literature 2,3 | 2 |
| MUS 132 | Music Literature 2,3 | 2 |
| MUS 141 | Sight-Singing \& Ear Training | 2 |
| MUS 142 | Sight-Singing \& Ear Training | 2 |
| MUS 145 | Harmony and Keyboard | 2 |
| MUS 146 | Harmony and Keyboard | 2 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| MUS 110D | Concert Choir | 1 |
| MUS 111D | Concert Choir | 1 |
| MUS 121A | Voice Minor | 1 |
| MUS 122A | Voice Minor | 1 |
| MUS 125A | Applied Major/Voice | 2 |
| MUS 126A | Applied Major/Voice | 2 |
|  | Credits | 33 |
| Se |  | 2 |


| Second Year |  |  |
| :--- | :--- | :--- |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| CLM 165 | Computer Literacy for Musicians | 3 |
| MUS 203 | Recitals Class | 0 |
| MUS 204 | Recitals Class | 0 |
| MCM 111 | Media and Society | 3 |
| MUS 240 | Progressive Harmony | 3 |
| MUS 241 | Sight-Singing \& Ear Training | 2 |
| MUS 151 | Elementary Conducting | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| Select one of the following: | 3 |  |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| HIS 102 | United States History to 1865 |  |
| HIS 103 | United States History Since 1865 | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| MUS 210D | Concert Choir |  |


| MUS 211D | Concert Choir | 1 |
| :--- | :--- | ---: |
| MUS 221A | Voice Minor | 1 |
| MUS 222A | Voice Minor | 1 |
| MUS 225A | Applied Major/Voice | 2 |
| MUS 226A | Applied Major/Voice | 2 |
|  | Credits | 30 |


| Third Year |  |  |
| :--- | :--- | :--- |
| MUS 265 | Practical Application in Electronic Music <br> (Midi) | 3 |
| MUS 234 | African-American Music ${ }^{2}$ | 3 |
| MUS 243 | Melody and Improvisation | 3 |
| MUS 303 | Recitals Class | 0 |
| MUS 304 | Recitals Class | 0 |
| MUS 331 | Music History | 2 |
| MUS 332 | Music History | 2 |
| MUS 335 | Jazz Literature \& Criticism | 3 |
| MUS 346 | Composition | 3 |
| or MUS 247 | or Introduction to World Music | 3 |
| PHY 154 | Physics of Music | 3 |
| ENG 285 | Public Speaking | 1 |
| MUS 310F | Jazz Ensemble | 1 |
| MUS 311F | Jazz Ensemble | 2 |
| MUS 325B | Applied Major/Piano | 2 |
| MUS 326B | Applied Major/Piano | 31 |
|  | Credits |  |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| MUS 261 | Percussion Class | 1 |
| MUS 365 | Recording \& Music Production | 3 |
| MUS 403 | Recitals Class | 0 |
| MUS 440 | Legal Protection to Music \& Musicians | 3 |
| MUS 366 | Music Video | 3 |
| MUS 410F | Jazz Ensemble | 1 |
| MUS 425A | Applied Major/Voice | 2 |
| MUS 426A | Applied Major/Voice | 2 |
| MUS 367 | Protools 101 | 3 |
| MUS 448 | Arranging | 2 |
| MCM 496 | Internship | $\mathbf{3}$ |
| MUS 493 | Music Internship | $\mathbf{3}$ |
|  | Credits | $\mathbf{2 6}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

1 The minimum ensemble requirement for instrumental students whose major is Bachelor of Music with an Emphasis in Media is five consecutive semesters in the University Jazz Ensemble and two semesters of either Symphonic/Concert Band or small instrumental ensembles. If a student enters this curriculum below the level of proficiency required to enroll in the University Jazz Ensemble, he or she can use no more than two ensemble credits in the Jazz Laboratory Band toward fulfilling ensemble requirements. The minimum ensemble requirement for vocal students whose major is Bachelor of Music with an Emphasis in Media is met by four consecutive semesters of Concert Choir and three semesters of Vocal Jazz Ensemble.
2 The two semesters of MUS 131 Music Literature and MUS 132 Music Literature, and MUS 234 African-American Music serve as the

Humanities requirement in the General Education Core. MCM 111
Media and Society also serves as the Social Science requirement in the General Education Core.
4 semesters of Music Literature/History satisfy the Humanities core requirements
4 Senior Recital or Senior Jury Required

## COLLEGE OF SCIENCE, ENGINEERING, AND TECHNOLOGY

Dr. Michael Keeve, Dean
Dr. Mushtaq Khan, Associate Dean
(757) 823-8180

The College of Science, Engineering 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 College 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 students. 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 College of Science, Engineering 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 knowhow 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 College of Science, Engineering, 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

The Computing Accreditation Commission of ABET. http:// www.abet.org
2. Chemistry

American Chemical Society (ACS)
1155 Sixteenth Street, N.W.
Washington, DC 20036
(202) 872-4589
http://www.acs.org/cpt (http://www.acs.org/cpt/)
3. Engineering

The Engineering Accreditation Commission of ABET
415 N. Charles St.
Baltimore, MD 21210
(410)347-7700
http://www.abet.org

## 4. Food Science and Nutrition Concentration

Accreditation Council for Education in Nutrition and Dietetics (ACEND)
120 S. Riverside Plaza, Suite 2190
Chicago, IL 60606-6995
(800) 577-1600
http://www.eatrightpro.org
5. Medical Technology

National Accrediting Agency for Clinical Laboratory Science (NAACLS)
5600 N. River Road, Suite 720
Rosemont, Illinois 60018-5119
(773)714-8880
www.naacls.org (https://www.naacls.org/about.aspx)
6. Nursing B.S.

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road, NE, Suite 1400
Atlanta, GA 30326
T: (404) 975-5000
Fax: (404) 975-5020
and
the Virginia Board of Nursing, Perimeter Center
9960 Maryland Drive, Suite 300
Henrico, VA 23233-1463
T: (804) 367-4515
www.acenursing.org (http://www.acenursing.org)
7. Technology

The Association of Technology, Management, and Applied Engineering (ATMAE)
275 N. York Street Suite 401
Elmhurst, Illinois 60126
630) 433-4514
http://www.atmae.org

## Organization of the College

The courses offered by the College of Science, Engineering, and Technology are organized into departments, which sponsor a wide array of possibilities for students. The following departments are included:

- Department of Biology
- Department of Chemistry
- Department of Computer Science
- Department of Engineering
- Department of Mathematics
- Department of Nursing and Allied Health
- Department of Physics
- Department of Technology


## Degrees Offered

The College of Science, Engineering, and Technology offers programs terminating at the associate, baccalaureate master, and doctorate degree levels. Students admitted to the College of Science, Engineering, and Technology may choose from fields of study in programs terminating at the associate, baccalaureate, master, or doctorate 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. Medical Technology
4. Nursing

## Science, Engineering and Technology Departments

- Army Science (p. 151)
- Bachelor of Arts in History - Military Science (ARMY) Concentration (p. 152)
- Biology (p. 153)
- Bachelor of Science in Biology (p. 154)
- Bachelor of Science in Biology - Pre-Professional Concentration (p. 155)
- Bachelor of Science in Biology - Teacher Licensure Endorsement (p. 157)
- Minor in Biology (p. 158)
- Chemistry (p. 159)
- Bachelor of Science in Chemistry (p. 160)
- Bachelor of Science in Chemistry - Pre-Medicine Concentration (p. 161)
- Bachelor of Science in Chemistry - Secondary Education Concentration (p. 162)
- Bachelor of Science in Chemistry and Master of Science in Materials Science - Five-Year Dual Degree (p. 163)
- Minor in Chemistry (p. 165)
- Computer Science (p. 166)
- Bachelor of Science in Computer Science - Computer Engineering Track (p. 169)
- Bachelor of Science in Computer Science - Cybersecurity Track (https://catalog.nsu.edu/undergraduate/science-engineering-technology/computer-science/computer-science-bs-track-cyb/)
- Bachelor of Science in Computer Science - Software Engineering Track (p. 171)
- Bachelor of Science in Computer Science - Standard Track (p. 168)
- Bachelor of Science in Information Technology (p. 172)
- Minor in Game Design and Development (p. 173)
- Minor in Computer Science (p. 173)
- Engineering (p. 174)
- Bachelor of Science Electrical and Electronics Engineering (General) (p. 176)
- Bachelor of Science in Electrical and Electronics Engineering (Track) (p. 177)
- Minor in Biomedical Engineering (p. 180)
- Minor in Electrical and Electronics Engineering (p. 181)
- Minor in Optical Engineering (p. 181)
- Mathematics (p. 182)
- Bachelor of Science in Mathematics - Applied Mathematics Track (p. 183)
- Dual Degree in Mathematics (p. 184)
- Mathematics with Teacher Certification Track (p. 184)
- Minor in Mathematics (p. 186)
- Naval Science (p. 187)
- Naval Reserve Officers Training Corp (NROTC) (p. 188)
- Nursing and Allied Health (p. 189)
- Bachelor of Science in Health Services Management (p. 191)
- Bachelor of Science in Health Services Management - Online Track (p. 192)
- Bachelor of Science in Health Services Management - Food Science \& Nutrition Concentration (p. 193)
- Bachelor of Science in Nursing - Online (RN to BSN) Completion Track (p. 196)
- Bachelor of Science in Nursing - Traditional (Pre-licensure) Baccalaureate Completion Track (p. 197)
- Certificate in Health Services Management (p. 195)
- Physics (p. 199)
- Bachelor of Science in Physics (p. 200)
- Bachelor of Science in Physics and Master of Science in Materials Science (Five-Year Dual Degree) (p. 201)
- Minor in Astronomy (p. 202)
- Minor in Physics (p. 203)
- Teacher Certification in Physics (p. 203)
- Special Academic Programs (p. 205)
- Bachelor of Science in Biology - (DNIMAS) Track (p. 206)
- Bachelor of Science in Biology - Pre-Professional (DNIMAS) Track (p. 207)
- Bachelor of Science in Chemistry - (DNIMAS) Track (p. 208)
- Bachelor of Science in Chemistry - Pre-Medicine (DNIMAS) Track (p. 209)
- Bachelor of Science in Computer Science - Computer Engineering (DNIMAS) Track (p. 210)
- Bachelor of Science in Computer Science - (DNIMAS) Track (p. 211)
- Bachelor of Science in Computer Science - CyberSecurity (DNIMAS) Track (p. 212)
- Bachelor of Science in Electrical and Electronics Engineering (DNIMAS) Track (p. 213)
- Bachelor of Science in Mathematics - Applied Mathematics (DNIMAS) Track (p. 214)
- Bachelor of Science in Optical Engineering - (DNIMAS) Track (p. 215)
- Bachelor of Science in Physics - (DNIMAS) Track (p. 216)
- Technology (p. 217)
- Associate of Science in Architectural Drafting (p. 218)
- Bachelor of Science in Computer Engineering Technology (p. 219)
- Bachelor of Science in Construction Management Engineering Technology (p. 220)
- Bachelor of Science in Electronics Engineering Technology (p. 222)

Dr. Aliecia McClain

## Army Science

Maj. Lisa Abel, US Army
Professor and Chair of Military Science
Army Reserve Officer Training Corps (AROTC)
(757) 823-8291

## Program Overview

The Army Reserve Officer Training Corps (ROTC) is a leadership development program that prepares qualified students to serve as Army Officers in the Active Duty Army, Army Reserve and National Guard. Once a student completes the requirements of the Army ROTC program, as well as the requirements for their academic major, they are commissioned as Second Lieutenants in the United States Army. The program consists of two phases of instruction, the Basic Course and the Advanced Course.

## The Basic Course

The Basic Course consists of MSL 101 Fundamentals of Leadership/ Management, MSL 102 Basic Leadership, MSL 201 Advanced Leadership/Management, and MSL 202 Advanced Leadership/ Management as well as co-requisite Leadership Labs for each course. The Basic Course is normally taken by students during their freshman and sophomore years of college. Areas of emphasis include familiarization with the Army's mission, branches, rank structure, and customs, as well as leadership and management skills such as communication, time management, problem solving, goal setting, team building, and physical fitness. The Basic Course requirements can take the place of several general education requirements (see chart) as well as free electives.

| NSU Course | AROTC Substitutions Course |
| :--- | :--- |
| HED 100 | MSL 101 or MSL 102 |
| HIS 100, HIS 101, HIS 102 | HIS 380 |
| PED 100 | MSL 201 or MSL 202 |

Students who enroll in the Basic Course do not incur a Military Service Obligation unless they apply for and are awarded an Army ROTC scholarship.

## The Advanced Course

The Advanced Course consists of MSL 301 Advanced Leadership/ Management, MSL 302 Advanced Leadership/Management, MSL 401 Theory and Dynamics of Military Team, and MSL 402 Theory and Dynamics of Military Team as well as co-requisite Leadership Labs for each course. Students who are enrolled in the Army ROTC Advanced Course are also required to take HIS 380 American Military History.

Advanced Course students also participate in a 30 day training event at Ft. Knox, KY during the summer between MSL 302 Advanced Leadership/ Management and MSL 401 Theory and Dynamics of Military Team. The Advanced Course is normally taken by students during their junior and senior years of college or as a graduate student. Areas of emphasis include critical thinking, small-unit leadership, map reading and land navigation, advanced communication skills, cultural awareness, planning, and ethics.

Students must complete the Basic Course (or receive credit for prior military service or JROTC participation) and meet all the requirements to contract in order to enroll in the Advanced Course.

## Enrollment Requirements

To enroll in the Army ROTC program, a student must

1. Be a full time student at Norfolk State University.
2. Be a citizen of the United States.
3. Be of good moral character.
4. Not be a conscientious objector.
5. Be physically healthy enough to participate in a normal college physical education course.

For more information about the Army ROTC program, including eligibility, requirements, benefits, scholarship opportunities, please contact the Recruiting and Enrollment Officer at 757-823-9296 or goldbar@nsu.edu.

## Army Science Programs

- Bachelor of Arts in History - Military Science (ARMY) Concentration (p. 152)


# Bachelor of Arts in History - Military Science (ARMY) Concentration 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 54 |
| Electives | 0 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

For the History-Military Science (Army) Sequence, thirty-six (36) hours in History are required, of which twenty-one (21) hours must be at the 300 or 400 level, with a minimum of six credit hours of non-Western history. Twenty-six (26) credit hours in Military Science are required. Juniors may receive four semester hours credit for leadership development assessment course, but these credits will not be a part of scheduling.

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| HIS 102 | United States History to 1865 | 3 |
| HIS 103 | United States History Since 1865 | 3 |
| MTH 103 | Mathematics in General Education | 3 |
| MSL 101 | Fundamentals of Leadership/Management | 3 |
| \& 101D | and Basic Drill \& Ceremony Module |  |
| MSL 102 | Basic Leadership <br> \& 102D | and Basic Drill \& Ceremony Module |


| Second Year |  | 1 |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 3 |
| HIS 205 | Introduction to the Study of History | 3 |
| Select on any of the following: |  |  |


| FRN 111 | Elementary French I |
| :--- | :--- |
| GRM 111 | Elementary German I |
| SPN 111 | Elementary Spanish |

Select on any of the following: 3

| FRN 112 | Elementary French II |  |
| :--- | :--- | :--- |
| GRM 112 | Elementary German II |  |
| SPN 112 | Elementary Spanish II | 3 |
| HIS 100 | History of World Societies I | 3 |
| HIS 101 | History of World Societies II | 3 |
| POS 100 | American National Government | 3 |
| MSL 201 | Advanced Leadership/Management <br> \& 201D | and Basic Drill \& Ceremony Module |
| MSL 202 | Advanced Leadership/Management <br> and Basic Drill \& Ceremony Module | 3 |

Select one of the following ENG XXX courses:

| ENG 286 | Writing About Literary Texts |  |
| :---: | :---: | :---: |
| ENG 203 | Advanced Communication Skills |  |
| ENG 303 | Professional \& Technical Writing |  |
| CSC 200 | Advanced Computer Concepts | 3 |
|  | Credits | 31 |
| Third Year |  |  |
| HIS 305 | The Three R's of History: Reading, Writing and Research | 3 |
| HIS 380 | American Military History | 3 |
| HIS 3XX/HIS 4XX | History Electives (300-400 level, NonWestern) | 6 |
| GEO 130 | Principles of Geography | 3 |
| ENG 285 | Public Speaking | 3 |
| $\begin{aligned} & \text { MSL } 301 \\ & \& 301 D \end{aligned}$ | Advanced Leadership/Management and Advanced Drill \& Ceremony Module | 4 |
| $\begin{aligned} & \text { MSL } 302 \\ & \& 302 D \end{aligned}$ | Advanced Leadership/Management and Advanced Drill \& Ceremony Module | 4 |
| HIS 335 or HIS 336 | African-American History or African-American History Since 1865 | 3 |
| ENG 207 | Introduction to World Literature | 3 |
|  | Credits | 32 |
| Fourth Year |  |  |
| HIS 497 | Historical Research | 3 |
| HIS 439 | Black Lives Matter: the Long Civil Right | 3 |
| GEO XXX | Geography Electives (300-400 level) | 3 |
| HIS 370 or HIS 371 | Early African History and Cultures, From the Beginning of Humankind to 1600 or Modern African History \& Cultures 1600-PRESENT | 3 |
| POS 360 | International Politics | 3 |
| HIS XXX | History Electives (300-400 level) | 6 |
| $\begin{aligned} & \text { MSL } 401 \\ & \& 401 \mathrm{D} \end{aligned}$ | Theory and Dynamics of Military Team and Advanced Drill \& Ceremony Module | 4 |
| \& 402D | Theory and Dynamics of Military Team and Advanced Drill \& Ceremony Module | 4 |
|  | Credits | 29 |
|  | Total Credits | 124 |

## Biology

Dr. Malikah Abdullah
Department Chair
(757) 823-8512

The Biology Department provides a diversity of career options through three 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 three B.S. option areas are as follows:

1. Biology 1 enables majors to pursue graduate degrees with an option for employment at the bachelor level.
2. Biology $\mathbf{2}$ students will follow Option 1 then seek specific endorsement. (e.g., teachers' licensure)
3. Biology 3 Pre-Professional provides a background for students having an interest in medicine, dentistry, veterinary medicine, optometry, pharmacy, osteopathy, and podiatry.

## Biology Programs

- Bachelor of Science in Biology (p. 154)
- Bachelor of Science in Biology - Pre-Professional Concentration (p. 155)
- Bachelor of Science in Biology - Teacher Licensure Endorsement (p. 157)
- Minor in Biology (p. 158)


## Bachelor of Science in Biology



| HIS 100 | History of World Societies I |  |
| :---: | :--- | ---: |
| POS 100 | American National Government |  |
| SOC 110 | Introduction to Sociology | 3 |
| MTH 151 | College Algebra | 3 |
| MTH 153 | College Algebra \& Trigonometry | $\mathbf{1}$ |
| PED 100 | Fundametals of Fitness for Life | $\mathbf{2 8}$ |
|  | Credits |  |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| BIO 260 | Integrative Zoology |  |
| \& 260L | and Integrative Zoology Laboratory | 4 |
| BIO 261 | General Botany | 3 |
| BIO 261L | General Botany Laboratory | 1 |
| XXX XXX | Biology Elective | 4 |
| CHM 221 | General Chemistry I | 3 |
| CHM 222 | General Chemistry II | 3 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| CSC 150 | Computer Literacy | 3 |
| XXX 111 | Intro to French, Spanish, German or Arabic | 3 |
| XXX 112 | Intro to French, Spanish, German or Arabic | 3 |
| ENG 285 | Public Speaking | 3 |
|  | Credits | 33 |

## Third Year

| BIO XXX XXX | Elective | 4 |
| :---: | :--- | :---: |
| BIO 263 | Vertebrate Embryology |  |
| \& 263L | and Vertebrate Embryology Lab |  |
| BIO XXX XXX | Elective | 4 |


| $\begin{aligned} & \text { BIO } 270 \\ & \& 270 \mathrm{~L} \end{aligned}$ | Comparative Vertebrate Anatomy and Physiology and Comparative Vertebrate Anatomy \& Physiology Laboratory |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO } 272 \\ & \& 272 L \end{aligned}$ | Human Anatomy and Human Anatomy Laboratory |  |
| BIO 310 | General Microbiology | 3 |
| BIO 310L | General Microbiology Laboratory | 1 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 322L | Organic Chemistry II Laboratory | 2 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| PHY 153 | General Physics | 3 |
| PHY 153L | General Physics Laboratory II | 1 |
| Select one Cultural Elective of the following: |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HRP 320 | African American Health |  |
| MUS 234 | African-American Music |  |
|  | Credits | 33 |
| Fourth Year |  |  |
| BIO 351 | Principles of Genetics | 3 |
| BIO 351L | Principles of Genetics Laboratory | 1 |
| BIO 364 | Seminar and Colloquium in Biology | 1 |
| Select one of the following BIO elective: |  | 4 |
| BIO 459 | General Physiology |  |
| BIO 459L | General Physiology Laboratory |  |
| $\begin{aligned} & \text { BIO } 461 \\ & \& 461 \mathrm{~L} \end{aligned}$ | Plant Physiology and Plant Physiology Laboratory |  |
| BIO 495 | Biostatistics | 3 |
| BIO 474 | Molecular Biology | 3 |
| BIO 474L | Molecular Biology Laboratory | 2 |
| Select one Cultural Elective: |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| FIA 270 | History of Art Survey I |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HRP 320 | African American Health |  |
| MUS 234 | African-American Music |  |
| XXX XXX | Free Elective | 3 |
| Select one Humanities Elective: |  | 3 |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |


| MUS 301 | Music Appreciation |  |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{2 6}$ |
| Total Credits | $\mathbf{1 2 0}$ |  |

All Biology courses require students to take both lecture (3 credits) and lab ( 1 credit) with the exception of BIO 364 Seminar and Colloquium in Biology and BIO 495 Biostatistics. The lab for BIO 474L Molecular Biology Laboratory is 2 credits.

## Bachelor of Science in Biology - PreProfessional Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 45 |
| Major Requirements | 46 |
| Electives | 3 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Biology 3 Curriculum |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| $\text { BIO } 110$ \& 110L | General Biology and General Biology Laboratory | 4 |
| $\text { BIO } 111$ \& 111L | General Biology II and General Biology II Laboratory | 4 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| Select one of the following: |  | 3 |


| HIS 100 | History of World Societies I |  |
| ---: | :--- | ---: |
| POS 100 | American National Government |  |
| SOC 110 | Introduction to Sociology | 3 |
| MTH 151 | College Algebra | 3 |
| MTH 153 | College Algebra \& Trigonometry | 1 |
| PED 100 | Fundametals of Fitness for Life | $\mathbf{2 8}$ |
|  | Credits |  |


| Second Year |  | 1 |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 4 |
| BIO 260 | Integrative Zoology |  |
| \& 260L | and Integrative Zoology Laboratory |  |
| BIO 261 | General Botany | 4 |
| \& 261L | and General Botany Laboratory |  |

BIO XXX: Select one Biology course 4

| BIO 271 <br> \& BIO 270L | Ecology and Comparative Vertebrate Anatomy \& Physiology Laboratory |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO 278 } \\ & \& 278 \mathrm{~L} \end{aligned}$ | Cell Biology and Cell Biology Laboratory |  |
| $\begin{aligned} & \text { BIO } 350 \\ & \& 350 \mathrm{~L} \end{aligned}$ | Parasitology and Parasitology Laboratory |  |
| $\begin{aligned} & \text { CHM } 221 \\ & \& 221 \mathrm{~L} \end{aligned}$ | General Chemistry I and General Chemistry I Laboratory | 4 |
| $\begin{aligned} & \text { CHM } 222 \\ & \& 222 \mathrm{~L} \end{aligned}$ | General Chemistry II and General Chemistry II Laboratory | 4 |
| MTH 184 | Calculus I | 4 |
| XXX 111 | Intro to French, Spanish, German or Arabic | 3 |
| XXX 112 | Intro to French, Spanish, German or Arabic | 3 |
| ENG 285 | Public Speaking | 3 |


| Third Year |  |  |
| :---: | :---: | :---: |
| BIO XXX | Select one of the following: | 4 |
| $\begin{aligned} & \text { BIO } 263 \\ & \text { \& 263L } \end{aligned}$ | Vertebrate Embryology and Vertebrate Embryology Lab |  |
| $\begin{aligned} & \text { BIO } 264 \\ & \& 264 \mathrm{~L} \end{aligned}$ | Concepts of Developmental Biology and Concepts of Developmental Biology Labor |  |
| BIO XXX: Select one of the following: |  | 4 |
| $\begin{aligned} & \text { BIO } 270 \\ & \& 270 \mathrm{~L} \end{aligned}$ | Comparative Vertebrate Anatomy and Physiology and Comparative Vertebrate Anatomy \& Physiology Laboratory |  |
| $\begin{aligned} & \text { BIO } 272 \\ & \& 272 \mathrm{~L} \end{aligned}$ | Human Anatomy and Human Anatomy Laboratory |  |
| CSC 150 | Computer Literacy | 3 |
| $\begin{aligned} & \text { BIO } 310 \\ & \& 310 \mathrm{~L} \end{aligned}$ | General Microbiology and General Microbiology Laboratory | 4 |
| $\begin{aligned} & \text { CHM } 321 \\ & \& 321 \mathrm{~L} \end{aligned}$ | Organic Chemistry I and Organic Chemistry I Laboratory | 5 |
| $\begin{aligned} & \text { CHM } 322 \\ & \& 322 \mathrm{~L} \end{aligned}$ | Organic Chemistry II and Organic Chemistry II Laboratory | 5 |
| $\begin{aligned} & \text { PHY } 152 \\ & \& 152 \mathrm{~L} \end{aligned}$ | General Physics and General Physics Laboratory I | 4 |
| PHY 153 <br> \& 153L | General Physics and General Physics Laboratory II | 4 |
|  | Credits | 33 |
| Fourth Year |  |  |
| $\begin{aligned} & \text { BIO } 351 \\ & \& 351 \mathrm{~L} \end{aligned}$ | Principles of Genetics and Principles of Genetics Laboratory | 4 |
| BIO 364 | Seminar and Colloquium in Biology | 1 |
| Select one of the following: |  | 4 |
| $\begin{aligned} & \text { BIO } 459 \\ & \& 459 \mathrm{~L} \end{aligned}$ | General Physiology and General Physiology Laboratory |  |
| $\begin{aligned} & \mathrm{BIO} 461 \\ & \& 461 \mathrm{~L} \end{aligned}$ | Plant Physiology and Plant Physiology Laboratory |  |
| $\begin{aligned} & \text { BIO } 469 \\ & \& 469 \text { L } \end{aligned}$ | Biochemistry and Biochemistry Laboratory | 4 |
| Select one Humanities Elective of the following: |  | 3 |
| FIA 201 | Basic Art Appreciation |  |
| HUM 210 | Humanties |  |
| MUS 301 | Music Appreciation |  |
| ENG 207 | Introduction to World Literature |  |
| Select two Cultural Electives of the following: |  | 6 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| MUS 234 | African-American Music |  |
| HRP 320 | African American Health |  |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| FIA 370 | African/Afro-American Art |  |
| XXX XXX | Free Elective | 3 |
|  | Credits | 25 |
|  | Total Credits | 120 |

All Biology courses require students to take both lecture (3 credits) and lab ( 1 credit) with the exception of BIO 364 Seminar and Colloquium in Biology and BIO 495 Biostatistics. The lab for BIO 474 Molecular Biology is 2 credits.

## Bachelor of Science in Biology Teacher Licensure Endorsement

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 34 |
| Restricted Electives | 33 |
| Education | 27 |
| Total Credit Hours | $\mathbf{1 3 4}$ |


| Biology 2 Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BIO 110 | General Biology <br> \& 110L | and General Biology Laboratory |$\quad 4$


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| BIO 260 | Integrative Zoology | 3 |
| BIO 260L | Integrative Zoology Laboratory | 1 |
| BIO 261 | General Botany | 3 |
| BIO 261L | General Botany Laboratory | 1 |
| BIO 271 | Ecology | 4 |
| \& 271L | and Ecology Laboratory | 3 |
| CHM 221 | General Chemistry I | 3 |
| CHM 222 | General Chemistry II | 1 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222L | General Chemistry II Laboratory | 3 |
| EDU 201 | Foundations of Education | 3 |
| HUM 210 | Humanties | 3 |

$\begin{array}{ll}\text { ENG } 383 & \text { African-American Literature, 1940- } \\ & \text { PRESENT }\end{array}$

| FIA 370 | African/Afro-American Art |
| :--- | :--- |
| HIS 335 | African-American History |
| HIS 336 | African-American History Since 1865 |
| HRP 320 | African American Health |
| MUS 234 | African-American Music |


| XXX 111 | Introduction to French, Spanish, German or | 3 |
| :--- | :--- | ---: |
|  | Arabic |  |
| ENG 285 | Public Speaking | 3 |
|  | Credits | $\mathbf{3 6}$ |


| Third Year |  |  |
| :--- | :--- | ---: |
| BIO 351 | Principles of Genetics |  |
| \& 351L | and Principles of Genetics Laboratory | 4 |
| BIO 310 | General Microbiology <br> \& 310L | and General Microbiology Laboratory |$\quad 4$


| Fourth Year |  |  |
| :--- | :--- | ---: |
| BIO 278 | Cell Biology |  |
| \& 278L | and Cell Biology Laboratory | 4 |
| BIO 459 | General Physiology |  |
| \& 459L | and General Physiology Laboratory | 4 |
| BIO 364 | Seminar and Colloquium in Biology | 1 |
| SED 405 | Reading in the Content Area | 3 |
| SCI 401 | Geological Material and Processes | 3 |
| EDU 486 | Human Growth and Development | 3 |
| SED 499 | Directed Teaching (internship) | 12 |
|  | Credits | $\mathbf{3 0}$ |
|  | Total Credits | $\mathbf{1 3 3}$ |

## Minor in Biology

## Curriculum

Completion of a minor requires that a student earn a grade of "C" (2.0) or better in each of the required courses. Substitutions are not possible for core courses. Biology courses have prerequisites so students should consult with the Biology Chair regarding prerequisite requirements for the minor.

| Code | Title | Credits |
| :--- | :--- | ---: |
| Core Courses |  |  |
| BIO 110 | General Biology | 3 |
| BIO 110L | General Biology Laboratory | 1 |
| BIO 111 | General Biology II | 3 |
| BIO 111L | General Biology II Laboratory | 1 |
| BIO 260 | Integrative Zoology | 3 |
| BIO 260L | Integrative Zoology Laboratory | 1 |
| BIO 261 | General Botany | 3 |
| BIO 261L | General Botany Laboratory | 1 |
| Additional Course Requirements | $3-6$ |  |
| Select one of the following: |  |  |

## Total Credits

19-22
1 Lectures and labs must be taken together unless you have consent of instructor to take lecture only.

## Chemistry

Dr. Suely Black

Department Chair
(757) 823-2285

The Department of Chemistry provides the knowledge, skills and training necessary for chemistry students seeking the B.S. degree with a major in Chemistry and supports undergraduate programs in other disciplines. The Chemistry Department also provides innovative research opportunities for students wishing to explore the fascinating world 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), 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 Tracks

The Chemistry Department offers several chemistry based tracks leading to a B. S. degree in Cemistry: Chemistry with an emphasis in Pre-Medicine (not a degree in Pre-Medicine), and the dual degree B.S. in Chemistry M.S. in Materials Science curriculum.

All B.S. Chemistry tracks provide you with a strong background in chemical knowledge, analytical and laboratory skills, oral and written communication proficiency, and experiences working independently or in a team.

[^2]The Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) offers a rigorous and demanding program to to qualifying students. Successful completion of the DNIMAS program results in a Bachelor of Science in Chemistry.

- Pre-Medicine (https://www.nsu.edu/chemistry/premed/) (BS.CHM.PM)
B.S. Chemistry with an emphasis in Pre-Medicine prepares you for medical, dental, veterinary and other bio-related professional schools. Please be aware, this is not a degree in Pre-Medicine.
- Pre-Medicine DNIMAS (https://www.nsu.edu/dnimas/chemistry-premed/) (B.S.CHM.PM.DNIMAS)
Pre-Med DNIMAS offers a rigorous and demanding B.S. Chemistry/ Pre-Med program to students who qualify.
- Teacher Licensure (https://www.nsu.edu/chemistry/teacherlicensure/)

Teacher Licensure combines chemistry and pedagogy, preparing students to work in K-12 education.

- M.S. Materials Science (https://www.nsu.edu/chemistry/m-s-materials-science/) (B.S. Chemistry/M.S. Materials Science) M.S. Materials Science is a 5 year program that further prepares students to assume positions of leadership in materials-related jobs.


## Chemistry Tracks

- Bachelor of Science in Chemistry (p. 160)
- Bachelor of Science in Chemistry - Pre-Medicine Concentration (p. 161)
- Bachelor of Science in Chemistry - Secondary Education Concentration (p. 162)
- Bachelor of Science in Chemistry and Master of Science in Materials Science - Five-Year Dual Degree (p. 163)
- Minor in Chemistry (p. 165)


## Bachelor of Science in Chemistry

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 34 |
| Major Requirements | 54 |
| Electives | 7 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 1}$ |


| Curriculum Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CHM 231 or CHM 231H | General Chemistry I or General Chemistry I Honors | 3 |
| CHM 231R | General Chemistry Applications I | 1 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 232 or CHM 232H | General Chemistry II or General Chemistry II Honors | 3 |
| CHM 232R | General Chemistry Applications II | 1 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| MTH 184 | Calculus I | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 32 |

## Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | :--- |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 322L | Organic Chemistry II Laboratory | 2 |
| CHM 331 | Analytical Chemistry I | 3 |
| CHM 331L | Analytical Chemistry I Laboratory | 2 |
| MTH 251 | Calculus II | 4 |
| MTH 252 | Calculus III | 4 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| PHY 153 | General Physics | 3 |
| PHY 153L | General Physics Laboratory II | 1 |
|  | Credits | 32 |

## Third Year

| ENG 285 | Public Speaking | 3 |
| :--- | :--- | ---: |
| HIS XXX | History from the Core | 3 |
| BIO 110 | General Biology | 4 |
| \& 110L | and General Biology Laboratory |  |
| CHM 332 | Analytical Chemistry II | 3 |


| CHM 332L | Analytical Chemistry II Laboratory | 2 |
| :---: | :---: | :---: |
| CHM 345 | Mathematical Methods \& Logic for the Physical Sciences | 3 |
| CHM 451 <br> \& CHM 452 | Chemistry Seminar I and Chemistry Seminar II | 2 |
| CHM 361 | Physical Chemistry I | 3 |
| CHM 362 | Physical Chemistry II | 3 |
| CHM 363L | Physical Chemistry Laboratory | 2 |
|  | Credits | 28 |
| Fourth Year |  |  |
| CHM 497 <br> \& CHM 498 | Introduction to Research and Introduction to Research | 2 |
| CHM 473 | Advanced Inorganic Chemistry | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| CHM XXX | Chemisty (Restrictive Electives) ${ }^{1}$ | 7 |
| XXX XXX | Cultural Elective from the Core | 6 |
| CHM 431 | Biochemistry I | 3 |
| CHM 431L | Biochemistry I Laboratory | 2 |
| XXX XXX | Humanities from the Core | 3 |
|  | Credits | 29 |
|  | Total Credits | 121 |

Select 6 hours from: CHM 397, CHM 398, CHM 473L, CHM 431L, CHM 432, CHM 432L, CHM 475, CHM 481, CHM 497, CHM 498, CHM 474 and CHM 474H
(Maximum of one elective hour of research).

## Bachelor of Science in Chemistry -Pre-Medicine Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 34 |
| Major Requirements | 56 |
| Electives | 6 |
| Other Requirements | 27 |
| Total Credit Hours | $\mathbf{1 2 3}$ |


| Curriculum |  |  |
| :--- | :--- | :--- |
| Course | Title | Credits |


| First Year |  |  |
| :---: | :---: | :---: |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CHM 231 or CHM 231H | General Chemistry I or General Chemistry I Honors | 3 |
| CHM 231R | General Chemistry Applications I | 1 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 232 or CHM 232H | General Chemistry II or General Chemistry II Honors | 3 |
| CHM 232R | General Chemistry Applications II | 1 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| MTH 184 | Calculus I | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 32 |

Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | ---: |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 323L | Synthesis and Analysis in Organic |  |
|  | Chemistry Laboratory (or CHM 323LH) | 2 |
| CHM 331 | Analytical Chemistry I | 3 |
| CHM 331L | Analytical Chemistry I Laboratory | 2 |
| MTH 251 | Calculus II | 4 |
| MTH 252 | Calculus III | 4 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| PHY 153 | General Physics | 3 |
| PHY 153L | General Physics Laboratory II | 1 |
|  | Credits | 32 |

Third Year

| ENG 285 | Public Speaking | 3 |
| :--- | :--- | :--- |
| BIO XXX | Restricted Biology Elective | 3 |

BIO 300 Level or higher

| HIS XXX | History from the Core | 3 |
| :---: | :---: | :---: |
| BIO 110 <br> \& 110L | General Biology and General Biology Laboratory | 4 |
| CHM 332 | Analytical Chemistry II | 3 |
| CHM 332L | Analytical Chemistry II Laboratory | 2 |
| CHM 345 | Mathematical Methods \& Logic for the Physical Sciences | 3 |
| CHM 451 | Chemistry Seminar I | 1 |
| CHM 361 | Physical Chemistry I | 3 |
| CHM 362 | Physical Chemistry II | 3 |
| CHM 363L | Physical Chemistry Laboratory | 2 |
|  | Credits | 30 |
| Fourth Year |  |  |
| CHM 497/498 | Introduction to Research | 1 |
| CHM 473 | Advanced Inorganic Chemistry | 3 |
| BIO XXX | Restricted Biology Elective | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| XXX XXX | Humanities from the Core | 3 |
| XXX XXX | Cultural Elective from the Core | 6 |
| CHM 431 | Biochemistry I | 3 |
| CHM 431L | Biochemistry I Laboratory | 2 |
| CHM 432 | Biochemistry II | 3 |
| CHM 432L | Biochemistry II Laboratory | 2 |
|  | Credits | 29 |
|  | Total Credits | 123 |

## Bachelor of Science in Chemistry Secondary Education Concentration

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Core Major | 42 |
| Requirements Electives | 17 |
| Other Requirements | 23 |
| Total Credit Hours | 122 |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| CHM 231 | General Chemistry I |  |
| CHM 231R | General Chemistry Applications I | 3 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 232 | General Chemistry II | 1 |
| CHM 232R | General Chemistry Applications II | 3 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| CSC 170 | Computer Programming I | 1 |
| CSC 170L | Computer Programming Laboratory I | 3 |
| ENG 101 | College English I | 1 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| HIS XXX | History Elective (from the General | 2 |
|  | Education Core) | 3 |
| MTH 153 | College Algebra \& Trigonometry |  |
| MTH 184 | Calculus I | 3 |
| PED 100 | Fundametals of Fitness for Life | 4 |
|  | Credits | 1 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 331 | Analytical Chemistry I | 3 |
| CHM 331L | Analytical Chemistry I Laboratory | 2 |
| EDU 201 | Foundations of Education | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| MTH 251 | Calculus II | 4 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| PHY 153 | General Physics | 3 |
| PHY 153L | General Physics Laboratory II | 1 |
|  | Credits | $\mathbf{3 2}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| BIO 110 | General Biology | 3 |
| BIO 110L | General Biology Laboratory | 1 |
| CHM 332 | Analytical Chemistry II | 3 |
| CHM 332L | Analytical Chemistry II Laboratory | 2 |


| CHM 451 | Chemistry Seminar I | 1 |
| :--- | :--- | :--- |
| CHM 361 | Physical Chemistry I | 3 |
| CHM 363L | Physical Chemistry Laboratory | 2 |
| ENG 285 | Public Speaking | 3 |
| SED 385 | Curriculum and Instructional Procedures in | 3 |
|  | Science | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| XXX XXX | Cultural Elective (from the General | 3 |
| XXX XXX | Education Core) | 3 |
|  | Humanities Elective (from the General | Education Core) |


| Fourth Year |  |  |
| :--- | :--- | :--- |
| CHM 452 | Chemistry Seminar II | 1 |
| CHM 497 | Introduction to Research |  |
| or CHM 498 | or Introduction to Research | 1 |
| CHM 431 | Biochemistry I | 3 |
| CHM 473 | Advanced Inorganic Chemistry | 3 |
| PSY 228 | Developmental Psychology | 3 |
| SED 405 | Reading in the Content Area | 3 |
| Only 3 credit hours of SED 499 is required for Chemistry major | 3 |  | students


| SED 499 | Directed Teaching (internship) |  |
| :--- | :--- | ---: |
| XXX XXX | Electives | 2 |
| XXX XXX | Cultural Elective (from the General | 3 |
|  | Education Core) | 3 |
|  | Humanities (from the General Education <br> Core) | $\mathbf{2 5}$ |
|  | Credits | $\mathbf{1 2 2}$ |

1 May be taken during the freshman year upon the approval of the advisor.

## Teacher Licensure Endorsement in Chemistry

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).

| Code | Title | Credits |
| :--- | :--- | ---: |
| EDU 201 | Foundations of Education | 3 |
| SED 233 | Seminar in Assessment and Evaluation | 3 |
| SED 380 | Foundations of Secondary School Methods and | 3 |
| SED 384 | Management Instruction |  |
|  | Curriculum \& Instructional Procedures in | 3 |

SED 499 Directed Teaching (internship)

## Bachelor of Science in Chemistry and Master of Science in Materials Science - Five-Year Dual Degree

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 34 |
| Major Requirements | 78 |
| Electives | 9 |
| Other Requirements | 29 |
| Total Credit Hours | 150 |


| Chemistry Curriculum |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CHM 223A <br> \& CHM 221L | General Chemistry I and General Chemistry I Laboratory ${ }^{1}$ | 5 |
| CHM 224A <br> \& CHM 222L | General Chemistry II and General Chemistry II Laboratory | 5 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| MTH 184 | Calculus I | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| ENG 285 | Public Speaking | 3 |
| CHM 321 | Organic Chemistry I <br> and Organic Chemistry I Laboratory | 5 |
| \& 321L | Organic Chemistry II |  |
| CHM 322 | and Organic Chemistry II Laboratory | 5 |
| \& 322L | Analytical Chemistry I |  |
| CHM 331 | and Analytical Chemistry I Laboratory | 5 |
| \& 331L | Calculus II |  |
| MTH 251 | Calculus III | 4 |
| MTH 252 | University Physics I <br> PHY 160 | and University Physics Laboratory I |
| \& 160L | University Physics II <br> PH 161 | 5 |
| \& 161L University Physics Laboratory II | 5 |  |
|  | Credits | $\mathbf{3 7}$ |

Third Year
Select one of the following History from the Core: 3

| HIS 100 | History of World Societies I |
| :---: | :--- |
| HIS 101 | History of World Societies II |
| HIS 102 | United States History to 1865 |
| HIS 103 | United States History Since 1865 |
| Select one of the following Humanities from the Core: |  |


| HUM 210 | Humanties |  |
| :--- | :--- | ---: |
| HUM 211 | Humanities |  |
| ENG 383 | African-American Literature, 1940- <br>  <br>  <br> MRESENT |  |
| CHM 332 | African-American Music | 5 |
| \& 332L | Analytical Chemistry II |  |
| CHM 361 | Phy Analytical Chemistry II Laboratory |  |
| CHM 362 | Physical Chemistry II | 3 |
| CHM 363L | Physical Chemistry Laboratory | 3 |
| CHM 345 | Mathematical Methods \& Logic for the | 2 |
| MTH 372 | Physical Sciences | 3 |
| SOC 101 | Differential Equations | 3 |
|  | Introduction to the Social Sciences | 3 |

## Fourth Year



| HUM 210 | Humanties |  |  |
| :--- | :--- | :---: | :---: |
| HUM 211 | Humanities |  |  |
| ENG 383 | African-American Literature, 1940- <br>  <br>  <br> MRESENT |  |  |
| MUS 234 |  |  | African-American Music |


| Select one of the following Electives: |  |
| :--- | :--- |
| CHM 431 | Biochemistry I |
| CHM 431L | Biochemistry II |
| CHM 432L | Biochemistry I Laboratory |
| CHM 473L | Advanced Inorganic Chemistry Lab |
| CHM 475 | Advanced Organic Chemistry |
| CHM 481 | Special Topics in Chemistry |
| CHM 478 | Int Inogr Spectr'y |
| CHM 397 | Introduction to Research |
| CHM 398 | Introduction to Research |
| CHM 497 | Introduction to Research |
| CHM 498 | Introduction to Research |
| CHM 451 | Chemistry Seminar I |
| CHM 473 | Advanced Inorganic Chemistry |
| CHM 545 | Mathematical Method |
| MSE 530 | Materials Science |


| BIO 110 | General Biology <br> \& 110L | and General Biology Laboratory |
| :--- | :--- | ---: |
| PHY 356 | Heat and Thermodynamics | 4 |
| PHY 580 | Quantum Mechanics for Material Science | 3 |
|  | Credits | $\mathbf{2 9}$ |
|  | Total Credits | $\mathbf{1 2 6}$ |
|  | May be taken during the freshman year upon the approval of the <br> advisor. |  |

## Materials Science Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| Summer |  |  |
| MSE 697 | Research I | $\mathbf{1 - 9}$ |
|  | Credits | $\mathbf{1 - 9}$ |
| Fifth Year |  | 3 |
| MSE 533 | Polymers/Composites | 3 |
| MSE 535 | Electronic and Optic Material | 3 |
| MSE 575 | Basic Instrumentation for Material Science | 3 |
| MATS 799 | Thesis | 9 |


| CHM 573 | Advance Inorganic |  |
| :--- | :--- | ---: |
| CHM 633 | Molecular Dynamics |  |
| CHM 663 | Atomic and Molecular Spectroscopy |  |
| PHY 653 | Solid State Physics |  |
| PHY 675 | Elctricity and Magnetism |  |
| MATS 610 | Special Topics |  |
| MATS 710 | Special Topics II | $\mathbf{2 1}$ |
|  | Credits | $\mathbf{2 2 - 3 0}$ |

## Minor in Chemistry

The American Chemical Society (ACS) requires that a minor in chemistry consist of a minimum of 20 credit hours and 200 laboratory contact hours in two different areas of chemistry beyond the first year general chemistry. A minor in chemistry at NSU will consist of a required minor "core" and then a choice of the following advances courses listed below (all course work listed below must be passed with a grade of "C" or higher).

## CURRICULUM

New Chemistry Minor Options

| Code | Title Creser | Credits |
| :---: | :---: | :---: |
| Chemistry Minor Core ${ }^{1}$ |  |  |
| $\begin{aligned} & \text { CHM } 321 \\ & \& 321 \mathrm{~L} \end{aligned}$ | Organic Chemistry I and Organic Chemistry I Laboratory ${ }^{2}$ | 5 |
| Advanced Courses |  |  |
| Option 1: Analytical Chemistry Option |  |  |
| $\begin{aligned} & \text { CHM } 331 \\ & \& 331 \mathrm{~L} \end{aligned}$ | Analytical Chemistry I and Analytical Chemistry I Laboratory | 5 |
| $\begin{aligned} & \text { CHM } 332 \\ & \& 332 \text { L } \end{aligned}$ | Analytical Chemistry II and Analytical Chemistry II Laboratory | 5 |
| $\text { CHM } 497$ <br> or CHM 498 | Introduction to Research Introduction to Research | 1 |
| TOTAL (Including Core) 16 |  |  |
| OPTION 2: Biochemistry Option |  |  |
| $\begin{aligned} & \text { CHM } 322 \\ & \& 322 \mathrm{~L} \end{aligned}$ | Organic Chemistry II and Organic Chemistry II Laboratory | 5 |
| $\begin{aligned} & \text { CHM } 431 \\ & \& 431 \mathrm{~L} \end{aligned}$ | Biochemistry I and Biochemistry I Laboratory | 5 |
| CHM 497 <br> or CHM 498 | Introduction to Research Introduction to Research | 1 |
| TOTAL (Including Core) 16 |  |  |
| OPTION 3: Physical Chemistry Option |  |  |
| CHM 345 | Mathematical Methods \& Logic for the Physical Sciences | 3 |
| CHM 361 | Physical Chemistry I | 3 |
| CHM 362 <br> \& CHM 363L | Physical Chemistry II and Physical Chemistry Laboratory | 5 |
| TOTAL (Including Core) 16 |  |  |
| Total Credits |  | 38 |

Students must complete the General Chemistry lecture and laboratory sequence to enter the Chemistry Minor program.

All courses listed above must be taken exactly as stated, no substitutions are allowed.

# Computer Science Computer Science 

Dr. Felicia R. Doswell<br>Department Chair (I)<br>(757) 823-9453

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. The B.S. degree program in Computer Science is accredited by the Computing Accreditation Commission of ABET. http://www.abet.org

## Program Educational Objectives

A graduate of the Undergraduate Computer Science Program at Norfolk State University will be able:

1. To work successfully, both independently and in team environments.
2. To communicate effectively, both orally and in writing.
3. To pursue advanced study or engage in professional practice within the computing profession.
4. To engage in the practice of life-long learning to enhance their capabilities.
5. To practice ethical behavior in their professional endeavors.
6. To address contemporary issues by using evolving technologies, analytical thinking, and design methodologies.

## Student Learning Outcomes

Upon graduation, computer science students will demonstrate an:

1. Ability to apply knowledge of computing and mathematics appropriate to the discipline
2. Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. Ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs
4. Ability to function effectively on teams to accomplish a common goal
5. Understanding of professional, ethical, legal, security, and social issues and responsibilities
6. Ability to communicate effectively with a range of audiences
7. Ability to analyze the local and global impact of computing on individuals, organizations and society
8. Recognition of the need for and ability to engage in continuing professional development
9. Ability to use current techniques, skills, and tools necessary for computing practices
10. Ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computerbased systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
11. Ability to apply design and develop principles in the construction of software systems of varying complexity

## General Department Requirements

Computer Science and Information Technology majors must complete at least 120 credits to complete the B.S. degree. Additionally:

Students must meet prerequisites or their equivalents prior to enrolling in more advanced computer science or information technology courses.

Computer Science majors must earn at least a " $C$ " grade in all English, Science, Mathematics and Computer Science courses. Also majors with a specialty in computer engineering must receive a "C" grade or better in all engineering courses, and majors with a specialty in information systems must receive a " $C$ " grade or better in all courses taken in the School of Business.

Information Technology majors must earn at least a "C" grade in SEM 101 Spartan Seminar 101 (plus SEM 102 and SEM 201), all English, Science, Mathematics, Computer Science courses and all courses with the ITE, CIT and IMT prefixes.

## Information Technology

Dr. Aurelia T. Williams
Department Head
(757) 823-9454

The Information Technology Program aims to provide graduates with the skills and knowledge to take on appropriate professional positions in Information Technology upon graduation and grow into leadership positions or pursue research or graduate studies in the field.

## Program Educational Objectives

A graduate of the Undergraduate Computer Science Program at Norfolk State University will be able:

1. To work successfully, both independently and in team environments.
2. To communicate effectively, both orally and in writing.
3. To pursue advanced study or engage in professional practice within the computing profession.
4. To engage in the practice of life-long learning to enhance their capabilities.
5. To practice ethical behavior in their professional endeavors.
6. To address contemporary issues by using evolving technologies, analytical thinking, and design methodologies.

## Student Learning Outcomes

Upon graduation, computer science students will demonstrate an:

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline;
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
3. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;
4. An ability to function effectively on teams to accomplish a common goal;
5. An understanding of professional, ethical, legal, security, and social issues and responsibilities;
6. An ability to communicate effectively with a range of audiences;
7. An ability to analyze the local and global impact of computing on individuals, organizations and society;
8. Recognition of the need for, and an ability to engage in, continuing professional development;
9. An ability to use current techniques, skills, and tools necessary for computing practices;
10. An ability to use and apply current technical concepts and practices in the core information technologies
11. An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems
12. An ability to effectively integrate IT-based solutions into the user environment
13. An understanding of best practices and standards and their application
14. An ability to assist in the creation of an effective project plan

## Computer Science Programs

- Bachelor of Science in Computer Science - Computer Engineering Track (p. 169)
- Bachelor of Science in Computer Science - Cybersecurity Track (https://catalog.nsu.edu/undergraduate/science-engineering-technology/computer-science/computer-science-bs-track-cyb/)
- Bachelor of Science in Computer Science - Software Engineering Track (p. 171)
- Bachelor of Science in Computer Science - Standard Track (p. 168)
- Bachelor of Science in Information Technology (p. 172)
- Minor in Game Design and Development (p. 173)
- Minor in Computer Science (p. 173)


# Bachelor of Science in Computer Science - Standard Track 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education (p. 41) | 40 |
| Core Major | 53 |
| Requirements Electives | 27 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HED 100 | Personal and Community Health | 2 |
| CSC 101 | Introduction to the Computer Science Profession | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260L | Computer Programming II Laboratory | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| MTH 184 | Calculus I | 4 |
| XXX XXX | Social Science Elective | 3 |
|  | Credits | 30 |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| CSC 268 | Computer Organization | 3 |
| CSC 295 | Java Applications Programming | 3 |
| ENG 303 | Professional \& Technical Writing | 3 |
| CSC 361 | Survey of Programming Languages | 3 |
| MTH 251 | Calculus II | 4 |
| MTH 371 | Discrete Mathematical Structures | 4 |
| CSC 372 | Data Structures | 3 |
| ENG 285 | Public Speaking | 3 |

Select one Laboratory Science Elective and the corresponding 4
Laboratory of the following:

| BIO 110 | General Biology |
| :--- | :--- |
| \& 110L | and General Biology Laboratory |
| PHY 152 | General Physics |
| \& 152L | and General Physics Laboratory I |
| CHM 221 | General Chemistry I |
| \& 221L | and General Chemistry I Laboratory |

## Third Year

| CSC 292 | Unix and C Programming | 3 |
| :--- | :--- | :--- |
| CSC 380 | Software Engneerng | 3 |
| CSC 468 | Computer Architecture | 3 |

MTH $351 \quad$ Probability \& Statistics I 3
Select one Laboratory Science Elective Sequence of the ..... 4

| $\begin{aligned} & \text { PHY } 152 \\ & \& 152 \text { L } \end{aligned}$ | General Physics and General Physics Laboratory I |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO } 110 \\ & \& 110 \mathrm{~L} \end{aligned}$ | General Biology and General Biology Laboratory |  |
| $\begin{aligned} & \text { CHM } 221 \\ & \& 221 \mathrm{~L} \end{aligned}$ | General Chemistry I and General Chemistry I Laboratory |  |
| CSC 430 | Data Communications | 3 |
| XXX XXX | Computer Science Electives (300 or above) | 3 |
| XXX XXX | Humanities or Foreign Languages | 3 |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| CSC 275 | Fundamentals of Cybersecurity | 3 |
|  | Credits | 28 |
| Fourth Year |  |  |
| CSC 498 | Computer Science Seminar I | 2 |
| CSC 464 | Operating Systems | 3 |
| XXX XXX | Computer Science Electives (300 level or above) | 6 |
| XXX XXX | Social Science Cultural Elective | 3 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| HRP 320 | African American Health |  |
| XXX XXX | Humanities Cultural Elective I | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| MUS 234 | African-American Music |  |
| CSC 499 | Computer Science Seminar II | 2 |
| XXX XXX | Computer Science or Mathematics Elective (300 level or above) | 9 |
| XXX XXX | Free Elective | 3 |
|  | Credits | 31 |
|  | Total Credits | 120 |

## Bachelor of Science in Computer Science - Computer Engineering Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 73 |
| Electives | 12 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 5}$ |


| Curriculum <br> Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| CSC 101 | Introduction to the Computer Science <br> Profession | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| ENG 101 | College English I | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260L | Computer Programming II Laboratory | 1 |
| CSC 268 | Computer Organization | 3 |
| MTH 184 | Calculus I | 4 |
| HED 100 | Personal and Community Health | 2 |
| ENG 102 | College English II | 3 |
|  | Credits | $\mathbf{3 0}$ |

Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | ---: |
| CSC 372 | Data Structures | 3 |
| PHY 160 | University Physics I | 5 |
| \& 160L | and University Physics Laboratory I | 4 |
| MTH 251 | Calculus II | 3 |
| XXX XXX | Social Science Elective |  |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| ECN 200 | Basic Principles of Economics |  |
| BUS 175 | Introduction to Business \& |  |
|  | Entrepreneurship |  |
| SOC 101 | Introduction to the Social Sciences |  |
| PHY 161 | University Physics II | 5 |
| \& 161L | and University Physics Laboratory II | 4 |
| MTH 252 | Calculus III | 3 |
| CSC 295 | Java Applications Programming | 3 |
| ENG 285 | Public Speaking | $\mathbf{3 1}$ |

Third Year

| EEN 201 | Electrical Network Theory I | 4 |
| :--- | :--- | :--- |
| $\& 201 \mathrm{~L}$ | and Electrical Network Theory I Laboratory |  |


| MTH 351 | Probability \& Statistics I | 3 |
| :--- | :--- | ---: |
| MTH 371 | Discrete Mathematical Structures | 4 |
| CSC 292 | Unix and C Programming | 3 |
| CSC 361 | Survey of Programming Languages | 3 |
| MTH 372 | Differential Equations | 3 |
| EEN 231 | Digital Electronics Logic Design |  |
| \& EEE 231L | and Digital Logic Design Laboratory | 4 |
| CSC 380 | Software Engneerng |  |
| ENG 303 | Professional \& Technical Writing | 3 |
| EEN 203 | Electronic Principles | 3 |
|  | Credits | 3 |
| Fourth Year | Microcontrollers | $\mathbf{3 3}$ |
| EEE 431 | Fundamentals of Cybersecurity | 3 |
| CSC 275 | Humanities Elective | 3 |
| XXX XXX | Computer Architecture | 3 |
| CSC 468 | Computer Science Seminar I | 3 |
| CSC 498 | Social Science Cultural Elective | 3 |
| XXX XXX | Humanities Cultural Elective | 2 |
| XXX XXX | Computer Science Elective 300 level or | 3 |
| CSC XXX | above | 3 |
| CSC 430 | Data Communications | 3 |
| CSC 464 | Operating Systems | 3 |
| CSC 499 | Computer Science Seminar II | 3 |
|  | Credits | 2 |
|  | Total Credits | $\mathbf{3 1}$ |
|  | $\mathbf{1 2 5}$ |  |

## Bachelor of Science in Computer Science - IA Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 56 |
| Electives | 24 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |  |
| :--- | :--- | :--- |
| Course | Title |  |


| First Year |  |  |
| :--- | :--- | ---: |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HED 100 | Personal and Community Health | 2 |
| CSC 101 | Introduction to the Computer Science <br>  <br> CSC 170 | Compession |
| CSC 170L | Computer Programming Laboratory I | 1 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260L | Computer Programming II Laboratory | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 1 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| MTH 184 | Calculus I | 3 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 3 |
| XXX XXX | Social Science Elective | 4 |
|  | Credits | 2 |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| CSC 268 | Computer Organization | 3 |
| ENG 303 | Professional \& Technical Writing | 3 |
| CSC 295 | Java Applications Programming | 3 |
| CSC 275 | Fundamentals of Cybersecurity | 3 |
| MTH 251 | Calculus II | 4 |
| MTH 371 | Discrete Mathematical Structures | 4 |
| PSY 210 | Introduction to Psychology | 3 |
| ENG 285 | Public Speaking | 3 |
| Select one Laboratory Science Elective of the following: | 4 |  |


| BIO 110 | General Biology |  |
| :--- | :--- | :--- |
| \& 110L | and General Biology Laboratory |  |
| PHY 152 | General Physics |  |
| \& 152L | and General Physics Laboratory I |  |
| CHM 221 | General Chemistry I |  |
| \& 221L | and General Chemistry I Laboratory |  |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  | 3 |
| :--- | :--- | :--- |
| CSC 292 | Unix and C Programming | 3 |
| CSC 361 | Survey of Programming Languages | 3 |
| CSC 420 | Database Principles and Design | 3 |


| MTH 351 | Probability \& Statistics I | 3 |
| :--- | :--- | :--- |
| CSC 430 | Data Communications | 3 |
| CSC 449 | Cryptography and Network Security | 3 |
| XXX XXX | Humanities or Foreign Language | 3 |
| Select one Laboratory Science Elective Sequence of the | 4 |  |

following:

| BIO 110 | General Biology |
| :--- | :--- |
| \& 110L | and General Biology Laboratory |
| PHY 152 | General Physics |
| \& 152L | and General Physics Laboratory I |
| CHM 221 | General Chemistry I |
| \& 221L | and General Chemistry I Laboratory |

Select one Laboratory Science Elective Sequence of the 4
following:

| BIO 111 | General Biology II |  |
| :--- | :--- | :--- |
| \& 111L | and General Biology II Laboratory |  |
| PHY 153 | General Physics |  |
| \& 153L | and General Physics Laboratory II |  |
| CHM 222 | General Chemistry II |  |
| \& 222L | and General Chemistry II Laboratory |  |
|  | Credits | $\mathbf{3 2}$ |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| CSC 445 | Computer Network Defense | 3 |
| CSC 313 | Network Administration | 3 |
| XXX XXX | Mathematics Elective (300 level or above) | 3 |
| CSC 464 | Operating Systems | 3 |
| CSC 468 | Computer Architecture | 3 |
| CSC 498 | Computer Science Seminar I | 2 |
| CSC 499 | Computer Science Seminar II | 2 |
| CSC 494 | Digital Forensics | 3 |
| XXX XXX | Humanities Cultural Elective I | 3 |
| XXX XXX | Social Sciences Cultural Elective | 3 |
|  | Credits | $\mathbf{2 8}$ |
|  | Total Credits | $\mathbf{1 2 1}$ |

## Bachelor of Science in Computer Science - Software Engineering Track

| Summary of Graduation Requirements |  |  |
| :--- | :--- | :--- |
| Subject Area | Credits |  |
| General Education Core (p. 41) | 40 |  |
| Major Requirements | 56 |  |
| Electives | 24 |  |
| Other Requirements | 0 |  |
| Total Credit Hours | 120 |  |
| Curriculum   <br> Course Title  |  |  |


| First Year |  |  |
| :---: | :---: | :---: |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CSC 101 | Introduction to the Computer Science Profession | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| ENG 101 | College English I | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260 L | Computer Programming II Laboratory | 1 |
| MTH 184 | Calculus I | 4 |
| ENG 102 | College English II | 3 |
| XXX XXX | Social Science Elective | 3 |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| ECN 200 | Basic Principles of Economics |  |
| SOC 101 | Introduction to the Social Sciences |  |
| HED 100 | Personal and Community Health | 2 |
|  | Credits | 30 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 3 |
| CSC 295 | Java Applications Programming | 4 |
| Select one Laboratory Science Elective of the following: |  |  |
| BIO 110 | General Biology |  |
| \& 110L | and General Biology Laboratory |  |
| PHY 152 | General Physics |  |
| \& 152L | and General Physics Laboratory I |  |
| CHM 221 | General Chemistry I |  |
| \& 221L | and General Chemistry I Laboratory | 4 |
| MTH 251 | Calculus II | 4 |
| MTH 371 | Discrete Mathematical Structures | 3 |
| CSC 268 | Computer Organization | 3 |
| CSC 372 | Data Structures | 3 |
| CSC 292 | Unix and C Programming | 3 |
| CSC 275 | Fundamentals of Cybersecurity |  |


| ENG 285 | Public Speaking | 3 |
| :--- | :--- | ---: |
| Credits | $\mathbf{3 1}$ |  |


| Third Year |  |  |
| :--- | :--- | ---: |
| CSC 373 | Algorithms Design and Analysis | 3 |
| ENG 303 | Professional \& Technical Writing | 3 |
| XXX XXX | Social Science Cultural Elective |  |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600- <br>  <br> PRESENT |  |
| HRP 320 | African American Health |  |
| MTH 351 | Probability \& Statistics I |  |

Select one Laboratory Science Elective Sequence of the 4 following:

| BIO 110 | General Biology |  |
| :--- | :--- | :--- |
| \& 110L | and General Biology Laboratory |  |
| PHY 152 | General Physics |  |
| \& 152L | and General Physics Laboratory I |  |
| CHM 221 | General Chemistry I <br> \& 221L | and General Chemistry I Laboratory |
| CSC 361 | Survey of Programming Languages | 3 |
| CSC 420 | Database Principles and Design | 3 |
| CSC 380 | Software Engneerng | 3 |
| XXX XXX | Computer Science Elective 300 level or <br> above | 3 |
| XXX XXX | Humanities or Foreign Language | 3 |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation | 31 |
| MUS 301 | Music Appreciation | 3 |
|  | Credits | 3 |

## Fourth Year

CSC 498 Computer Science Seminar I 2
CSC 464 Operating Systems 3

CSC 485 Software Quality Assurance and Testing 3
CSC 430 Data Communications 3
CSC 486 Software Project Management 3
CSC 499 Computer Science Seminar II 2
CSC 468 Computer Architecture 3

XXX XXX Humanities Cultural Elective 3
ENG 383 African-American Literature, 1940
PRESENT

| MUS 234 | African-American Music |  |
| :--- | :--- | ---: |
| CSC 488 | Principles of Distributed Software Syste | 3 |
| CSC 487 | Engineering Secure Software Systems | $\mathbf{3}$ |
|  | Credits | $\mathbf{2 8}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

## Bachelor of Science in Information Technology

| Summary of Graduation Requirements |  |  |
| :--- | :--- | :--- |
| Subject Area | Credits |  |


| First Year |  |  |
| :--- | :--- | :---: |
| CSC 101 | Introduction to the Computer Science <br> Profession | 1 |
| ITE 111 | Information Technology Principles | 3 |
| CSC 170 | Computer Programming I <br> \& 170L | and Computer Programming Laboratory I |
| CSC 260 | Computer Programming II |  |
| \& 260L | College English I | 4 |
| ENG 101 | College English II | 4 |
| ENG 102 | Personal and Community Health | 3 |
| HED 100 | College Algebra \& Trigonometry | 3 |
| MTH 153 | Calculus I | 3 |
| MTH 184 | Fundametals of Fitness for Life | 3 |
| PED 100 | Spartan Seminar 101 | 4 |
| SEM 101 | and Spartan Seminar 102 | 1 |
| \& SEM 102 | Credits | 2 |
|  | 30 |  |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 |  |

ITE 195 Introduction to Internet Programming 3
ITE 211 Information Technology Operating Systems 3
CSC 268 Computer Organization 3
ITE 311 Fundamentals of Networking 3
CSC 360 Interface Design 3
MTH 371 Discrete Mathematical Structures 4

Select Laboratory Sequence of Biology, Chemistry or Physics 8
of the following:
Biology

| BIO 110 | General Biology |
| :--- | :--- |
| BIO 110L | General Biology Laboratory |
| BIO 111 | General Biology II |
| BIO 111L | General Biology II Laboratory |
| Chemistry |  |
| CHM 221 | General Chemistry I |
| CHM 221L | General Chemistry I Laboratory |
| CHM 222 | General Chemistry II |
| CHM 222L | General Chemistry II Laboratory |
| Physics |  |
| PHY 152 | General Physics |
| PHY 152L | General Physics Laboratory I |


| PHY 153 | General Physics |  |
| :---: | :---: | :---: |
| PHY 153L | General Physics Laboratory II |  |
| Select one Concentration Electives (p. 172) |  | 3 |
|  | Credits | 31 |
| Third Year |  |  |
| CSC 380 | Software Engneerng | 3 |
| CSC 420 | Database Principles and Design | 3 |
| CSC 435 | Computer Security I | 3 |
| IMT 244 | Industrial Specification \& Technical Documentation | 3 |
| MTH 250 | Elementary Statistics Concepts | 3 |
| ENG 285 | Public Speaking | 3 |
| Select two Concentration Electives (p. 172) |  | 6 |
| XXX XXX | Humanities Elective | 3 |
| XXX XXX | Social Science Elective | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| CSC 498 | Computer Science Seminar I | 2 |
| CSC 499 | Computer Science Seminar II | 2 |
| IMT 303 | Internship in Technology | 3 |
| IMT 413 | Project Management | 3 |
| XXX XXX | CSC Elective (300 level or above) | 3 |
| Select two Concentration Electives (p. 172) |  | 6 |
| XXX XXX | Humanities Cultural Elective | 3 |
| XXX XXX | Free Electives | 5 |
| XXX XXX | Social Science Cultural Elective | 3 |
|  | Credits | 30 |
|  | Total Credits | 121 |

## Concentration Electives

Code Title Credits
MIS 410 Systems Analysis and Design 3

CSC 292 Unix and C Programming 3
CSC 312 Topics in Information Technology 3
CSC 313 Network Administration 3
CSC 314 Advanced Internet Programming 3
CSC 411 Web Server Administration 3
CSC 422 Database Implementation 3
CSC 432 Wireless Data Networking 3
CSC 445 Computer Network Defense 3
$\begin{array}{lll}\text { CIT 336L } & \text { Computer Networks Technology I Lab } & 1 \\ \text { CIT } 436 & \text { Computer Natwork Technoll II }\end{array}$
\& 436L and Computer Networks Technology II Lab

## Minor in Computer Science

## Curriculum

A Computer Science Minor consists of the following 18 credit hours of required courses:

| Code | Title | Credits |
| :--- | :--- | ---: |
| CSC 170 | Computer Programming I | 3 |
| CSC 260 | Computer Programming II | 3 |
| CSC 268 | Computer Organization | 3 |
| CSC 372 | Data Structures | 3 |
| CSC 464 | Operating Systems | 3 |
| CSC XXX | Elective at the 300 or 400 level | 3 |
| Total Credits |  | $\mathbf{1 8}$ |

## Minor in Game Design and Development

The minor on Game Design and Development introduces the student to the technical and societal world of games. Students learn the fundamentals of game design, animation, storytelling, project management, all through interdisciplinary teams while collaborating on the design and development of game projects. The experience culminates in a capstone project judged by a curated group of faculty and game industry professionals. This minor is open to all majors.

| Courses in Minor in Game Design and Development: |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| CSC 290 | Survey of Video Gaming | 3 |
| CSC 390 | Technical Strategies in Game Design | 3 |
| CSC 369 | Introduction to 3D Animation and Visual | 3 |
| CSC 471 | Introduction to Game Design and Development | 3 |
| CSC 472 | 3D Game Programming | 3 |
| CSC 490 | Game Design Capstone Project | 3 |

## Engineering

Dr. Patricia F. Mead
Department Chair
(757) 823-2697

The Department of Engineering at Norfolk State University offers B.S. degrees in Electrical and Electronics Engineering and Optical Engineering and an M.S. degree in Electronics Engineering. The Department's Engineering Advisory Board is composed of national leaders from government, universities, and industry. The Advisory Board helps to set the vision for departmental initiatives.

The Department of Engineering offers its students curricula that focus on key concepts and developments in the Electrical, Electronics and Optical engineering fields.

The B.S. and M.S. degree programs provide students with exciting opportunities to conduct research at major research facilities of the university and other research laboratories, both nationally and internationally. Areas of research include biomedical engineering, carbon electronics, gaming, image processing, microelectronics, modeling and simulation, nanotechnology, high power electronics, optoelectronics, photonics, and quantum optics.

The mission of the Department of Engineering is to empower students with the knowledge, skills, and abilities needed for successful professional careers in engineering; to encourage innovation, creativity and an entrepreneurial spirit; to instill a sense of community responsibility; and to develop leaders for a technology-driven global society.

In order to provide the best possible undergraduate education, the department embraces the standards established by ABET, Inc., the sole accrediting agency for engineering programs in the United States. The B.S. programs in Electrical and Electronics Engineering and Optical Engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org

## General Department Requirements

All students must complete the University's general education requirements to qualify for the Bachelor of Science degree. Additionally, the department requires that all majors:

- meet prerequisites or their equivalents before enrolling in engineering courses;
- earn a grade of " $C$ " or better in SEM 101 Spartan Seminar 101 and other Spartan Seminar classes, and in all English, mathematics, science and engineering courses; and,
- complete a senior design project.


## Electrical and Electronics Engineering Objectives

The Norfolk State University Electrical and Electronics Engineering program faculty have identified a set of program educational objectives that describe the expected abilities of graduates as they enter the workforce. Graduates of the Electrical and Electronics Engineering program will:

- Devise technical solutions based on sound principles in science and engineering;
- Be effective communicators of technical information within professional settings or to broader audiences;
- Be ethically responsible members of the engineering community and cognizant of societal impacts of engineering solutions; and
- Continue their professional development in business settings or through advanced degree attainment.


## Optical Engineering Objectives

The Norfolk State University Optical Engineering program faculty have identified a set of program educational objectives that describe the expected abilities of graduates as they enter the workforce. Graduates of the Optical Engineering program will:

- Devise technical solutions based on sound principles in science and engineering;
- Be effective communicators of technical information within professional settings or to broader audiences;
- Be ethically responsible members of the engineering community and cognizant of societal impacts of engineering solutions; and
- Continue their professional development in business settings or through advanced degree or through advanced degree attainment.


## Engineering Programs

- Bachelor of Science Electrical and Electronics Engineering (General) (p. 176)
- Bachelor of Science in Electrical and Electronics Engineering (Track) (p. 177)
- Minor in Biomedical Engineering (p. 180)
- Minor in Electrical and Electronics Engineering (p. 181)
- Minor in Optical Engineering (p. 181)


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Transmission, Spectroscopy
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# Bachelor of Science Electrical and Electronics Engineering (General) 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Engineering Requirements | 54 |
| Mathematics and Science | 34 |
| Total Credit Hours | $\mathbf{1 2 8}$ |

## Curriculum

The B.S. degree program in Electrical and Electronics Engineering provides emphasis in microelectronics, digital and analog networks, communications, and control systems. The curriculum is designed to give students a thorough knowledge of the methods of design, application, and analysis of electronic systems.

| Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| EEN 100 | Introduction to Engineering | 3 |
| ENG 101 | College English I | 3 |
| MTH 184 | Calculus I ${ }^{1}$ | 4 |
| PHY 160 | University Physics I ${ }^{1}$ | 4 |
| PHY 160L | University Physics Laboratory ${ }^{1}$ | 1 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| CSC 170 | Computer Programming I (C++) | 3 |
| EEN 101 | Engineering Problem Solving | 2 |
| ENG 102 | College English II | 3 |
| MTH 251 | Calculus II | 4 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
|  | Credits | 35 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| XXX XXX | Social Science from the Core | 3 |
| HED 100 | Personal and Community Health | 2 |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 201L | Electrical Network Theory I | 1 |
| CHM 210 | General Chemistry for Engineers ${ }^{\text {1 }}$ | 3 |
| MTH 252 | Calculus III | 4 |
| EEN 202 | Electrical Network Theory II | 3 |
| EEN 202L | Electrical Network Theory II Laboratory | 1 |
| EEN 211 | Material Science \& Engineering,Material | 3 |
|  | Science |  |
| EEE 231 | Digital Logic Design | 3 |
| EEE 231L | Digital Logic Design Laboratory | 1 |
| MTH 372 | Differential Equations | 3 |
| ENG 285 | Public Speaking | 3 |
|  | Credits | $\mathbf{3 4}$ |

Third Year
XXX XXX
Humanities from the Core Tier 2

| EEN 301 | Engineering Electronics I,Electronic Devices | 3 |
| :--- | :--- | :--- |
| EEN 301L | Electronic Devices Laboratory | 1 |
| EEN 305 | Signals and Systems | 3 |
| EEN 311 | Engineering Economics | 3 |
| MTH 300 | Linear Algebra | 3 |
| XXX XXX | Engineering Restricted Elective | 3 |
| EEN 321 | Electromagnetic Field Theory | 3 |
| EEN 431 | Microcontrollers | 3 |
| EEN 371 | Control Systems | 3 |
| MTH 351 | Probability \& Statistics I (Engineering | 3 |
|  | Section) ${ }^{7}$ |  |
|  | Credits | $\mathbf{3 1}$ |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| XXX XXX | Humanities (Core Tier 3 Cultural <br> Perspectives Elective) | 3 |
|  | EEN 401 | Electronics Engineering Seminar |
| EEN 451 | Communications Engineering | 1 |
| EEN 498 | Sr Project I | 3 |
| XXX XXX | Restricted Engineering Elective | 3 |
| XXX XXX | Social Sciences (Core Tier 3 Cultural | 9 |
|  | Perspectives Elective) | 3 |
| EEN 499 | Sr Project II |  |
| XXX XXX: Unrestricted Elective | 3 |  |
|  | Credits | 3 |
|  | Total Credits | $\mathbf{2 8}$ |

1
Substitutes for General Education Core Requirements

## Engineering Restricted Electives

Take one elective from this list or take one elective from any of the 3 tracks.

| Code | Title | Credits |
| :--- | :--- | ---: |
| EEN 333 | Digital Integrated Circuits | 3 |
| EEN 350 | Scientific Instrumentation | 3 |
| EEN 462 | Semiconductor Processing | 3 |
|  | Technology,Semiconductor Processing |  |
| EEN 451 | Communications Engineering | 3 |
| EEN 476 | Renewable Bio Energy | 3 |
| OEN 340 | Lasers and Photonics | 3 |
| OEN 380 | Introduction to Quantum Optics | 3 |
| OEN 360 | Introduction to Optical Materials | 3 |
| BIO Engineering | Track | Credits |
| Code | Title | 3 |
| EEN 462 | Semiconductor Processing |  |
|  | Technology,Semiconductor Processing | 3 |
| EEN 481 | Biomedical Engineering Micro-Devices \& Systems | 3 |
| EEN 482 | Bioelectrics | 3 |
| EEN 476 | Renewable Bio Energy | 3 |
| Total Credits |  | $\mathbf{1 2}$ |


| Microelectronics and Photonics Track |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| EEE 201 | Electrical Network Theory I | 3 |
| EEN 462 | Semiconductor Processing | 3 |
|  | Technology,Semiconductor Processing |  |
| OEN 340 | Lasers and Photonics | 3 |
| OEN 460 | Optical Communications I | 3 |
| EEN 302 | Microelectronics,Engineering Electronics II | 3 |
| OEN 380 | Introduction to Quantum Optics | 3 |
| Total Credits |  | $\mathbf{1 8}$ |
| Gaming and Robotics Track |  |  |
| Code | Title | Credits |
| EEE 431 | Microcontrollers | 3 |
| EEN 471 | Control Systems | 3 |
| EEN 475 | Design of Robotic Systems | 3 |
| EEN 350 | Scientific Instrumentation | 3 |
| EEN 451 | Communications Engineering | 3 |
| EEN 462 | Semiconductor Processing | 3 |
|  | Technology,Semiconductor Processing |  |
| Total |  |  |

# Bachelor of Science in Electrical and Electronics Engineering (Track) 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Engineering Requirements | 54 |
| Mathematics and Science | 34 |
| Total Credit Hours | $\mathbf{1 2 8}$ |

## Curriculum

The B.S. degree program in Electrical and Electronics Engineering provides emphasis in microelectronics, digital and analog networks, communications, and control systems. The curriculum is designed to give students a thorough knowledge of the methods of design, application, and analysis of electronic systems.

| Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| EEN 100 | Introduction to Engineering | 3 |
| ENG 101 | College English I | 3 |
| MTH 184 | Calculus I ${ }^{1}$ | 4 |
| PHY 160 | University Physics ${ }^{1}$ | 4 |
| PHY 160L | University Physics Laboratory I ${ }^{1}$ | 1 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| CSC 170 | Computer Programming I (C++) | 3 |
| EEN 101 | Engineering Problem Solving | 2 |
| ENG 102 | College English II | 3 |
| MTH 251 | Calculus II | 4 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
|  | Credits | 35 |
| Second Year |  |  |
| SEM 201 | Spartan Seminar 201 | 1 |
| XXX XXX | Social Science from the Core | 3 |
| HED 100 | Personal and Community Health | 2 |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 201L | Electrical Network Theory I | 1 |
| CHM 210 | General Chemistry for Engineers ${ }^{1}$ | 3 |
| MTH 252 | Calculus III | 4 |
| EEN 202 | Electrical Network Theory II | 3 |
| EEN 202L | Electrical Network Theory II Laboratory | 1 |
| EEN 211 | Material Science \& Engineering,Material Science | 3 |
| EEE 231 | Digital Logic Design | 3 |
| EEE 231L | Digital Logic Design Laboratory | 1 |
| MTH 372 | Differential Equations | 3 |
| ENG 285 | Public Speaking | 3 |
|  | Credits | 34 |
| Third Year |  |  |
| XXX XXX | Humanities from the Core Tier 2 | 3 |
| EEN 301 | Engineering Electronics I,Electronic Devices | 3 |


| EEN 301L | Electronic Devices Laboratory | 1 |
| :--- | :--- | :--- |
| EEN 305 | Signals and Systems | 3 |
| EEN 311 | Engineering Economics | 3 |
| MTH 300 | Linear Algebra | 3 |
| Engineering Restricted Elective (p. 178) | 3 |  |
| EEN 321 | Electromagnetic Field Theory | 3 |
| EEN 431 | Microcontrollers | 3 |
| EEN 371 | Control Systems | 3 |
| MTH 351 | Probability \& Statistics I (Engineering | 3 |
|  | Section) ${ }^{7}$ |  |
|  | Credits | $\mathbf{3 1}$ |

## Fourth Year

| XXX XXX | Humanities (Core Tier 3 Cultural <br> Perspectives Elective) | 3 |
| :--- | :--- | ---: |
| EEN 401 | Electronics Engineering Seminar | 1 |
| EEN 451 | Communications Engineering | 3 |
| EEN 498 | Sr Project I | 3 |

Engineering Restricted Elective (p. 178) 3

| XXX XXX | Social Sciences (Core Tier 3 Cultural <br> Perspectives Elective) | 3 |
| :--- | :--- | :--- |

Engineering Restricted Elective (p. 178) 3
EEN 499 Sr Project II 3
Engineering Restricted Elective (p. 178) 3

| XXX XXX | Unrestricted Elective | 3 |
| :--- | :--- | ---: |
|  | Credits | 28 |
|  | Total Credits | 128 | Total Credits 128

1 Substitutes for General Education Core Requirements

## EEE Engineering Restricted Elective

## Track Courses

Select at least 3 courses from selected track (may take up to one course from another track)

## BIO Engineering Track

| Code | Title | Credits |
| :--- | :--- | ---: |
| EEN 462 | Semiconductor Processing | 3 |
|  | Technology,Semiconductor Processing |  |
| EEN 476 | Renewable Bio Energy | 3 |
| EEN 481 | Biomedical Engineering Micro-Devices \& Systems | 3 |
| EEN 482 | Bioelectrics | 3 |
| Total Credits |  | $\mathbf{1 2}$ |


| Microelectronics and Photonics Track |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| EEN 302 | Microelectronics, Engineering Electronics II | 3 |
| EEN 462 | Semiconductor Processing | 3 |
|  | Technology,Semiconductor Processing |  |
| OEN 340 | Lasers and Photonics | 3 |
| OEN 360 | Introduction to Optical Materials | 3 |
| OEN 380 | Introduction to Quantum Optics | 3 |
| OEN 460 | Optical Communications I | 3 |
| Total Credits |  | $\mathbf{1 8}$ |


| Gaming and Robotics Track | Credits |  |
| :--- | :--- | ---: |
| Code | Title | 3 |
| EEN 333 | Digital Integrated Circuits | 3 |
| EEN 350 | Scientific Instrumentation | 3 |
| EEN 451 | Communications Engineering | 3 |
| EEN 462 | Semiconductor Processing |  |
|  | Technology,Semiconductor Processing |  | 12

## Bachelor of Science in Optical Engineering

The Optical Engineering program was established in fall 2003 for the purpose of addressing diversity and high-tech workforce needs in Hampton Roads, the Commonwealth of Virginia, and the United States. The curriculum offers emphasis in optical materials, photonics, optoelectronics, and optical communications.

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Engineering Requirements | 54 |
| Mathematics and Science | 34 |
| Total Credit Hours | $\mathbf{1 2 8}$ |


| Curriculum <br> Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| EEN 100 | Introduction to Engineering | 3 |
| EEN 102 | Eng Use Computers | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| MTH 184 | Calculus I | 4 |
| XXX XXX | Social Science (Tier) | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| CHM 210 | General Chemistry for Engineers | 3 |
| EEN 211 | Material Science \& Engineering,Material | 3 |
| EEN 101 | Science |  |
| SEM 101 | Engineering Problem Solving | 2 |
| \& SEM 102 | Spartan Seminar 101 <br> and Spartan Seminar 102 | 2 |

## Second Year

| PHY 160 | University Physics I | 4 |
| :--- | :--- | ---: |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| MTH 251 | Calculus II | 4 |
| MTH 252 | Calculus III | 4 |
| OEN 200 | Geometric \& Instr Optics | 3 |
| OEN 200L | Geometric \& Instr Optics Lab | 1 |
| OEN 290 | Optical Engineering Seminar I | 1 |
| XXX XXX | Humanities (Tier) | 3 |
| XXX XXX | Cultural Social Science (Tier) | 3 |
| ENG 285 | Public Speaking | 3 |
| HED 100 | Personal and Community Health | 2 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 5}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| OEN 201 | Physical and Instrumental Optics | 3 |
| OEN 201L | Physical and Instrumental Optics Lab | 1 |
| MTH 300 | Linear Algebra | 3 |
| MTH 372 | Differential Equations | 3 |


| OEN 320 | Optical Systems Analysis | 3 |
| :--- | :--- | ---: |
| OEN 340 | Lasers and Photonics | 3 |
| OEN 340L | Laser and Photonics Lab | 1 |
| OEN 360 | Introduction to Optical Materials | 3 |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 201L | Electrical Network Theory I | 1 |
| EEN 311 | Engineering Economics | 3 |
| OEN 390 | Optical Engineering Seminar II | 1 |
| EEE 203 | Electronic Principles | 3 |
| XXX XXX | Cultural Humanities | 3 |
|  | Credits | $\mathbf{3 4}$ |
| Fourth Year |  |  |
| MTH 351 | Probability \& Statistics I | 3 |
| OEN 380 | Introduction to Quantum Optics | 3 |
| OEN 460 | Optical Communications I | 3 |
| OEN 460L | Optical Communication I Laboratory | 1 |
| EEN 321 | Electromagnetic Field Theory | 3 |
| OEN 490 | Senior Seminar | 1 |
| OEN 498 | Senior Project ! | 3 |
| OEN 499 | Senior Project II | 3 |
| XXX XXX | Engineering Restrictive Elective | 3 |
| XXX XXX | Technical Elective | 3 |
| XXX XXX | Engineering Restrictive Elective | 3 |
|  | Credits | $\mathbf{2 9}$ |
|  | Total Credits | $\mathbf{1 2 8}$ |

The Technical Elective may be chosen from the 300 level or above courses in math, computer science, chemistry, physics or engineering

## Minor in Biomedical Engineering

Biomedical engineering is an emerging field that uses engineering concepts to develop solutions in biology and the medical field. It involves the application of engineering and technology to living systems. This minor is beneficial not only for engineering students, but also for other students in the College of Science, Engineering, and Technology.


Total Credits

Note: Students must fulfill the pre-requisite requirements prior to enrolling in the courses for the minor.

- BIO 110 General Biology (Pre-requisites required: none; Corequisite: BIO 110L General Biology Laboratory or consent of Chair)
- CHM 321 Organic Chemistry I (Pre-requisites required: CHM 222 General Chemistry II or CHM 224 General Chemistry II)
- CHM 322 Organic Chemistry II (Pre-requisite required: CHM 321 Organic Chemistry I)
- EEN 211 Material Science \& Engineering,Material Science: (Pre-requisite required: CHM 210 General Chemistry for Engineers or CHM 221 General Chemistry I)
- EEN 481 Biomedical Engineering Micro-Devices \& Systems: (Prerequisite or Co-requisite: University Physics I (PHY 160 University Physics I) and General Chemistry (CHM 210 General Chemistry for Engineers or CHM 221 General Chemistry I)
- EEN 482 Bioelectrics: (Same as EEN 481 Biomedical Engineering Micro-Devices \& Systems)
- One of the following courses: EEN 305 Signals and Systems, EEN 481 Biomedical Engineering Micro-Devices \& Systems, or EEN 482 Bioelectrics


## CURRICULUM 2

| Code | Title | Credits |
| :--- | :--- | ---: |
| Required Courses |  |  |
| BIO 110 | General Biology | 3 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 322 | Organic Chemistry II | 3 |
| BIO 469 | Biochemistry | 3 |
| EEN 211 | Material Science \& Engineering,Material Science | 3 |
| EEN 350 | Scientific Instrumentation | 3 |
| Total Credits |  | $\mathbf{1 8}$ |

## Note:

Students must fulfill the pre-requisite requirements prior to enrolling in the courses for the minor.

- BIO 110 General Biology (Pre-requisites required: none; Corequisite: BIO 110L General Biology Laboratory or consent of Chair)
- CHM 321 Organic Chemistry I (Pre-requisites required: CHM 222 General Chemistry II or CHM 224 General Chemistry II)
- BIO 469 Biochemistry (Pre-requisite required: CHM 322 Organic Chemistry II) or CHM 431 Biochemistry I (Pre-requisites required: CHM 322 Organic Chemistry II, CHM 362 Physical Chemistry II)
- EEN 211 Material Science \& Engineering,Material Science: Materials Science and Engineering (Pre-requisite required: CHM 210 General Chemistry for Engineers or CHM 221 General Chemistry I)
- EEN 350 Scientific Instrumentation (Pre-requisite required: EEN 102 Eng Use Computers or CSC 170 Computer Programming I; EEN 201 Electrical Network Theory I or equivalent)
- EEN 481 Biomedical Engineering Micro-Devices \& Systems: Biomedical Engineering Microdevices and Systems (Pre-requisite or Co-requisite: University Physics I (PHY 160 University Physics I) and General Chemistry (CHM 210 General Chemistry for Engineers or CHM 221 General Chemistry I)


## Minor in Electrical and Electronics Engineering

Curriculum

This minor if for non-engineering major students.

| Code | Title | Credits |
| :--- | :--- | ---: |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 203 | Electronic Principles | 3 |
| Engineering | EEE 3XXX (Excluding EEE 311 or 4XX) | 3 |
| Elective |  | 3 |
| Engineering | EEE 3XXX (Excluding EEE 311 or 4XX) | 3 |
| Elective |  | 3 |
| Engineering | EEE 3XXX (Excluding EEE 311 or 4XX) | 3 |
| Elective |  |  |

Total Credits ..... 15

## Minor in Optical Engineering

| Curriculum | Title | Credits |
| :--- | :--- | ---: |
| Code |  |  |
| Select 15 credits of the following: | 15 |  |
| OEN 2XX |  |  |
| OEN 3XX |  |  |
| OEN 4XX | Material Science \& Engineering,Material Science |  |
| EEN 211 | Electromagnetic Field Theory |  |

## Mathematics

Dr. Anne Fernando
Department Chair
(757) 823-8883

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, the natural sciences, business and economics, and the vocational areas.
3. To prepare students for various career opportunities such 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 Mathematics Resource Center (BMH-318) for students enrolled in entry level mathematics courses.

## 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 complete the prerequisites, or their equivalents, prior to enrolling in more advanced mathematics courses.
2. Mathematics majors earn at least a grade of "C" in Spartan Seminar Series SEM 101 Spartan Seminar 101, SEM 102 Spartan Seminar 102, and SEM 201 Spartan Seminar 201, all mathematics and computer science courses and in certain other courses specified in the curriculum.
3. Mathematics majors 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.

## Mathematics Programs

- Bachelor of Science in Mathematics - Applied Mathematics Track (p. 183)
- Dual Degree in Mathematics (p. 184)
- Mathematics with Teacher Certification Track (p. 184)
- Minor in Mathematics (p. 186)


## Bachelor of Science in Mathematics Applied Mathematics Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 42 |
| Major Requirements | 59 |
| Restricted Electives | 15 |
| General Electives | 4 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |
| :--- | :--- |
| Course |  |


| First Year |  |  |
| :--- | :--- | ---: |
| BIO 100 | Biological Science | 3 |
| BIO 100L | Biological Science Lab | 1 |
| CSC 169 | Introduction to Computer Science | 3 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | 4 |
| MTH 184 | Calculus I | 4 |
| MTH 251 | Calculus II | 1 |
| PED 100 | Fundametals of Fitness for Life | $\mathbf{3 0}$ |


| Second Year  <br> SEM 201 Spartan Seminar 201 | 1 |  |
| :--- | :--- | :---: |
| CSC 2XX | Computer Programming Electives (200 <br> Level) | 6 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| MTH 252 | Calculus III | 4 |
| MTH 300 | Linear Algebra | 3 |
| MTH 372 | Differential Equations | 3 |
| MTH 373 | Advanced Vector Calculus | 3 |
| PHY 153 | General Physics | 3 |
| PHY 153L | General Physics Laboratory II | 1 |
| XXX XXX | Cultural Perspectives (Humanities) ${ }^{1}$ | 3 |
|  | Credits | $\mathbf{3 1}$ |


| Third Year |  |  |
| :--- | :--- | :--- |
| XXX XXX | Applied Electives ${ }^{2}$ | 3 |
| XXX XXX | Science Electives (200 level or above) | 3 |
| XXX XXX | General Electives | 2 |
| MTH 273 | Mathematical Foundations | 3 |
| MTH 331 | Algebraic Structures | 3 |
| MTH 351 | Probability \& Statistics I | 3 |
| MTH 352 | Probability \& Statistics II | 3 |
| XXX XXX | Cultural Perspectives (Social Science) | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Social Sciences Elective |  |


| XXX XXX | Humanities $^{5}$ | 3 |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{3 2}$ |
| Fourth Year |  |  |
| XXX XXX | Applied Electives ${ }^{2}$ | 12 |
| XXX XXX | General Electives $^{\text {MTH 401 }}$ | Numeric Analysis I |
| MTH 473 | Real Analysis | 3 |
| MTH 496 | Mathematics Seminar I | 3 |
| MTH 497 | Mathematics Seminar II | 2 |
| ENG 203 | Advanced Communication Skills | 2 |
| or ENG 303 | $\quad$ or Professional \& Technical Writing | $\mathbf{3}$ |
|  | Credits | $\mathbf{2 7}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

1 Cultural Perspectives (Humanities)
Note: Students will take 3 hours of Cultural Perspectives (Humanities) as indicated: ENG 383 African-American Literature, 1940-PRESENT, MUS 234 African-American Music.
2 Applied Electives
Note: students will take 15 hours of applied electives as indicated: Third year. MTH 382 Introduction to Applied Mathematics, MTH 384
Mathematical Modeling in the Sciences, PHY 3xx (6 hours)
Fourth year. MTH 402 Numeric Analysis II, MTH 474 Complex
Variables, MTH 484 Topics in Applied Mathematics, PHY 3xx, PHY
4xx, EEN 3xx (9 hours)
Cultural Perspectives (Social Science)
Note: Students will take 3 hours of Cultural Perspectives
(Humanities) as indicated: HIS 335 African-American History, HIS 336
African-American History Since 1865, HIS 371 Modern African History \& Cultures 1600-PRESENT, HRP 320 African American Health.

## Social Sciences

Note: Students will take 3 hours of Social Sciences as indicated: SOC 101 Introduction to the Social Sciences, HIS 101 History of World Societies II, HIS 103 United States History Since 1865, BUS 175 Introduction to Business \& Entrepreneurship, ECN 200 Basic Principles of Economics.

Note: Students will take 3 hours of humanities as indicated: ENG 207 Introduction to World Literature, FIA 201 Basic Art Appreciation, MUS 301 Music Appreciation.

## Dual Degree in Mathematics

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.

Summary of Graduation Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 54 |
| Electives | 5 |
| Other Requirements | 21 |
| Dual Mathematics Requirements | 30 |
| Total Credit Hours | $\mathbf{1 5 0}$ |

## Curriculum

1. Complete Primary Degree Requirements
(Minimum of 120 Semester Hours)
2. Complete Dual Mathematics Requirements
(30 Semester Hours)

| Code | Title | Credits |
| :--- | :--- | ---: |
| Requirements |  |  |
| 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 |

Mathematics Electives
Select one of the following: 3

| MTH 310 | Discrete Mathematics |
| :---: | :--- |
| MTH 331 | Algebraic Structures |
| MTH 352 | Probability \& Statistics II |
| MTH 382 | Introduction to Applied Mathematics |
| MTH 384 | Mathematical Modeling in the Sciences |
| Select one of the following: |  |
| MTH 401 | Numeric Analysis I |
| MTH 431 | Abstract Algebra |
| MTH 473 | Real Analysis |
| MTH 484 | Topics in Applied Mathematics |
| Total Credits |  |

3. Complete $\mathbf{3 0}$-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.

# Mathematics with Teacher Certification Track 

| Summary of Graduation Requirements |  |  |
| :---: | :---: | :---: |
| Subject Area | Credits |  |
| General Education Core (p. 41) | 42 |  |
| Major Requirements | 43 |  |
| Professional Educational Requirements | 18 |  |
| Student Teaching/Field Experiences | 12 |  |
| Restricted \& General Electives | 5 |  |
| Total Credit Hours | 120 |  |
| Curriculum  <br> Course Title |  | Credits |


| First Year |  |  |
| :--- | :--- | ---: |
| BIO 100 | Biological Science <br> and Biological Science Lab | 4 |
| C 100L | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 184 | Calculus I | 4 |
| MTH 251 | Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| PHY 152 | General Physics |  |
| \& 152L | and General Physics Laboratory I | 4 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
|  | Credits | $\mathbf{3 1}$ |


| Second Year |  |  |
| :---: | :---: | :---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| $\begin{aligned} & \text { ENG } 203 \\ & \text { or ENG } 303 \end{aligned}$ | Advanced Communication Skills or Professional \& Technical Writing | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Cultural Perspectives (Social Science) ${ }^{1}$ | 3 |
| XXX XXX | Humanities ${ }^{2}$ | 3 |
| MTH 242 | History of Mathematics | 3 |
| MTH 252 | Calculus III | 4 |
| MTH 300 | Linear Algebra | 3 |
| MTH 372 | Differential Equations | 3 |
| EDU 201 | Foundations of Education | 3 |
| XXX XXX | Social Science ${ }^{3}$ | 3 |
|  | Credits | 32 |


| Third Year |  |  |
| :---: | :---: | :---: |
| XXX XXX | Cultural Perspectives (Humanities) ${ }^{4}$ | 3 |
| MTH 250 | Elementary Statistics Concepts | 3 |
| MTH 310 | Discrete Mathematics | 3 |
| MTH 311 | Modern Geometry I | 3 |
| MTH 351 | Probability \& Statistics I | 3 |
| MTH 352 | Probability \& Statistics II | 3 |
| MTH 331 | Algebraic Structures | 3 |


| EDU 381 | Classroom and Behavior Management | 3 |
| :---: | :---: | :---: |
| SED 384 | Curriculum \& Instructional Procedures in Mathematics | 3 |
| SED 405 | Reading in the Content Area | 3 |
|  | Credits | 30 |
| Fourth Year |  |  |
| XXX XXX | Mathematics Elective ${ }^{5}$ | 3 |
| MTH 496 <br> \& MTH 497 | Mathematics Seminar I and Mathematics Seminar II | 4 |
| SED 420 | Educational Technology | 3 |
| $\begin{aligned} & \text { PSY } 228 \\ & \text { or EDU } 486 \end{aligned}$ | Developmental Psychology or Human Growth and Development | 3 |
| SED 499 | Directed Teaching (internship) | 12 |
| XXX XXX | General Elective | 2 |
|  | Credits | 27 |
|  | Total Credits | 120 |

1 Cultural Perspectives (Social Science)
Note: Students will take 3 hours of Cultural Perspectives (Social Science) as indicated: HIS 335 African-American History, HIS 336 African-American History Since 1865, HIS 371 Modern African History \& Cultures 1600-PRESENT, HRP 320 African American Health
Humanities
Note: Students will take 3 hours of humanities as indicated: ENG 207 Introduction to World Literature, FIA 201 Basic Art Appreciation, MUS 301 Music Appreciation
Social Sciences
Note: Students will take 3 hours of Social sciences as indicated:
SOC 101 Introduction to the Social Sciences, HIS 101 History of World Societies II, HIS 103 United States History Since 1865, BUS 175 Introduction to Business \& Entrepreneurship, ECN 200 Basic Principles of Economics
4
Cultural Perspectives (Humanities)
Note: Students will take 3 hours of Cultural Perspectives (Humanities) as indicated: ENG 383 African-American Literature, 1940-PRESENT, MUS 234 African-American Music
5
Mathematics Electives
MTH 401 Numeric Analysis I, MTH 431 Abstract Algebra, MTH 473
Real Analysis

## Teacher Licensure Endorsement in Mathematics

Students wishing to pursue a career in teaching must take the following steps:

1. Follow the curriculum for the liberal arts degree in Mathematics.
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.
5. Take the PRAXIS test and make a passing score. (See the School of Education PRAXIS coordinator)
6. Take the following professional education courses (18 semester hours) plus student teaching ( 12 semester hours).

| Code | Title | Credits |
| :--- | :--- | ---: |
| EDU 201 | Foundations of Education | 3 |
| EDU 381 | Classroom and Behavior Management | 3 |
| PSY 228/ | Developmental Psychology | 3 |
| EDU 486 |  |  |
| SED 384 | Curriculum \& Instructional Procedures in <br> Mathematics | 3 |
| SED 405 | Reading in the Content Area | 3 |
| SED 420 | Educational Technology | 3 |

## Minor in Mathematics

| Curriculum <br> Code <br> Core | Title | Credits |
| :--- | :--- | ---: |
| MTH 252 | Calculus III | 4 |
| MTH 351 | Probability \& Statistics I | 3 |
| MTH 372 | Differential Equations | 3 |
| Electives |  | 6 |
| Select two of the following: |  |  |
| MTH 300 | Linear Algebra |  |
| MTH 331 | Algebraic Structures |  |
| MTH 352 | Probability \& Statistics II |  |
| MTH 373 | Advanced Vector Calculus |  |
| MTH 382 | Introduction to Applied Mathematics |  |
| MTH 401 | Numeric Analysis I | $\mathbf{1 6}$ |
| Total Credits |  |  |

## Naval Science

LT Kristy A. Litts
Naval Reserve Officer Training Corps
(757) 823-8848

Recruiter email: hrnrotc-recruiter@odu.edu or kalitts@nsu.edu
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 nonscholarship (college program) students.

The four-year program is divided into a two-year basic course and a twoyear advanced course. The basic course (NSC 101 Naval Orientation, NSC 102 Seapower \& Maritime Affairs, NSC 201 Navalship Systems I, NSC 202 Navalship Systems II 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 Navigation \& Naval Operations I, NSC 302 Navigation \& Naval Operations II, NSC 401 Leadership \& Management I, NSC 402 Leadership \& Ethics 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 The Evolution of Warfare, NSC 410 Amphibious Warfare, and two approved elective courses for NSC 301 Navigation \& Naval Operations I, NSC 302 Navigation \& Naval Operations II, NSC 401 Leadership \& Management I, and NSC 402 Leadership \& Ethics.

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 in Quantico, Virginia, the summer between their junior and senior years.

The two-year NROTC Program (when offered) 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 or enrolled at Tidewater Community College.
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 \$250-\$400 (tax free). For specific information and requirements, contact the Department of Naval Science (kalitts@nsu.edu).

Advanced course students in the College Program (non-scholarship) are entitled to subsistence pay at the rate of $\$ 350$ JR and $\$ 400$ 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.

## Naval Science Programs

- Naval Reserve Officers Training Corp (NROTC) (p. 188)


## Naval Reserve Officers Training Corp (NROTC)

This Department does not offer a major course program.

| CURRICULUM Course | Title | Credits |
| :---: | :---: | :---: |
| First Year |  |  |
| NSC 101 | Naval Orientation ${ }^{1}$ | 2 |
| NSC 102/HIS 380 | Seapower \& Maritime Affairs ${ }^{1}$ | 3 |
| NSC 111 | Naval Laboratory I | 1 |
|  | Credits | 6 |
| Second Year |  |  |
| NSC 201 | Navalship Systems I (Engineering) | 3 |
| NSC 202 | Navalship Systems II (Weapons) | 3 |
| NSC 211 | Naval Laboratory III | 1 |
| NSC 212 | Naval Laboratory IV | 1 |
|  | Credits | 8 |
| Third Year |  |  |
| NSC 301 | Navigation \& Naval Operations I | 3 |
| NSC 302 | Navigation \& Naval Operations II | 3 |
| NSC 310 | The Evolution of Warfare (Marine Option Only) | 3 |
| NSC 311 | Naval Laboratory V | 1 |
| NSC 312 | Naval Laboratory Vi | 1 |
|  | Credits | 11 |
| Fourth Year |  |  |
| NSC 401 | Leadership \& Management ${ }^{1}$ | 3 |
| NSC 402 | Leadership \& Ethics ${ }^{1}$ | 3 |
| NSC 410 | Amphibious Warfare (Marine Option Only) | 3 |
| NSC 411 | Naval Laboratory Vii | 1 |
|  | Credits | 10 |
|  | Total Credits | 35 |

# Nursing and Allied Health 

Dr. Mildred Fuller
Department Chair (I)
(757) 823-9013

## Nursing

Nursing offers the Bachelor of Science Degree. The Bachelor of Science in Nursing (BSN) Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road, NE, Suite 850 Atlanta, GA 30326; Tel. 404) 975-5000; Fax: (404) 975-5020 and approved by the Virginia Board of Nursing (VBON), Perimeter Center, 9960 Maryland Drive, Suite 300, Henrico, VA 23233-1463; Tel. (804) 367-4515.

There are two BSN Nursing tracks offered:

1) The Traditional (pre-licensure) track is a full-time track that can be completed in five (5) semesters.
2) The Online (RN to BSN) track (designed to individuals who have associate degrees or diplomas in nursing) can be completed in (4) fiveweeks terms fulltime or (5) five-week terms part-time.

Graduates are prepared as generalists in the practice of professional nursing. Upon graduation from the Traditional (pre-licensure) nursing track, individuals are eligible to take the National Council Licensing Examination (NCLEX-RN) for Registered Nurses.

The Virginia Board of Nursing (VBON) 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 VBON for further information.

## Policies

Specific policies related to grading, promotion, and retention in the program are delineated in the Student Handbook.

## Admission to Nursing

1. Admission to University prior to semester of the desired entry into the nursing sequence.
2. Submission of a separate application for admission to the Nursing Department.
3. 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 G.P.A. of 2.0 in each course.
4. Students must have a cumulative G.P.A. of 2.5 or better in high school or course work.
5. For admission to the Traditional Program, students must have a cumulative grade point average of 2.8 and a minimum grade of " C " in all prerequisite courses. Students must complete the National League of Nursing (NLN) RN Preadmission Exam. (See Nursing Program for additional criteria).
6. For admission to the Upper Level Baccalaureate Program (RNCompletion), student must be licensed in the Commonwealth of Virginia as a RN.
7. For admission to the 2nd Degree Program, student must have completed an undergraduate or higher degree and defined prerequisites.
8. For admission to the LPN to BSN Program, student must be licensed in the Commonwealth of Virginia as a LPN and must have completed defined prerequisites

## Criteria for Readmission

Readmission is competitive and is granted on a space available basis. A Letter of Request for Readmission should be addressed to the Admissions Coordinator. The Admissions, Promotion, and Retention Committee makes recommendations for readmission. The final decision to grant readmission to the nursing program, however, rests with the Department Chairperson.

## Allied Health

Dr. Marie St. Rose
Director
(757) 823-2480

Allied Health offers both a Bachelor of Science degree in Health Services Management and a Certificate of Completion in Health Services Management.

## Policies

Admission to the Health Services Management Program is contingent upon acceptance by Norfolk State University.

Specific policies related to Health Services Management are delineated in the student handbook.

## Objectives

1. Apply the steps used in the managerial decision making process to solve a problem.
2. Demonstrate knowledge of the Internal and external environment of health care organizations.
3. Develop competency skills in the functional areas of planning, organizing, staffing, leading and controlling.
4. Demonstrate professionalism and ethical behavior.
5. Construct and present effective oral and written communication.
6. Interpret and synthesize data in the delivery of health care services.
7. Apply technological tools in the delivery of health care services.

## 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 G.P.A. of 2.0.
4. Students must submit three letters of recommendation from persons familiar with the students' ability.

## Nursing and Allied Health Programs

- Bachelor of Science in Health Services Management (p. 191)
- Bachelor of Science in Health Services Management - Online Track (p. 192)
- Bachelor of Science in Health Services Management - Food Science \& Nutrition Concentration (p. 193)
- Bachelor of Science in Nursing - Online (RN to BSN) Completion Track (p. 196)
- Bachelor of Science in Nursing - Traditional (Pre-licensure) Baccalaureate Completion Track (p. 197)
- Certificate in Health Services Management (p. 195)


# Bachelor of Science in Health Services Management 

Dr. Alicia Moore
Program Director
(757) 823-2453

## Program Description

The Health Services Management Program 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 health services industry in the form of an internship and on-the-job experiential learning in the last year.

## Program Mission

The mission of the Bachelor of Science in Health Services Management aligns with the mission of Norfolk State University such that through teaching, scholarly activity, and service, the program prepares undergraduate students for entry-level positions in a variety of health services organizations. The program strives to empower students to "achieve their full potential as well rounded, resourceful citizens and leaders for the 21 st century."

## Summary of Graduation Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 74 |
| Electives | 6 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum



SCI 101 Physical Science for Non-Science Majors

|  | Credits | 33 |
| :---: | :---: | :---: |
| Second Year |  |  |
| SEM 201 | Spartan Seminar 201 | 1 |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 203 or BUS 330 | Advanced Communication Skills or Business Communication | 3 |
| ENG 285 | Public Speaking | 3 |
| HSM 300 | Health Services Management | 3 |
| HSM 300L | Health Services Management Laboratory | 1 |
| HSM 310 | Health Personnel Management | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| Select one of the following: |  | 3 |
| MTH 250 <br> or PSY 270 <br> or SOC 355 <br> or POS 345 <br> or DSC 270 | Elementary Statistics Concepts <br> or Psychological Statistics <br> or Elementary Social Statistics,Social <br> Statistics <br> or Statistics and Data Processing or Business Statistics |  |
| PSY 270 | Psychological Statistics |  |
| SOC 355 | Elementary Social Statistics,Social Statistics |  |
| POS 345 | Statistics and Data Processing |  |
| DSC 270 | Business Statistics |  |
| XXX XXX | Select one of the following Social Sciences: | 3 |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| SOC 101 | Introduction to the Social Sciences |  |
| ECN 200 | Basic Principles of Economics |  |
| XXX XXX | Select one of the Cultural Humanities courses: | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| MUS 234 | African-American Music |  |
|  | Credits | 32 |
| Third Year |  |  |
| HRP 310 | Current Trends in Health Care Delivery | 3 |
| HSM 311 | Legal Aspects \& Ethics of Health-Care Delivery | 3 |
| HSM 331 | Health Financial Management | 4 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| HSM 368 | Healthcare Marketing | 3 |
| HSM 387 | Population Health | 3 |
| HSM 397 | Healthcare Information Systems | 3 |
| XXX XXX | Select one of the following Humanities: | 3 |
| ENG 207 | Introduction to World Literature |  |
| MUS 301 | Music Appreciation |  |
| FIA 201 | Basic Art Appreciation |  |
| XXX XXX | Select one of the following Cultural Sciences: | 3 |
| HIS 335 | African-American History |  |


| HIS 336 | African-American History Since 1865 |  |
| :--- | :--- | ---: |
| HIS 371 | Modern African History \& Cultures 1600- <br>  <br>  <br>  <br> HRESENT |  |
|  | African American Health |  |
| Fourth Year | Credits | $\mathbf{2 8}$ |
| HSM 451 | Comprehensive Health Planning |  |
| HSM 454 | Long-Term Care Administration | 3 |
| HSM 460 | Public Health Administration | 3 |
| HSM 470 | Managerial Epidemiology | 3 |
| HSM 494 | Health Services Management Internship | $\mathbf{3}$ |
| HSM 497 | Health Services Management Problems | 6 |
|  | and Research | $\mathbf{3}$ |
| XXX XXX | Free Electives | 6 |
|  | Credits | $\mathbf{2 7}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |

## Bachelor of Science in Health Services Management - Online Track



| MTH 151 | College Algebra |  |
| :--- | :--- | ---: |
| MTH 131 | Pre-Calculus for Business Majors |  |
| MTH 132 | Calculus for Business Majors |  |
| MTH 153 | College Algebra \& Trigonometry | 4 |
| BIO 100 | Biological Science |  |
| \& 100L | and Biological Science Lab |  |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
|  | Credits | $\mathbf{3 3}$ |


| Second Year |  | 3 |
| :--- | :--- | :--- |
| ECN 211 | Principles of Microeconomics | 3 |
| ECN 212 | Principles of MacRoeconomics | 3 |
| ENG 203 | Advanced Communication Skills | 3 |
| ENG 285 | Public Speaking | 3 |
| HSM 300 | Health Services Management | 1 |
| HSM 300L | Health Services Management Laboratory | 3 |
| HSM 310 | Health Personnel Management | 3 |
| PSY 210 | Introduction to Psychology | 3 |
| Select one of the following: |  |  |


| MTH 250 | Elementary Statistics Concepts |
| :--- | :--- |
| PSY 270 | Psychological Statistics |
| SOC 355 | Elementary Social Statistics,Social <br> Statistics |
| POS 345 | Statistics and Data Processing |
| DSC 270 | Business Statistics |
| Select one of the following Social Sciences: | 3 |


| BUS 175 |  <br> Entrepreneurship |
| :--- | :--- |
| ECN 200 | Basic Principles of Economics |
| HIS 101 | History of World Societies II |


| HIS 103 | United States History Since 1865 |  |
| :---: | :---: | :---: |
| SOC 101 | Introduction to the Social Sciences |  |
| $\begin{aligned} & \text { ENG } 383 \\ & \text { or MUS } 234 \end{aligned}$ | African-American Literature, 1940PRESENT or African-American Music | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 32 |
| Third Year |  |  |
| HRP 310 | Current Trends in Health Care Delivery | 3 |
| HSM 311 | Legal Aspects \& Ethics of Health-Care Delivery | 3 |
| HSM 331 | Health Financial Management | 4 |
| BUS 365 | Organizational Behavior \& Theory | 3 |
| HSM 368 | Healthcare Marketing | 3 |
| HSM 387 | Population Health | 3 |
| HSM 397 | Healthcare Information Systems | 3 |
| Select one of the following Humanities: |  | 3 |
| ENG 207 | Introduction to World Literature |  |
| MUS 301 | Music Appreciation |  |
| FIA 201 | Basic Art Appreciation |  |
| XXX XXX | Cultural Social Sciences | 3 |
|  | Credits | 28 |
| Fourth Year |  |  |
| HSM 451 | Comprehensive Health Planning | 3 |
| HSM 454 | Long-Term Care Administration | 3 |
| HSM 460 | Public Health Administration | 3 |
| HSM 470 | Managerial Epidemiology | 3 |
| HSM 494 | Health Services Management Internship | 6 |
| HSM 497 | Health Services Management Problems and Research | 3 |
| XXX XXX | Free Electives | 6 |
|  | Credits | 27 |
|  | Total Credits | 120 |

# Bachelor of Science in Health Services Management - Food Science \& Nutrition Concentration 

## Program Description

The Food Science and Nutrition Concentration is designed for students who are pursuing a Bachelor of Science Degree in Health Services Management who are seeking to enter supervised practice to become a registered dietitian nutritionist; and for students who already have an undergraduate degree and want to complete the Accreditation Council for Education in Nutrition and Dietetics (ACEND) Didactic requirements. The core knowledge provides graduates with the necessary background for employment in diverse communities and a variety of food science and nutrition settings. The Program Director issues a verification statement to each student who completes the program requirements. The Food Science and Nutrition Concentration is accredited by ACEND. (https:// www.eatrightpro.org/acend/)

## Program Mission

The mission of the Food Science and Nutrition (FSN) Concentration is aligned with the mission of the University. Offering a supportive academic and culturally diverse environment, the Food Science and Nutrition Concentration prepares students for supervised practice leading to eligibility for a verification statement and for the Commission for Dietetics Registration (CDR) credentialing examination. The FSN Concentration also prepares students to meet the Didactic requirements as defined by the Accreditation Council for Education in Nutrition and Dietetics (ACEND)in order to be successful food science and nutrition professionals in diverse communities and a variety of workplace settings for the 21st century.

## Program Goals

1. The program will prepare students for ACEND supervised practice to become a registered dietitian nutritionist.
2. The program will produce competent graduates to work in food science and nutrition related fields.

## Summary of Graduation Requirements

| Subject Area |  | Credits |  |
| :---: | :---: | :---: | :---: |
| General Education Core (p. 41) |  | 40 |  |
| Major Requirements |  | 83 |  |
| Electives |  | 0 |  |
| Total Credit Hours |  | 123 |  |
| Curriculum |  |  |  |
| First Year |  |  |  |
| SEM 101 <br> \& SEM 102 | Spartan Sem and Spartan | $101$ <br> inar 102 | 2 |
| ENG 101 | College Eng |  | 3 |
| MTH 153 | College Algeb | Trigonometry | 3 |
| $\begin{aligned} & \text { CHM } 221 \\ & \& 221 \mathrm{~L} \end{aligned}$ | General Chem and General | I <br> istry I Laboratory | 4 |
| $\begin{aligned} & \text { BIO } 165 \\ & \& 165 \mathrm{~L} \end{aligned}$ | Human Anat and Human Laboratory | and Physiology my and Physiology | 4 |
| HED 100 | Personal and | munity Health | 2 |


| PED 100 | Fundametals of Fitness for Life | 1 |
| :--- | :--- | ---: |
| ENG 102 | College English II | 3 |
| CSC 150 | Computer Literacy | 3 |
| BIO 166 | Human Anatomy and Physiology <br> \& 166 <br> Laboratory | 4 |
| CHM 222 | General Chemistry II |  |
| \& 222L | and General Chemistry II Laboratory |  |
|  | Credits | 4 |
| Second Year |  | 33 |
| SEM 201 | Spartan Seminar 201 |  |
| SOC 101 | Introduction to the Social Sciences | 1 |
| ENG 285 | Public Speaking | 3 |
| BIO 310 | General Microbiology |  |
| \& 310L | and General Microbiology Laboratory | 3 |
| MTH 250 | Elementary Statistics Concepts | 4 |
| FSN 101 | Introduction to Dietetics \& Food Science | 3 |
| FSN 110 | The Science of Human Nutrition | 2 |
| ENG 207 | Introduction to World Literature | 3 |
| HSM 300 | Health Services Management | 3 |
| HRP 320 | African American Health | 3 |
| CHM 312 | Organic Chemistry I | 3 |
| CHM 312L | Organic Chemistry I Laboratory | 3 |
|  | Credits | 1 |


| Third Year |  |  |
| :--- | :--- | ---: |
| BIO 469 | Biochemistry <br> and Biochemistry Laboratory | 4 |
| \& 469L | Health Personnel Management |  |
| HSM 310 | Legal Aspects \& Ethics of Health-Care <br> HSM 311 | 3 |
| HSM 331 | Health Financial Management | 3 |
| HSM 368 | Healthcare Marketing | 4 |
| HSM 387 | Population Health | 3 |
| HSM 397 | Healthcare Information Systems | 3 |
| ENG 383 | African-American Literature, 1940- | 3 |
|  | PRESENT | 3 |
| HSM 454 | Long-Term Care Administration |  |
|  | Credits | $\mathbf{3}$ |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| FSN 312 | Physiological \& Chemical Foundations of <br> Nutrition | 3 |
| FSN 320 | Food Service Management | 3 |
| FSN 330 | Scientific Food Development <br> and Scientific Food Development <br> Laboratory | 4 |
| FSN L 340 | Nutrition Education | 3 |
| FSN 356 | Advanced Nutrition \& Human Metabolism | 3 |
| FSN 426 | Nutrition in Disease |  |
| \& 426L | and Nutrition in Disease Laboratory | 4 |
| FSN 460 | Quantity Food Production | 3 |
| FSN 484 | Rural/Urban Nutrition | 3 |


| HSM 497 | Health Services Management Problems <br> and Research | 3 |
| :--- | :--- | ---: |
| Credits | $\mathbf{2 9}$ |  |
| Total Credits | $\mathbf{1 2 3}$ |  |

## Certificate in Health Services <br> Management

The Certificate in Health Services Management is designed for health care professionals who are seeking to improve their management, administrative, and leadership skills. The target audience for the Certificate Program:

1. persons already employed in the health care field with an associate or bachelor's degree;
2. persons currently in a managing position in the health care field or on a career path in the direction of health care management; and
3. persons interested in gaining knowledge of careers in the health care field.

Students wishing to pursue the Certificate in Health Services
Management must do the following:

1. Apply for admission to the University.
2. Have a letter of recommendation.
3. Have a current position in the health care field,
4. Write a detailed statement of interest in health care management if not employed in the health care field, and
5. Take all semester credits applicable to the Certificate Program at Norfolk State University

## Concentration in Health Services Management

The concentration in Health Services Management is for students who have Interdisciplinary Studies as their major. Those students seeking a concentration in Health Services Management can take the Health Services Management core courses as directed by the division of Interdisciplinary Studies (Department of History and Interdisciplinary Studies).

## CURRICULUM

Courses are taught on-line.

| Code | Title | Credits |
| :--- | :--- | ---: |
| HSM 300 | Health Services Management | 3 |
| HSM 310 | Health Personnel Management | 3 |
| HSM 311 | Legal Aspects \& Ethics of Health-Care Delivery | 3 |
| HSM 331 | Health Financial Management | 4 |
| Total Credits |  | $\mathbf{1 3}$ |

## Bachelor of Science in Nursing Online (RN to BSN) Completion Track Admission Criteria

Admission to the Online (RN to BSN) Track Completion program in Nursing is competitive and open to all qualified applicants.

## Admission is not guaranteed.

The general admission criteria are:

1. Admission to the University prior to the start of any semester.
2. Submission of a separate and complete application package for admission to the Department of Nursing and Allied Health after admission to the University and prior to the start of the semester in which one desires to attend.
3. Receipt of official transcript(s) from previously attended college(s). Eligibility will be determined by the GPA from the most recent transcript.
4. Current license to practice as a Registered Nurse in the Commonwealth of Virginia or Compact License.
5. Completion of one algebra course, one general mathematics course, one biology course with a lab, and one chemistry course with a lab (will accept high school applicable courses). A minimum grade of "C" is required in each course or credit by examination (CLEP or ACT).
6. Students with a GED must also show proof of all required courses listed in \#5 above and a grade of " $C$ " or above. If the student has not taken any of the required courses, the student must take college level courses for which a grade of "C" or above can be awarded.
7. A cumulative grade point average of 2.5 , and a course grade of " $C$ " or above in the listed below prerequisite courses.

All prerequisite courses must be completed before the start of the Online (RN-BSN) Track Completion Program.

Summary of Graduation Requirements

| Subject Area | Credits |
| :--- | :--- |
| Total Major Credits | 30 |
| Total Prerequisite Credits Credits | 55 |
| Awarded for Lower Level Nursing | 36 |
| Degree |  |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Prerequisite Courses <br> Code Title Credits

Tier 1 General Education Requirements

| SEM 101 | Spartan Seminar 101 | 1 |
| :--- | ---: | :--- |

ENG 101/101H College English I 3

ENG 102/102H College English II 3
ENG 285/285H Public Speaking
Tier 2 General Education Requirements
Select one of the following Humanities: 3

| ENG 207 | Introduction to World Literature |  |
| :---: | :--- | :---: |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation | 4 |
| CHM 215 | Chemistry I | 4 |
| $\& 215$ L | and Chemistry I Laboratory |  |


| SEM 102 | Spartan Seminar 102 | 1 |
| :---: | :---: | :---: |
| Select one of the following Social Sciences: |  | 3 |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| ECN 200 | Basic Principles of Economics |  |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| SOC 101 | Introduction to the Social Sciences |  |
| CSC 150 | Computer Literacy | 3 |
| Tier 3 General Education Requirements |  |  |
| HUM XXX | Elective (Humanities Transfer Credits) | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
| Social Science Elective | Social Science Transfer Credits | 3 |
| Nursing Program Requirements |  |  |
| $\begin{aligned} & \text { BIO } 165 \\ & \& 165 \mathrm{~L} \end{aligned}$ | Human Anatomy and Physiology and Human Anatomy and Physiology Laboratory | 4 |
| $\begin{aligned} & \text { BIO } 166 \\ & \& 166 \mathrm{~L} \end{aligned}$ | Human Anatomy and Physiology and Human Anatomy and Physiology Laboratory | 4 |
| $\begin{aligned} & \text { BIO } 163 \\ & \& 163 \mathrm{~L} \end{aligned}$ | Microbiology for the Health Sciences and Microbiology for the Health Sciences Laboratory | 4 |
| BIO 320 | Pathophysiology | 3 |
| PSY 228 | Developmental Psychology | 3 |
| MTH 250 | Elementary Statistics Concepts | 3 |
| HRP 320 | African American Health (University cultural perspective required) | 3 |

Total Credits ..... 55
Subject Area Credits
Total Prerequisite Credits Required ..... 55
Credits Awarded for Lower Level ..... 36
Nursing Degree
Total Credit Hours ..... 91
CurriculumFirst Semester

| Code | Title | Credits |
| :--- | :--- | ---: |
| Term 1 |  |  |
| NUR 301 | Foundations of Online Success: Bsn Orientation | 3 |
| NUR 418/418H | Conceptual Models for Nursing | 3 |
| NUR 461/461H | Nursing Research Dimensions | 3 |
| Term 2 |  | 3 |
| NUR 321/321H | Multicultural/Bioethics | 4 |
| NUR 415 | Health Assessment | $\mathbf{1 6}$ |

## Second Semester

Code Title CreditsTerm 3

| NUR 435 | Providing Nursing Systems for Families, Groups, <br> and Communities | 3 |
| :--- | :--- | :--- |
| NUR 435L | Providing Nursing Systems for Families, Groups, <br> and Communities Laboratory | 2 |

Term 4

| NUR 462/462H | Nursing Leadership and Management | 3 |
| :--- | :--- | ---: |
| NUR 470 | Seminar on Professional Development | 3 |
| NUR 485/485H | Contempory Topics in Nursing and Health Care | 3 |
| Total Credits |  | $\mathbf{1 4}$ |

Note on Online (RN to BSN) Completion Track: The department also offers a part-time 5 -term Online RN to BSN track.

## Bachelor of Science in Nursing - Traditional (Pre-licensure) Baccalaureate Completion Track Admission Criteria

Applications for the Traditional (Pre-licensure) Completion Program are open to all qualified students and is highly competitive.

## Admission is not guaranteed.

The general admission criteria are:

1. Admission to the University on or before March $1^{\text {st }}$ (prior to the fall semester of desired entry) or on or before October $5^{\text {th }}$ (prior to the spring semester of desired entry).
2. Submit separate Nursing Program Application for admission to the Department of Nursing and Allied Health on or before March $1^{\text {st }}$ for fall admission or on or before October $5^{\text {th }}$ for spring admission.
3. Receipt of official transcript(s) from previously attended college(s) and high school.
4. Completion of one algebra course, one general mathematics course, one biology course with a lab (will accept high school).
5. A cumulative NSU grade point average of 3.0 , and a " C " or above in the listed below prerequisite courses or credit by examination (CLEP or ACT), all of which must be completed before the start of the program.
6. Students seeking admission to Traditional (pre-licensure) BSN Track are required to complete the HESI A2 Entrance Exam.
7. Students seeking admission to the Traditional (pre-licensure) BSN track are required to pass the HESI A2 Entrance Exam before submitting a nursing application. Students will be allowed to that the HESI A2 twice during an academic year at NSU. Potential applicants must achieve a $75 \%$ or greater composite score in the specific categories (Reading/Comprehension, Vocabulary/ Grammar; Anatomy and Physiology; Math) and a $75 \%$ or greater cumulative score in each subject category (i.e. English and Science Composite score) as well as a $75 \%$ overall score. Additional information may be received from the University Testing Center at testingcenter@nsu.edu.

## Summary of Graduation Requirements

| Subject Area |  | Credits |  |
| :---: | :---: | :---: | :---: |
| Total Nursing Program Credits |  | 69 |  |
| Total Prerequisite Credits |  | 52 |  |
| Total Credit Hours |  | 121 |  |
| Prerequisite Courses |  |  |  |
| Course | Title |  | Credits |
| First Year |  |  |  |
| Fall |  |  |  |
| SEM 101 | Spartan Sem | 101 | 1 |
| ENG 101 | College Engl |  | 3 |
| $\begin{aligned} & \text { BIO } 163 \\ & \& 163 \mathrm{~L} \end{aligned}$ | Microbiology and Microbi Laboratory | the Health Sciences for the Health Sciences | 4 |
| $\begin{aligned} & \text { BIO } 165 \\ & \& 165 \mathrm{~L} \end{aligned}$ | Human Anat and Human Laboratory | and Physiology my and Physiology | 4 |

MTH 101 or MTH 105 (Will accept High School)

|  | Credits | 12 |
| :---: | :---: | :---: |
| Spring |  |  |
| SEM 102 | Spartan Seminar 102 | 1 |
| ENG 102 | College English II | 3 |
| BIO 100 <br> \& 100L | Biological Science and Biological Science Lab (Will accept High School) |  |
| MTH 250 | Elementary Statistics Concepts | 3 |
| FSN 110 | The Science of Human Nutrition | 3 |
| $\begin{aligned} & \text { BIO } 166 \\ & \& 166 \mathrm{~L} \end{aligned}$ | Human Anatomy and Physiology and Human Anatomy and Physiology Laboratory | 4 |

## Second Year

Fall

| SEM 201 | Spartan Seminar 201 | 1 |
| :--- | :--- | :---: |
| ENG 285 | Public Speaking | 3 |
| CHM 215 | Chemistry I | 4 |
| \& 215L | and Chemistry I Laboratory |  |
| Select | af the following Cultural Perspective - Humanities: | 3 |


| Select one of the following Cultural Perspective - Humanities: | 3 |
| :--- | :--- |
| ENG 383/384 | African-American Literature, 1940- <br> PRESENT |
| FIA 370 | African/Afro-American Art |

Select one of the following Social Science Electives:

| SOC 101 | Introduction to the Social Sciences |
| :--- | :--- |
| HIS 101 | History of World Societies II |
| HIS 103 | United States History Since 1865 |
| BUS 175 |  <br>  <br> Entrepreneurship |
| ECN 200 | Basic Principles of Economics |


| Apply for Nursing Program |  |
| :---: | :---: |
| Credits | 14 |


| Spring |  |  |
| :--- | :--- | :--- |
| PSY 228 | Developmental Psychology | 3 |
| CSC 150 | Computer Literacy | 3 |

Select one of the following Cultural Perspective - Social 3
Science:

| HRP 320 | African American Health |
| :--- | :--- |
| HIS 335/336 | African-American History |
| HIS 371 | Modern African History \& Cultures 1600- |
|  | PRESENT |


| Select one of the following Humanities Elective: | 3 |  |
| :---: | :--- | :---: |
| ENG 207 | Introduction to World Literature |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation | $\mathbf{1 2}$ |
|  | Credits | $\mathbf{5 2}$ |


| Nursing Curriculum |  |  |
| :---: | :---: | :---: |
| Code | Title Credir |  |
| First Semester |  |  |
| NUR 300 | Foundations of Professional Development | 1 |
| NUR 304 | Nursing Informatics | 2 |
| NUR 322 | Health Assessment | 4 |
| NUR 348 | Nursing Pharmacology | 3 |
| NUR 342 | Fundamentals of Nursing | 4 |
| NUR 342L | Fundamentals of Nursing Laboratory | 2 |
| Second Semester |  |  |
| NUR 360 | Nursing Care of Adults I | 6 |
| NUR 360L | Nursing Care of Adults I Laboratory | 3 |
| NUR 400 | Nursing Pathophysiology | 3 |
| NUR 461 | Nursing Research Dimensions | 3 |
| Third Semester |  |  |
| NUR 332 | Genetics \& Genomics in Nursing Practice | 2 |
| NUR 446 | Nursing of Women \& the Childbearing Family | 2 |
| NUR 446L | Nursing of Women \& the Childbearing Family Laboratory | 2 |
| NUR 450 | Nursing of Children, Adolescents, \& Families | 2 |
| NUR 450L | Nursing of Children, Adolescents, \& Families Lab | 2 |
| Fourth Semester |  |  |
| NUR 440 | Nursing Care of Adults II | 6 |
| NUR 440L | Nursing Care of Adults II Laboratory | 3 |
| NUR 442 | Psychiatric/Mental Health Nursing | 2 |
| NUR 442L | Psychiatric/Mental Health Nursing Laboratory | 2 |
| NUR 485 or NUR 485H | Contempory Topics in Nursing and Health Care Honors: Contempory Topics in Nursing and Health Care | 3 |
| Fifth Semester |  |  |
| NUR 463 | Capstone Theory | 2 |
| NUR 463L | Capstone Theory and Preceptorship | 3 |
| NUR 462 or NUR 462H | Nursing Leadership and Management <br> Honors: Nursing Leadership and Management | 3 |
| NUR 490 | Community Health Nursing | 2 |
| NUR 490L | Community Health Nursing Laboratory | 2 |
| Total Credits |  | 69 |

## Notes on Traditional (Pre-licensure) Baccalaureate Nursing Completion Track

- Clinical hours may range from 6 hours to 12 hours per day dependent upon course specific clinical hour requirements.
- Every effort will be made to have lecture and clinical hours held during weekdays, however, some evening and/or weekend clinical arrangements may be necessary.
- All students must participate in a minimum of 500 direct care and simulation hours (not to exceed 100 simulation hours).


## Physics

Dr. Doyle E. Temple
Department Chair
(757) 823-2992

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 Programs

- Bachelor of Science in Physics (p. 200)
- Bachelor of Science in Physics and Master of Science in Materials Science (Five-Year Dual Degree) (p. 201)
- Minor in Astronomy (p. 202)
- Minor in Physics (p. 203)
- Teacher Certification in Physics (p. 203)


## Bachelor of Science in Physics

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 68 |
| Electives | 0 |
| Other Requirements | 12 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| ENG 101 | College English I |  |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| MTH 184 | Calculus I | 2 |
| MTH 251 | Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 4 |
| PHY 160 | University Physics I | 1 |
| PHY 160L | University Physics Laboratory I | 4 |
| PHY 161 | University Physics II | 1 |
| PHY 161L | University Physics Laboratory II | 4 |
| SEM 101 | Spartan Seminar 101 | 1 |
| $\&$ SEM 102 | and Spartan Seminar 102 | 2 |
|  | Credits | 29 |

## Second Year

| SEM 201 | Spartan Seminar 201 | 1 |
| :---: | :---: | :---: |
| Select one of the following Cultural Perspectives (Humanities): |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| MUS 234 | African-American Music |  |
| XXX XXX | Elective from General Education Core | 3 |
| XXX XXX | Elective (unrestricted) | 3 |
| CSC 169 | Introduction to Computer Science | 3 |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| PHY 241 | Physics Seminar | 1 |
| PHY 260 | University Physics III | 4 |
| PHY 345 | Mathematical Methods Physical Sciences I | 3 |
| PHY 350 | Modern Physics | 3 |
| PHY 351 | Modern Physics | 2 |
|  | Credits | 33 |


| Third Year |  |  |
| :--- | :--- | :---: |
| CHM 221 | General Chemistry I | 3 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222 | General Chemistry II | 3 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| PHY 365 | Physical Mechanics | 3 |
| PHY 366 | Physical Mechanics | 3 |
| PHY 375 | Electricity and Magnetism I | 3 |
| PHY 380 | Quantum Mechanics I | 3 |


| PHY 399 | Advanced Laboratory | 2 |
| :---: | :---: | :---: |
| PHY 445 | Mathematical Methods for Physical Sciences II | 3 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Social Science Elective from the General Core | 3 |


| Fourth Year |  |
| :--- | :--- |
| XXX XXX $\quad$ Elective (unrestricted) | 9 |
| Select one of the following Cultural Perspectives - Social | 3 |
| Sciences: |  |


| HIS 335 | African-American History |  |
| :--- | :--- | ---: |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600- |  |
|  | PRESENT |  |
| HRP 320 | African American Health | 3 |
| PHY 356 | Heat and Thermodynamics | 3 |
| PHY 468 | Optics | 3 |
| PHY 475 | Electricity and Magnetism II | 3 |
| PHY 480 | Quantum Mechanics II | 2 |
| PHY 498 | Sr Project I | 2 |
| PHY 499 | Sr Project II | $\mathbf{2 8}$ |
|  | Credits | $\mathbf{1 2 1}$ |
|  | Total Credits |  |

## Bachelor of Science in Physics and Master of Science in Materials Science (Five-Year Dual Degree)

| Summary of Graduation Requirements |  |  |
| :--- | :--- | :--- |
| Subject Area Credits |  |  |
| General Education Core (p. 41) | 40 |  |
| Major Requirements | 70 |  |
| Electives | 10 |  |
| Other Requirements | 41 |  |
| Total Credit Hours | 161 |  |
| Curriculum  Credits <br> Course   |  |  |


| First Year |  |  |
| :--- | :--- | :--- |
| CSC 169 | Introduction to Computer Science | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 184 | Calculus I | 4 |
| MTH 251 | Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
| CHM 221 | General Chemistry I | 3 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222 | General Chemistry II | 3 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| EEN 301 | Engineering Electronics I,Electronic Devices | 3 |
| ENG 203 | Advanced Communication Skills | 3 |
| XXX XXX | Cultural Perspectives (Humanities) | 3 |
| ENG 383 | African-American Literature, 1940- |  |
| or MUS 234 | PRESENT |  |
|  | or African-American Music |  |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| PHY 241 | Physics Seminar | 1 |
| PHY 260 | University Physics III | 4 |
| PHY 350 | Modern Physics | 3 |
| PHY 351 | Modern Physics | 2 |
|  | Credits | $\mathbf{3 5}$ |


| Summer |  |  |
| :--- | :--- | :--- |
| PHY 397 | Introduction to Research (to fulfill Elective <br> Requirement) | 3 |
|  | Credits |  |

Third Year

| PHY 356 | Heat and Thermodynamics | 3 |
| :---: | :---: | :---: |
| PHY 365 | Physical Mechanics | 3 |
| PHY 366 | Physical Mechanics | 3 |
| PHY 375 | Electricity and Magnetism I | 3 |
| PHY 380 | Quantum Mechanics I | 3 |
| PHY 399 | Advanced Laboratory | 2 |
| ENG 285 | Public Speaking | 3 |
| XXX XXX | Social Science Elective from the Core | 3 |
| Select one Cultural Perspectives (Social Sciences) of the following: |  | 3 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| HIS 320 | Independent Latin America |  |
| XXX XXX | Elective (unrestricted) | 1 |
| Select two of the following Restricted Math Electives: |  | 6 |
| MTH 300 | Linear Algebra |  |
| MTH 373 | Advanced Vector Calculus |  |
| MTH 474 | Complex Variables |  |
| PHY 345 | Mathematical Methods Physical Sciences I |  |
| PHY 445 | Mathematical Methods for Physical Sciences II |  |
|  | Credits | 33 |


| Fourth Year |  |  |
| :--- | :--- | ---: |
| CHM 545 | Mathematical Method | 3 |
| XXX XXX | Humanities Elective from the Core | 3 |
| MSE 530 | Materials Science | 3 |
| MSE 533 | Polymers/Composites | 3 |
| PHY 468 | Optics | 3 |
| PHY 475 | Electricity and Magnetism II | 3 |
| PHY 480 | Quantum Mechanics II | 3 |
| PHY 498 | Sr Project I | 2 |
| PHY 499 | Sr Project II | 2 |
| PHY 565 | Physical Mechanics | 3 |
| PHY 580 | Quantum Mechanics for Material Science | 3 |
|  | Credits | $\mathbf{3 1}$ |
| Summer |  | $\mathbf{1 - 9}$ |
| MSE 697 | Research I | $\mathbf{1 - 9}$ |
|  | Credits |  |


| Fifth Year |  |  |
| :--- | :--- | :--- |
| CHM 573 | Advance Inorganic | 3 |
| CHM 663 | Atomic and Molecular Spectroscopy | 3 |
| MSE 575 | Basic Instrumentation for Material Science | 3 |
| CHM 633 | Molecular Dynamics | 3 |
| MATS 710 | Special Topics II | 3 |
| MATS 797 | Research III | 3 |
| MATS 799 | Thesis | 3 |
| PHY 653 | Solid State Physics | 3 |


| PHY 675 | Elctricity and Magnetism | 3 |
| :--- | :--- | ---: |
|  | Credits | 27 |
| Total Credits | $162-170$ |  |

## Minor in Astronomy

The Minor in Astronomy is an ideal complement 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.

| CURRICULUM <br> Code <br> Core Requirements | Title | Credits |
| :--- | :--- | ---: |
| PHY 152 | General Physics | 3 |
| PHY 153 | General Physics | 3 |
| AST 201 | General Astronomy | 3 |
| Select three of the following: | 9 |  |
| AST 301 | Methods in Observational Astronomy |  |
| AST 302 | Astrobiology |  |
| AST 303 | Introduction to Astrophysics | $\mathbf{1 8}$ |
| AST 401 | Stellar Astrophysics |  |
| Total Credits |  |  |

## Minor in Physics

| Curriculum <br> Code | Title | Credits |
| :---: | :---: | :---: |
| Core Requirements |  |  |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| Upper Division Courses |  |  |
| PHY 350 | Modern Physics | 3 |
| Select two of the following: |  | 6 |
| PHY 365 | Physical Mechanics |  |
| PHY 366 | Physical Mechanics |  |
| PHY 375 | Electricity and Magnetism I |  |
| PHY 475 | Electricity and Magnetism II |  |
| PHY 380 | Quantum Mechanics I |  |
| PHY 480 | Quantum Mechanics II |  |
| Total Credits |  | 18 |

## Teacher Certification in Physics

## Summary of Graduation Requirements



| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| BIO 110 | General Biology | 3 |
| CSC 170 | Computer Programming I | 3 |
| EDU 201 | Foundations of Education | 3 |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| PHY 241 | Physics Seminar | 1 |
| PHY 260 | University Physics III | 4 |
| PHY 345 | Mathematical Methods Physical Sciences I | 3 |
| PHY 350 | Modern Physics | 3 |
| PHY 351 | Modern Physics | 2 |
| XXX XXX | Humanities Elective (from General | 3 |
|  | Education Core) |  |
|  | Credits | 33 |


| Third Year |  | 3 |
| :--- | :--- | ---: |
| CHM 221 | General Chemistry I | 1 |
| CHM 221L | General Chemistry I Laboratory | 3 |
| CHM 222 | General Chemistry II | 3 |
| XXX XXX | Social Sciences Elective from the General |  |
|  | Education Core | 3 |
| PSY 228 | Developmental Psychology | 3 |
| PHY 365 | Physical Mechanics | 3 |
| PHY 375 | Electricity and Magnetism I | 3 |
| PHY 380 | Quantum Mechanics I | 3 |
| SED 405 | Reading in the Content Area | 3 |


| SOC 101 | Introduction to the Social Sciences | 3 |
| :---: | :---: | :---: |
|  | Credits | 31 |
| Fourth Year |  |  |
| EDU 381 | Classroom and Behavior Management | 3 |
| SED 385 | Curriculum and Instructional Procedures in Science | 3 |
| PHY 468 | Optics | 3 |
| PHY 498 | Sr Project I | 2 |
| SED 499 | Directed Teaching (internship) | 12 |
| Select one of the following Cultural Perspectives (Humanities): |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| MUS 234 | African-American Music |  |
| Select one of the following Cultural Perspectives (Social Sciences): |  | 3 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| HRP 320 | African American Health |  |
|  | Credits | 29 |
|  | Total Credits | 122 |

## Teacher Licensure Endorsement in Physics

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).

| Code | Title | Credits |
| :--- | :--- | ---: |
| EDU 201 | Foundations of Education | 3 |
| SED 233 | Seminar in Assessment and Evaluation | 3 |
| SED 380 | Foundations of Secondary School Methods and | 3 |
|  | Management Instruction |  |
| SED 420 | Educational Technology | 3 |
| SED 486 | Human Growth and Development | 3 |
| SED 488 | School Community Relations | 3 |
| SED 499 | Directed Teaching (internship) | 12 |

# Special Academic Programs Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) 

Dr. Aliecia R. McClain
Director
(757) 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 Electrical and Electronics Engineering, a Bachelor of Science in Mathematics, a Bachelor of Science in Optical Engineering 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 semester 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
(757) 823-2511

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.

## Special Academic Programs

- Bachelor of Science in Biology - (DNIMAS) Track (p. 206)
- Bachelor of Science in Biology - Pre-Professional (DNIMAS) Track (p. 207)
- Bachelor of Science in Chemistry - (DNIMAS) Track (p. 208)
- Bachelor of Science in Chemistry - Pre-Medicine (DNIMAS) Track (p. 209)
- Bachelor of Science in Computer Science - Computer Engineering (DNIMAS) Track (p. 210)
- Bachelor of Science in Computer Science - (DNIMAS) Track (p. 211)
- Bachelor of Science in Computer Science - CyberSecurity (DNIMAS) Track (p. 212)
- Bachelor of Science in Electrical and Electronics Engineering (DNIMAS) Track (p. 213)
- Bachelor of Science in Mathematics - Applied Mathematics (DNIMAS) Track (p. 214)
- Bachelor of Science in Optical Engineering - (DNIMAS) Track (p. 215)
- Bachelor of Science in Physics - (DNIMAS) Track (p. 216)


# Bachelor of Science in Biology (DNIMAS) Track 

Summary of Graduation Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 47 |
| Electives | 6 |
| Other Requirements | 27 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| APS 110 | Applied Science Seminar |  |
| APS 111 | Applied Science Seminar | 0 |
| BIO 110H | Honors General Biology |  |
| \& BIO 110L | and General Biology Laboratory | 0 |
| BIO 260 | Integrative Zoology | 4 |
| \& 260L | and Integrative Zoology Laboratory |  |
| CHM 221 | General Chemistry I | 4 |
| CHM 221L | General Chemistry I Laboratory |  |
| CHM 222 | General Chemistry II | 3 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| ENG 101H | Honors College English I | 3 |
| ENG 102H | Honors College English II | 1 |
| MTH 184H | Honors Calclulus I | 3 |
| MTH 251H | Honors Calculus II | 3 |
| PED 100 | Fundametals of Fitness for Life | 4 |
| SEM 101 | Spartan Seminar 101 | 4 |
| \& SEM 102 | and Spartan Seminar 102 | 1 |


| Second Year |  |  |
| :--- | :--- | ---: |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| BIO 261 | General Botany |  |
| \& 261L | and General Botany Laboratory | 4 |
| BIO 310 | General Microbiology |  |
| \& 310L | and General Microbiology Laboratory | 4 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 323L | Synthesis and Analysis in Organic | 2 |
|  | Chemistry Laboratory |  |
| CSC 170 | Computer Programming I | 3 |
| HED 100 | Personal and Community Health | 2 |
| ENG 285H | Honors Public Speaking | 3 |
| SOC 110 | Introduction to Sociology | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 0}$ |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 311 | Applied Science Seminar | 0 |


| BIO XXX: |  | 4 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO } 270 \\ & \& 270 \mathrm{~L} \end{aligned}$ | Comparative Vertebrate Anatomy and Physiology and Comparative Vertebrate Anatomy \& Physiology Laboratory |  |
| $\begin{aligned} & \text { BIO } 263 \\ & \& 263 \mathrm{~L} \end{aligned}$ | Vertebrate Embryology and Vertebrate Embryology Lab |  |
| $\begin{aligned} & \text { BIO } 362 \\ & \& 362 L \end{aligned}$ | Histology and Microtechnique and Histology \& Microtechnique Laboratory | 4 |
| CHM 431 | Biochemistry I | 3 |
| CHM 431L | Biochemistry I Laboratory | 2 |
| CHM 432 | Biochemistry II | 3 |
| CHM 432L | Biochemistry II Laboratory | 2 |
| CSC 200 | Advanced Computer Concepts | 3 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
|  | Credits | 31 |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| APS 411 | Applied Science Seminar | 0 |
| $\begin{aligned} & \mathrm{BIO} 351 \\ & \& 351 \mathrm{~L} \end{aligned}$ | Principles of Genetics and Principles of Genetics Laboratory | 4 |
| BIO 364 | Seminar and Colloquium in Biology | 1 |
| BIO 459 | General Physiology | 3 |
| $\begin{aligned} & \text { BIO 474 } \\ & \& 474 \mathrm{~L} \end{aligned}$ | Molecular Biology and Molecular Biology Laboratory | 5 |
| BIO 495 | Biostatistics | 3 |
| ENG 203/303 | Advanced Communication Skills | 3 |
| Select one BIO XXX Elective: |  | 4 |
| $\begin{aligned} & \text { BIO } 263 \\ & \quad \text { or BIO } 278 \end{aligned}$ | Vertebrate Embryology or Cell Biology |  |
| Select one of the following Humanities Electives: |  | 3 |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| MUS 301 | Music Appreciation |  |
| FIA 201 | Basic Art Appreciation |  |
| ENG 207 | Introduction to World Literature |  |
|  | Credits | 26 |
|  | Total Credits | 120 |

All Biology courses with the exception of BIO 459 General Physiology and BIO 495 Biostatistics require both lecture ( 3 credits) and lab ( 1 credit).

## Bachelor of Science in Biology - PreProfessional (DNIMAS) Track

| Summary of Graduation Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Area |  | Credits |  |
| General Education Core (p. 41) |  | 40 |  |
| Major Requirements |  | 47 |  |
| Electives |  | 6 |  |
| Other Requirements |  | 27 |  |
| Total Credit Hours |  | 120 |  |
| Curriculum |  |  |  |
| First Year |  |  |  |
| APS 110 | Applied Science Seminar |  | 0 |
| APS 111 | Applied Science Seminar |  | 0 |
| BIO 110H <br> \& BIO 110 L | Honors General Biology and General Biology Laboratory |  | 4 |
| SEM 101 \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 |  | 2 |
| $\begin{aligned} & \text { BIO } 260 \\ & \& 260 \mathrm{~L} \end{aligned}$ | Integrative Zoology and Integrative Zoology Laboratory |  | 4 |
| CHM 221 | General Chemistry I |  | 3 |
| CHM 221L | General Chemistry I Laboratory |  | 1 |
| CHM 222 | General Chemistry II |  | 3 |
| CHM 222L | General Chemistry II Laboratory |  | 1 |
| ENG 101H | Honors College English I |  | 3 |
| ENG 102H | Honors College English II |  | 3 |
| MTH 184H | Honors Calclulus I |  | 4 |
| MTH 251H | Honors Calculus II |  | 4 |
| PED 100 | Fundametals of Fitness for Life |  | 1 |
|  | Credits |  | 33 |


| Second Year |  |  |
| :--- | :--- | ---: |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| BIO 261 | General Botany | 4 |
| \& 261L | and General Botany Laboratory | 4 |
| BIO 310 | General Microbiology |  |
| \& 310L | and General Microbiology Laboratory |  |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 323L | Synthesis and Analysis in Organic | 2 |
|  | Chemistry Laboratory |  |
| CSC 170 | Computer Programming I | 3 |
| HED 100 | Personal and Community Health | 2 |
| ENG 285H | Honors Public Speaking | 3 |


| SOC 110 | Introduction to Sociology | 3 |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 0}$ |

## Third Year

APS 310
Applied Science Seminar

| APS 311 | Applied Science Seminar | 0 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { BIO } 272 \\ & \& 272 L \end{aligned}$ | Human Anatomy and Human Anatomy Laboratory | 4 |
| $\begin{aligned} & \text { BIO } 362 \\ & \& 362 \text { L } \end{aligned}$ | Histology and Microtechnique and Histology \& Microtechnique Laboratory | 4 |
| CHM 431 | Biochemistry I | 3 |
| CHM 431L | Biochemistry I Laboratory | 2 |
| CHM 432 | Biochemistry II | 3 |
| CHM 432L | Biochemistry II Laboratory | 2 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| CSC 200 | Advanced Computer Concepts | 3 |
|  | Credits | 31 |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| $\begin{aligned} & \text { BIO } 351 \\ & \& 351 \mathrm{~L} \end{aligned}$ | Principles of Genetics and Principles of Genetics Laboratory | 4 |
| BIO 364 | Seminar and Colloquium in Biology | 1 |
| BIO 459 | General Physiology | 3 |
| $\begin{aligned} & \text { BIO 474 } \\ & \& 474 \mathrm{~L} \end{aligned}$ | Molecular Biology and Molecular Biology Laboratory | 5 |
| BIO 495 | Biostatistics | 3 |
| APS 411 | Applied Science Seminar | 0 |
| $\begin{aligned} & \text { ENG } 203 \\ & \text { or ENG } 303 \end{aligned}$ | Advanced Communication Skills or Professional \& Technical Writing | 3 |
| XXX XXX | Humanities Elective | 3 |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| ENG 207 | Introduction to World Literature |  |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| Select one BIO XXX Elective: |  | 4 |
| $\begin{aligned} & \text { BIO } 263 \\ & \& 263 \mathrm{~L} \end{aligned}$ | Vertebrate Embryology and Vertebrate Embryology Lab |  |
| $\begin{aligned} & \text { BIO } 278 \\ & \& 278 \mathrm{~L} \end{aligned}$ | Cell Biology and Cell Biology Laboratory |  |
|  | Credits | 26 |
|  | Total Credits | 120 |
| All Biology courses with the exception of BIO 459 General Physiology and BIO 495 Biostatistics require both lecture (3 lab (1 credit). |  |  |

## Bachelor of Science in Chemistry (DNIMAS) Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 37 |
| Major Requirements | 53 |
| Electives | 6 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 2}$ |

## Curriculum

Course Title Credits

| First Year |  | 0 |
| :--- | :--- | ---: |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 5 |
| CHM 231H | General Chemistry I Honors |  |
| \& CHM 231R | and General Chemistry Applications I |  |
| \& CHM 221L | and General Chemistry I Laboratory |  |
| CHM 232H | General Chemistry II Honors |  |
| \& CHM 232R | and General Chemistry Applications II |  |
| \& CHM 222L | and General Chemistry II Laboratory | 5 |
| CSC 170 | Computer Programming I |  |
| CSC 170L | Computer Programming Laboratory I | 3 |
| ENG 101H | Honors College English I | 1 |
| ENG 102H | Honors College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| MTH 184H | Honors Calclulus I | 2 |
| MTH 251H | Honors Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 4 |
| SEM 101 | Spartan Seminar 101 <br> \& SEM 102 | and Spartan Seminar 102 |
|  | Credits | 2 |


| Second Year |  |  |
| :---: | :---: | :---: |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 323L | Synthesis and Analysis in Organic Chemistry Laboratory (Honor section required - CHM 323LH) | 2 |
| CHM 331 | Analytical Chemistry I | 3 |
| CHM 331L | Analytical Chemistry I Laboratory | 2 |
| MTH 252 | Calculus III | 4 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| ENG 285H | Honors Public Speaking | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 33 |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | ---: |
| APS 311 | Applied Science Seminar | 0 |
| BIO 110H | Honors General Biology | 3 |
| BIO 110L | General Biology Laboratory | 1 |
| CHM 332 | Analytical Chemistry II | 5 |
| \& 332L | and Analytical Chemistry II Laboratory |  |
| CHM 345 | Mathematical Methods \& Logic for the | 3 |
| CHM 451 | Physical Sciences |  |
| CHM 361 | Phemistry Seminar I | 1 |
| CHM 362 | Physical Chemistry II | 3 |
| CHM 363L | Physical Chemistry Laboratory | 3 |
| CHM 497 | Introduction to Research | 2 |
| HIS XXX | History from the Core | 1 |
| XXX XXX | Cultural Elective from the Core | 3 |
|  | Credits | 3 |

## Fourth Year

| APS 410 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 411 | Applied Science Seminar | 0 |
| XXX XXX | Humanities Elective | 6 |
| Restrictive | Select six hours of the following: | 6 |
| Chemistry |  |  |
| Electives |  |  |


| CHM 397 | Introduction to Research |
| :--- | :--- |
| CHM 398 | Introduction to Research |
| CHM 473L | Advanced Inorganic Chemistry Lab |
| CHM 431L | Biochemistry I Laboratory |
| CHM 432 | Biochemistry II |
| CHM 432L | Biochemistry II Laboratory |
| CHM 475 | Advanced Organic Chemistry |
| CHM 481 | Special Topics in Chemistry |
| CHM 497 | Introduction to Research |
| CHM 498 | Introduction to Research (Maximum of 1 <br> elective hour of research) |
| XXX XXX | Social Science Seminar |
| CHM 451 | Chemistry Seminar I |
| CHM 473 | Advanced Inorganic Chemistry |
| CHM 431 | Biochemistry I |
| CHM 431L | Biochemistry I Laboratory |
| CHM 498 | Introduction to Research |
| ENG 203 | Advanced Communication Skills |
| or ENG 303 | or Professional \& Technical Writing |

## Bachelor of Science in Chemistry -Pre-Medicine (DNIMAS) Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 31 |
| Major Requirements | 58 |
| Electives | 7 |
| Other Requirements | 26 |
| Total Credit Hours | $\mathbf{1 2 2}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 0 |
| CHM 231H | General Chemistry I Honors |  |
| \& CHM 231R | and General Chemistry Applications I | 4 |
| CHM 221L | General Chemistry I Laboratory |  |
| CHM 232H | General Chemistry II Honors |  |
| \& CHM 232R | and General Chemistry Applications II | 1 |
| CHM 222L | General Chemistry II Laboratory | 4 |
| CSC 170 | Computer Programming I |  |
| \& 170L | and Computer Programming Laboratory I | 1 |
| ENG 101H | Honors College English I | 4 |
| ENG 102H | Honors College English II | 3 |
| HED 100 | Personal and Community Health | 3 |
| MTH 184H | Honors Calclulus I | 2 |
| MTH 251H | Honors Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 4 |
| SEM 101 | Spartan Seminar 101 | 1 |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
|  | Credits | 33 |


| Second Year |  |  |
| :--- | :--- | :--- |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| CHM 321 | Organic Chemistry I | 3 |
| CHM 321L | Organic Chemistry I Laboratory | 2 |
| CHM 322 | Organic Chemistry II | 3 |
| CHM 323L | Synthesis and Analysis in Organic | 2 |

Chemistry Laboratory (*Honor section
Required - CHM 323LH*)

| CHM 331 | Analytical Chemistry I | 3 |
| :--- | :--- | ---: |
| CHM 331L | Analytical Chemistry I Laboratory | 2 |
| MTH 252 | Calculus III | 4 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| ENG 285H | Honors Public Speaking | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | $\mathbf{3 3}$ |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 311 | Applied Science Seminar | 0 |
| XXX XXX | Restricted Biology Elective | 3 |


| BIO 300 Level or Higher |  |
| :--- | :--- |
| BIO 110 H | 4 |


| \& BIO 110L | and General Biology Laboratory |
| :--- | :--- | :--- |
| CHM 332 | Analytical Chemistry II |

CHM 332L Analytical Chemistry II Laboratory 2
CHM 345 Mathematical Methods \& Logic for the 3

Physical Sciences
CHM $451 \quad$ Chemistry Seminar I 2

| \& CHM 452 | and Chemistry Seminar II |  |
| :--- | :--- | :--- |
| CHM 361 | Physical Chemistry I |  |

CHM 362 Physical Chemistry II 3
CHM 363L Physical Chemistry Laboratory 2
CHM 497 Introduction to Research 2
\& CHM 498 and Introduction to Research

| CHM 473 | Advanced Inorganic Chemistry | 3 |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{3 0}$ |

Fourth Year
APS $410 \quad$ Applied Science Seminar 0
APS 411 Applied Science Seminar 0
XXX XXX Restricted Biology Electives 4

| ENG 203 <br> or ENG 303 | Advanced Communication Skills <br> or Professional \& Technical Writing | 3 |
| :--- | :--- | :--- |
| XXX XXX | Social Science Elective or HIS from the | 3 |


|  | Core |
| :--- | :--- |
| XXX XXX | Humanities \& Cultural Elective from the |

Core

| CHM 431 | Biochemistry I | 5 |
| :--- | :--- | ---: |
| \& 431L | and Biochemistry I Laboratory |  |
| CHM 432 | Biochemistry II | 5 |
| \& 432L | and Biochemistry II Laboratory |  |


| \& 432L | and Biochemistry II Laboratory |  |
| :--- | :--- | ---: |
|  | Credits | $\mathbf{2 6}$ |
|  | Total Credits | 122 |

# Bachelor of Science in Computer Science - Computer Engineering (DNIMAS) Track 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 69 |
| Electives | 17 |
| Total Credit Hours | $\mathbf{1 2 6}$ |

## Curriculum Title

| First Year |  |  |
| :--- | :--- | :---: |
| APS 110 | Applied Science Seminar | 0 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| CSC 101 | Introduction to the Computer Science <br>  <br>  <br> Profession | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| MTH 184H | Honors Calclulus I | 4 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| APS 111 | Applied Science Seminar | 0 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260L | Computer Programming II Laboratory | 1 |
| MTH 251H | Honors Calculus II | 4 |
| XXX XXX | Social Science Elective | 3 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| APS 210 | Applied Science Seminar | 0 |
| CSC 268 | Computer Organization | 3 |
| MTH 252 | Calculus III (** Take the Honors section ***) | 4 |
| ENG 101H | Honors College English I | 3 |
| CSC 275 | Fundamentals of Cybersecurity | 3 |
| APS 211 | Applied Science Seminar | 0 |
| CSC 295 | Java Applications Programming | 3 |
| MTH 371 | Discrete Mathematical Structures | 4 |
| ENG 102H | Honors College English II | 3 |
| CHM 222 | General Chemistry II | 3 |
| CHM 222L | General Chemistry II Laboratory | 1 |
|  | Credits | $\mathbf{2 8}$ |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| CSC 292 | Unix and C Programming | 3 |
| CSC 361 | Survey of Programming Languages | 3 |
| EEN 201 | Electrical Network Theory I | 3 |
| EEN 201L | Electrical Network Theory I Laboratory | 1 |


| MTH 351 | Probability \& Statistics I | 3 |
| :--- | :--- | :--- |
| ENG 285H | Honors Public Speaking | 3 |
| APS 311 | Applied Science Seminar | 0 |
| EEN 203 | Electronic Principles | 3 |
| CSC 372 | Data Structures | 3 |
| CSC 380 | Software Engneerng | 3 |
| MTH 372 | Differential Equations | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | $\mathbf{3 1}$ |

## Fourth Year

APS 410 Applied Science Seminar 0
CSC 430 Data Communications 3
CSC 464 Operating Systems 3
CSC 498 Computer Science Seminar I 2
EEN 331 Microprocessors 4

| $\& 331 \mathrm{~L}$ | and Microprocessor Lab |
| :--- | :--- |
| XXX XXX | Humanities Cultural Elective |

ENG 303 Professional \& Technical Writing 3
APS 411 Applied Science Seminar 0
EEN 231 Digital Electronics Logic Design 3
CSC 468 Computer Architecture 3
CSC 499 Computer Science Seminar II 2
XXX XXX Foreign Language Elective 3
XXX XXX Social Science Cultural Elective 3
XXX XXX Computer Science Elective (300 Level or 3
Above)
Credits ..... 35

## Bachelor of Science in Computer Science - (DNIMAS) Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 53 |
| Electives | 27 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| First Year |  |  |
| APS 110 | Applied Science Seminar | 0 |
| SEM 101 <br> \& SEM 102 | Spartan Seminar 101 and Spartan Seminar 102 | 2 |
| CSC 101 | Introduction to the Computer Science Profession | 1 |
| CSC 170 | Computer Programming I | 3 |
| CSC 170L | Computer Programming Laboratory I | 1 |
| MTH 184H | Honors Calclulus I | 4 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| APS 111 | Applied Science Seminar | 0 |
| CSC 260 | Computer Programming II | 3 |
| CSC 260L | Computer Programming II Laboratory | 1 |
| MTH 251H | Honors Calculus II | 4 |
| XXX XXX | Social Science Elective | 3 |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| ECN 200 | Basic Principles of Economics |  |
| SOC 101 | Introduction to the Social Sciences |  |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
|  | Credits | 32 |


| Second Year |  |  |
| :--- | :--- | ---: |
| SEM 201 | Spartan Seminar 201 | 0 |
| APS 210 | Applied Science Seminar | 3 |
| CSC 268 | Computer Organization | 4 |
| MTH 252 | Calculus III (*** Take the Honors section |  |
|  | $* * *)$ | 3 |
| ENG 101H | Honors College English I | 3 |
| CHM 221 | General Chemistry I | 1 |
| CHM 221L | General Chemistry I Laboratory | 0 |
| APS 211 | Applied Science Seminar | 3 |
| CSC 295 | Java Applications Programming | 4 |
| MTH 371 | Discrete Mathematical Structures | 3 |
| ENG 102H | Honors College English II | 3 |
| CSC 275 | Fundamentals of Cybersecurity | $\mathbf{2 8}$ |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :---: | :---: | :---: |
| CSC 292 | Unix and C Programming | 3 |
| CSC 361 | Survey of Programming Languages | 3 |
| MTH 351 | Probability \& Statistics I | 3 |
| XXX XXX | Free Elective | 2 |
| ENG 285H | Honors Public Speaking | 3 |
| APS 311 | Applied Science Seminar | 0 |
| CSC 372 | Data Structures | 3 |
| CSC 380 | Software Engneerng | 3 |
| XXX XXX | Foreign Language Elective | 3 |
| ENG 303 | Professional \& Technical Writing | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | 29 |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| CSC 430 | Data Communications | 3 |
| CSC 464 | Operating Systems | 3 |
| CSC 498 | Computer Science Seminar I | 2 |
| XXX XXX | Computer Science Elective (300 Level or Above) | 6 |
| XXX XXX | CSC or Math Electives (300 Level or Above) | 6 |
| XXX XXX | Humanities Cultural Elective | 3 |
| APS 411 | Applied Science Seminar | 0 |
| CSC 468 | Computer Architecture | 3 |
| CSC 499 | Computer Science Seminar II | 2 |
| XXX XXX | Social Science Cultural Elective | 3 |
|  | Credits | 31 |
|  | Total Credits | 120 |

# Bachelor of Science in Computer Science - CyberSecurity (DNIMAS) Track 

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 65 |
| Electives | 15 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum <br> Course <br> First Year | Title | Credits |
| :--- | :--- | ---: |
| APS 110 | Applied Science Seminar |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 0 |
| CSC 101 | Introduction to the Computer Science <br>  <br> CProfession | 2 |
| CSC 170 | Computer Programming I | 1 |
| CSC 170L | Computer Programming Laboratory I |  |
| MTH 184H | Honors Calclulus I | 3 |
| PHY 160 | University Physics I | 1 |
| PHY 160L | University Physics Laboratory I | 4 |
| APS 111 | Applied Science Seminar | 4 |
| CSC 260 | Computer Programming II | 1 |
| MTH 251H | Honors Calculus II | 0 |
| XXX XXX | Social Science Elective | 3 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 3 |
| CSC 260L | Computer Programming II Laboratory | 4 |
|  | Credits | 1 |


| Second Year |  | 1 |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 0 |
| APS 210 | Applied Science Seminar | 3 |
| CSC 268 | Computer Organization | 4 |
| MTH 252 | Calculus III (**Take the Honors section**) | 3 |
| ENG 101H | Honors College English I | 3 |
| CSC 275 | Fundamentals of Cybersecurity | 3 |
| CHM 221 | General Chemistry I | 1 |
| CHM 221L | General Chemistry I Laboratory | 0 |
| APS 211 | Applied Science Seminar | 3 |
| CSC 295 | Java Applications Programming | 4 |
| MTH 371 | Discrete Mathematical Structures | 3 |
| ENG 102H | Honors College English II | 3 |
| XXX XXX | Computer Science Elective (300 level or |  |
|  | Above) | $\mathbf{3 1}$ |

## Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| CSC 292 | Unix and C Programming | 3 |


| CSC 361 | Survey of Programming Languages | 3 |
| :--- | :--- | ---: |
| MTH 351 | Probability \& Statistics I | 3 |
| XXX XXX | Foreign Language Elective | 3 |
| ENG 285H | Honors Public Speaking | 3 |
| APS 311 | Applied Science Seminar | 0 |
| CSC 372 | Data Structures | 3 |
| CSC 380 | Software Engneerng | 3 |
| XXX XXX | Free Elective | 2 |
| ENG 303 | Professional \& Technical Writing | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
|  | Credits | $\mathbf{2 9}$ |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| CSC 430 | Data Communications | 3 |
| CSC 464 | Operating Systems | 3 |
| CSC 498 | Computer Science Seminar I | 2 |
| CSC 313 | Network Administration | 3 |
| XXX XXX | Humanities Cultural Elective | 3 |
| APS 411 | Applied Science Seminar | 0 |
| CSC 468 | Computer Architecture | 3 |
| CSC 499 | Computer Science Seminar II | 2 |
| CSC 494 | Digital Forensics | 3 |
| CSC 449 | Cryptography and Network Security | 3 |
| XXX XXX | Social Science Cultural Elective | 3 |
|  | Credits | $\mathbf{2 8}$ |
|  | Total Credits | $\mathbf{1 2 0}$ |
|  |  |  |

## Bachelor of Science in Electrical and Electronics Engineering - (DNIMAS) Track

| Summary of Graduation Requirements |  |  |
| :--- | :--- | :--- |
| Subject Area | Credits |  |
| General Education Core (p. 41) | 40 |  |
| Major Requirements | 54 |  |
| Electives | 24 |  |
| Other Requirements | 15 |  |
| Total Credit Hours | 133 |  |
| Curriculum  Credits |  |  |


| First Year |  |  |
| :--- | :--- | :--- |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 0 |
| EEN 100 | Introduction to Engineering | 3 |
| EEN 102 | Eng Use Computers | 3 |
| ENG 101H | Honors College English I | 3 |
| ENG 102H | Honors College English II | 3 |
| MTH 184H | Honors Calclulus I | 4 |
| MTH 251H | Honors Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | $\mathbf{3 3}$ |


| Second Year |  |  |
| :--- | :--- | ---: |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 223A | General Chemistry I | 4 |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 201L | Electrical Network Theory I | 1 |
| EEN 202 | Electrical Network Theory II | 3 |
| EEN 202L | Electrical Network Theory II Laboratory | 1 |
| EEE 231 | Digital Logic Design | 3 |
| EEN 211 | Material Science \& Engineering,Material | 3 |
|  | Science |  |
| HED 100 | Personal and Community Health | 2 |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| ENG 285H | Honors Public Speaking | 3 |
| XXX XXX | Humanities Elective | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 35 |

## Third Year

APS 310
Applied Science Seminar

| APS 311 | Applied Science Seminar | 0 |
| :---: | :---: | :---: |
| EEN 301 | Engineering Electronics I,Electronic Devices | 3 |
| EEN 301L | Electronic Devices Laboratory | 1 |
| EEN 302 | Microelectronics,Engineering Electronics II | 3 |
| EEN 302L | Microelectronics Laboratory | 1 |
| EEN 305 | Signals and Systems | 3 |
| EEN 321 | Electromagnetic Field Theory | 3 |
| EEN 331 | Microprocessors | 3 |
| EEN 331L | Microprocessor Lab | 1 |
| EEN 333 | Digital Integrated Circuits | 3 |
| EEN 333L | Ditigal Integrated Circuits Laboratory | 1 |
| EEN 351 | Communications Engineering I | 3 |
| MTH 300 | Linear Algebra | 3 |
| XXX XXX | Humanities Elective | 3 |
|  | Credits | 31 |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| APS 411 | Applied Science Seminar | 0 |
| EEN 401 | Electronics Engineering Seminar | 1 |
| EEN 311 | Engineering Economics | 3 |
| EEN 471 | Control Systems | 3 |
| EEN 498 | Sr Project I | 3 |
| EEN 499 | Sr Project II | 3 |
| XXX XXX | Cultural Elective | 3 |
| XXX XXX | Engineering Elective | 3 |
| XXX XXX | Social Science Elective | 6 |
| XXX XXX | Technical Elective | 3 |
| XXX XXX | Unrestrictive Elective | 3 |
|  | Credits | 31 |
|  | Total Credits | 30 |

The Technical Elective may be chosen from 300 level or above courses in math, computer science, chemistry, physics or engineering.

## Bachelor of Science in Mathematics Applied Mathematics (DNIMAS) Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 65 |
| Electives | 15 |
| Other Requirements | 0 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |  |
| :--- | :--- | :--- |
| Course | Title | Credits |


| First Year |  | 0 |
| :--- | :--- | :--- |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 1 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222L | General Chemistry II Laboratory | 4 |
| CHM 223A | General Chemistry I | 4 |
| CHM 224A | General Chemistry II | 3 |
| CSC 169 | Introduction to Computer Science | 3 |
| CSC 200 | Advanced Computer Concepts | 3 |
| ENG 101H | Honors College English I | 3 |
| ENG 102H | Honors College English II | 2 |
| HED 100 | Personal and Community Health | 4 |
| MTH 184H | Honors Calclulus I | 4 |
| MTH 251H | Honors Calculus II | 1 |
| PED 100 | Fundametals of Fitness for Life | 2 |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 35 |


| Second Year |  |  |
| :--- | :--- | :---: |
| APS 210 | Applied Science Seminar | 0 |
| APS 211 | Applied Science Seminar | 0 |
| MTH 252 | Calculus III | 4 |
| MTH 300 | Linear Algebra | 3 |
| MTH 372 | Differential Equations | 3 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| XXX XXX | Foreign Language Electives | 6 |
| XXX XXX | Free Electives | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 30 |

## Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 311 | Applied Science Seminar | 0 |
| ENG 303 | Professional \& Technical Writing | 3 |
| MTH 351 | Probability \& Statistics I | 3 |
| MTH 352 | Probability \& Statistics II | 3 |
| MTH 273 | Mathematical Foundations | 3 |
| MTH 473 | Real Analysis | 3 |


| ENG 285H | Honors Public Speaking | 3 |
| :---: | :--- | ---: |
| XXX XXX | Mathematics Elective | 3 |
| MTH 311 | Modern Geometry I (or Higher) |  |
| XXX XXX | Mathematics Elective | 3 |
| MTH 431 | Abstract Algebra (or Higher) | 3 |
| XXX XXX | Social Sciences Elective | $\mathbf{2 7}$ |

## Fourth Year

| APS 410 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 411 | Applied Science Seminar | 0 |

MTH 382 Introduction to Applied Mathematics 3
MTH 401 Numeric Analysis I 3
MTH $402 \quad$ Numeric Analysis II 3
MTH 484 Topics in Applied Mathematics 3
MTH 496 Mathematics Seminar I 2
MTH 497 Mathematics Seminar II 2
XXX XXX Free Electives 3
XXX XXX Mathematics Electives 6

| MTH 431 | Abstract Algebra (or Higher) |  |
| :---: | :--- | :--- |
| XXX XXX | Social Science Elective | 3 |


| Credits | 28 |
| :--- | ---: | ---: |
| Total Credits | 120 |

## Bachelor of Science in Optical Engineering - (DNIMAS) Track

| Summary of Graduation Requirements <br> Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 54 |
| Electives | 24 |
| Other Requirements | 15 |
| Total Credit Hours | $\mathbf{1 3 3}$ |


| Curriculum <br> Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 0 |
| EEN 100 | Introduction to Engineering | 3 |
| EEN 102 | Eng Use Computers | 3 |
| ENG 101H | Honors College English I | 3 |
| ENG 102H | Honors College English II | 3 |
| MTH 184H | Honors Calclulus I | 4 |
| MTH 251H | Honors Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | 1 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
|  | Credits | 33 |

Second Year

| APS 210 | Applied Science Seminar | 0 |
| :--- | :--- | ---: |
| APS 211 | Applied Science Seminar | 0 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 223A | General Chemistry I | 4 |
| EEE 201 | Electrical Network Theory I | 3 |
| EEE 201L | Electrical Network Theory I | 1 |
| EEE 203 | Electronic Principles | 3 |
| EEN 211 | Material Science \& Engineering,Material | 3 |
|  | Science |  |
| HED 100 | Personal and Community Health | 2 |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| OEN 200 | Geometric \& Instr Optics | 3 |
| OEN 200L | Geometric \& Instr Optics Lab | 1 |
| OEN 201 | Physical and Instrumental Optics | 3 |
| OEN 201L | Physical and Instrumental Optics Lab | 1 |
| ENG 285H | Honors Public Speaking | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 36 |

Third Year

| APS 310 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| APS 311 | Applied Science Seminar | 0 |


| EEN 321 | Electromagnetic Field Theory | 3 |
| :--- | :--- | ---: |
| MTH 300 | Linear Algebra | 3 |
| MTH 351 | Probability \& Statistics I | 3 |
| OEN 320 | Optical Systems Analysis | 3 |
| OEN 340 | Lasers and Photonics | 3 |
| OEN 340L | Laser and Photonics Lab | 1 |
| OEN 360 | Introduction to Optical Materials | 3 |
| OEN 380 | Introduction to Quantum Optics | 3 |
| XXX XXX | Cultural Elective | 3 |
| XXX XXX | Humanities Elective | 3 |
| XXX XXX | Social Sciences Elective | 3 |
|  | Credits | $\mathbf{3 1}$ |
| Fourth Year |  |  |
| APS 410 | Applied Science Seminar | 0 |
| APS 411 | Applied Science Seminar | 0 |
| EEN 311 | Engineering Economics | 3 |
| OEN 460 | Optical Communications I | 3 |
| OEN 460L | Optical Communication I Laboratory | 1 |
| OEN 461 | Optical Communications II | 3 |
| OEN 461L | Optical Communications II Laboratory | 1 |
| OEN 490 | Senior Seminar | 1 |
| OEN 498 | Senior Project ! | 3 |
| OEN 499 | Senior Project II | 3 |
| XXX XXX | Engineering Elective | 3 |
| XXX XXX | Humanities Elective | 3 |
| XXX XXX | Social Sciences Elective | $\mathbf{3 3}$ |
| XXX XXX | Technical Elective | 3 |
| XXX XXX | Unrestrictive Elective | 3 |
|  | Credits | 3 |
|  | Total Credits | 3 |

The Technical Elective may be chosen from 300 level or above courses in math, computer science, chemistry, physics or engineering.

## Bachelor of Science in Physics (DNIMAS) Track

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 39 |
| Electives | 6 |
| Other Requirements | 35 |
| Total Credit Hours | $\mathbf{1 2 0}$ |


| Curriculum |  |  |
| :--- | :--- | :--- |
| Course | Title | Credits |


| First Year |  |  |
| :--- | :--- | :--- |
| APS 110 | Applied Science Seminar | 0 |
| APS 111 | Applied Science Seminar | 0 |
| ENG 101H | Honors College English I | 3 |
| ENG 102H | Honors College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 184H | Honors Calclulus I | 4 |
| MTH 251H | Honors Calculus II | 4 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| PHY 160 | University Physics I | 4 |
| PHY 160L | University Physics Laboratory I | 1 |
| PHY 161 | University Physics II | 4 |
| PHY 161L | University Physics Laboratory II | $\mathbf{1}$ |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | $\mathbf{2 9}$ |

## Second Year

| APS | Applied Sciences Seminar | 0 |
| :--- | :--- | :--- |
| APS | Applied Sciences Seminar | 0 |
| CSC 170 | Computer Programming I | 3 |
| ENG 299 | Writing Competency Exam | 0 |
| MTH 252 | Calculus III | 4 |
| MTH 372 | Differential Equations | 3 |
| PHY 241 | Physics Seminar | 1 |
| PHY 260 | University Physics III | 4 |
| PHY 345 | Mathematical Methods Physical Sciences I | 3 |
| PHY 350 | Modern Physics | 3 |
| ENG 285H | Honors Public Speaking | 3 |
| XXX XXX | Humanities Elective | 3 |
| XXX XXX | Computer Science Elective | 3 |
| SEM 201 | Spartan Seminar 201 | 1 |
|  | Credits | 31 |

Third Year

| APS 310/311 | Applied Science Seminar | 0 |
| :--- | :--- | :--- |
| PHY 351 | Modern Physics | 2 |
| CHM 221L | General Chemistry I Laboratory | 1 |
| CHM 222L | General Chemistry II Laboratory | 1 |
| CHM 223A | General Chemistry I | 4 |
| CHM 224A | General Chemistry II | 4 |
| PHY 365 | Physical Mechanics | 3 |


| PHY 366 | Physical Mechanics | 3 |
| :--- | :--- | ---: |
| PHY 375 | Electricity and Magnetism I | 3 |
| PHY 380 | Quantum Mechanics I | 3 |
| PHY 399 | Advanced Laboratory | 2 |
| PHY 445 | Mathematical Methods for Physical | 3 |
|  | Sciences II | 3 |
| XXX XXX | Social Science Elective | $\mathbf{3 2}$ |
|  | Credits | 0 |
| Fourth Year |  | 0 |
| APS 410 | Applied Science Seminar | 3 |
| APS 411 | Applied Science Seminar | 3 |
| PHY 356 | Heat and Thermodynamics | 3 |
| PHY 468 | Optics | 3 |
| PHY 475 | Electricity and Magnetism II | 2 |
| PHY 480 | Quantum Mechanics II | 2 |
| PHY 498 | Sr Project I | 6 |
| PHY 499 | Sr Project II | 6 |
| XXX XXX | Free Electives | $\mathbf{3}$ |
| XXX XXX | Cultural Elective | $\mathbf{2 8}$ |
|  | Credits | $\mathbf{1 2 0}$ |

## Technology

Dr. Jeenson Sheen
Department Chair
(757) 823-8057

The Department offers degrees in the following program areas:

- Architectural Drafting Technology;
- Computer Engineering Technology;
- Construction Management Engineering Technology; and
- Electronics Engineering Technology.

All of the Technology programs are accredited by:
The Association of Technology, Management, and Applied Engineering
(ATMAE)
486 Cornell Road
Blairsville, PA 15717
Office Phone: (919) 635-8335
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 and government. The Department commits to the responsibility of preparing students in quality industrial technology programs. Accordingly, the department commits, through its academic programs to fostering within students an intrinsic feeling of self-worth that allows them to be the best persons possible, as well as the best technologists.

## Technology Programs

- Associate of Science in Architectural Drafting (p. 218)
- Bachelor of Science in Computer Engineering Technology (p. 219)
- Bachelor of Science in Construction Management Engineering Technology (p. 220)
- Bachelor of Science in Electronics Engineering Technology (p. 222)


## Associate of Science in Architectural Drafting

The Architectural Drafting curriculum is designed to provide students with a technical education that will prepare them to work as semiprofessionals immediately upon completion of the program. Graduates may fill such typical positions as architectural draftsman, mechanical draftsman, civil draftsman, technical representative, technical draft person, or CAD operator.

## Summary of Graduation Requirements

| Subject Area | Credits |  |
| :--- | :--- | :--- |
| General Education Core (p. 41) | 28 |  |
| Major Requirements | 33 |  |
| Electives | 0 |  |
| Other Requirements 6 <br> Total Credit Hours 67 <br> Curriculum  <br> Course Title |  |  |


| First Year |  |  |
| :--- | :--- | :--- |
| CMET 140 | Introduction to Construction Management | 1 |
| CMET 162 | Materials of Construction | 3 |
| CMET 262 | Methods of Building Construction I | 3 |
| CMET 262L | Construction Methods Lab | 1 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 151 | College Algebra | 3 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| TMD 150 | Engineering Graphics | 3 |
| TMD 151 | Introduction to Cad | 3 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | $\mathbf{3 4}$ |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| CMET 260 | Building Codes and Specifications | 3 |
| CMET 263 | Fundamentals of Surveying | 3 |
| CMET 263L | Fundamentals of Surveying Lab | 1 |
| CMET 265 | Architectural Details | 3 |
| CMET 266 | Architectural Drafting | 3 |
| IMT 205 | Industrial Safety \& Management | 3 |
| Select one Humanities Electives of the following: | 3 |  |


| HUM 210 | Humanties |  |
| :--- | :--- | :--- |
| HUM 211 | Humanities |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| ENG 207 | Introduction to World Literature | 3 |
| PHY 152 | General Physics | 1 |
| PHY 152L | General Physics Laboratory I | 3 |
| TMD 225 | Mechanics I: Statics |  |

TMD 251 Advanced Cad 3
Select one of the following Social Science Electives:

| HIS XXX |  |  |
| :--- | :--- | :--- |
| SOC 101 | Introduction to the Social Sciences |  |
| PSY 210 | Introduction to Psychology |  |
|  | Credits | $\mathbf{3 3}$ |
|  | Total Credits | $\mathbf{6 7}$ |

## GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE IN ARCHITECTURAL DRAFTING

| Code | Title | Credits |
| :---: | :---: | :---: |
| University Foundations |  |  |
| SEM 101 | Spartan Seminar 101 | 1 |
| SEM 102 | Spartan Seminar 102 | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| Communications |  |  |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| Health and Physical Education |  |  |
| PED 100 | Fundametals of Fitness for Life | 1 |
| HED 100 | Personal and Community Health | 2 |
| Natural Sciences |  |  |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| Digital, Computer \& Telecommunications |  |  |
| CSC 150 | Computer Literacy | 3 |
| Mathematics |  |  |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| Social Sciences |  |  |
| Select one of the following: |  | 3 |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| PSY 210 | Introduction to Psychology |  |
| SOC 101 | Introduction to the Social Sciences |  |
| ECN 200 | Basic Principles of Economics |  |
| Humanties Elective |  |  |
| Select one of the following: |  | 3 |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| ENG 207 | Introduction to World Literature |  |
| Total Credits |  | 28 |

## Bachelor of Science in Computer Engineering Technology

The Computer Engineering Technology program prepares graduates for careers in maintaining, manufacturing, integration, and support of computer systems. Emphasis is placed on job skills required of professionals in the computer industry; including wireless systems, electronic interfacing, networking, digital communications, oral and written communication, and management principles.

## Summary of Graduation Requirements

\section*{| Subject Area |
| :--- |
| General Educ |
| Major Requir |
| Electives |
| Other Require |
| Total Credit |
| Curriculum |}


| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| IMT 170 | Introduction to Technology | 1 |
| EET 111 | Circuit Analysis I | 4 |
| \& 111L | and Circuit Analysis I Laboratory |  |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| ENG 101 | College English I | 3 |
| HED 100 | Personal and Community Health | 2 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 | 4 |
| EET 212 | Circuit Analysis II |  |
| \& 212L | and Circuit Analysis II Laboratory | 4 |
| CSC 170 | Computer Programming I <br> \& 170L | and Computer Programming Laboratory I |

## Second Year

| EET 213 | Electronic Devices I <br> \& 213L | and Electronic Devices I Laboratory |
| :--- | :--- | ---: |
| EET 220 | Digital Electronics <br> and Digital Electronics Laboratory | 4 |
| IMT 244 | Industrial Specification \& Technical <br> Documentation | 3 |
| PHY 152 | General Physics <br> and General Physics Laboratory I | 4 |
| \& 152L | Spartan Seminar 201 | 4 |
| SEM 201 | Electronic Devices II <br> EET 313 | 1 |
| \& 313L | and Electronic Devices II Laboratory | 4 |
| CET 304 | Digital System Design <br> and Digital Systems Design Laboratory | 4 |
| \& 304L | General Physics <br> PHY 153 | and General Physics Laboratory II |
| ENG 285 | Public Speaking | 4 |
|  | Credits | 3 |

## Third Year

| $\begin{aligned} & \text { CET } 305 \\ & \& 305 \mathrm{~L} \end{aligned}$ | Computer Organization and Computer Organization Laboratory | 4 |
| :---: | :---: | :---: |
| IMT 205 | Industrial Safety \& Management | 3 |
| MTH 250 | Elementary Statistics Concepts | 3 |
| Select one of the following Social Science Electives: |  | 3 |
| SOC 101 | Introduction to the Social Sciences |  |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| HIS 103 | United States History Since 1865 |  |
| BUS 175 | Introduction to Business \& Entrepreneurship |  |
| PSY 210 | Introduction to Psychology |  |
| ECN 200 | Basic Principles of Economics |  |
| XXX XXX | Humanities Elective |  |
| HUM 210 | Humanties |  |
| HUM 211 | Humanities |  |
| FIA 201 | Basic Art Appreciation | 3 |
| ENG 207 | Introduction to World Literature |  |
| MUS 301 | Music Appreciation |  |
| $\begin{aligned} & \text { CET } 315 \\ & \& 315 \mathrm{~L} \end{aligned}$ | Microprocessors and Microprocessor Laboratory | 4 |
| $\begin{aligned} & \text { CET } 336 \\ & \& 336 \mathrm{~L} \end{aligned}$ | Computer Networks Technology and Computer Networks Technology I Laboratory | 4 |
| TMD 151 | Introduction to Cad | 3 |
| XXX XXX | Elective | 3 |
| Any Foreign language |  |  |
|  | Credits | 30 |

## Fourth Year

CET 432 Computer Interfaces \& Peripheral Devices 4
\& 432L and Computer Interfaces Laboratory
CET 436 Computer Networks Technology II 4
\& 436L and Computer Networks Technology II
Laboratory
EET 413 Digital Communications Systems 4

\& 413L $\quad$| and Digital Communications Systems |
| :--- |
| Laboratory |

EET 497L Sr Project A: a Capstone Experience 1
IMT 413 Project Management 3
EET 498L Sr Project B: a Capstone Experience 1
IMT $445 \quad$ Statistical Quality Control 3
Select one of the following Cultural Humanities Electives: 3
$\left.\begin{array}{|lll}\hline \text { ENG 383 } & \begin{array}{l}\text { African-American Literature, 1940- } \\ \text { PRESENT }\end{array} \\ \hline \text { FIA 370 } & \text { African/Afro-American Art } \\ \hline \text { MUS 234 } & \text { African-American Music }\end{array}\right]$ 3

PSY 340
Psychology of the African-American

| XXX XXX: Elective | 2 |
| :--- | ---: |
| Credits | $\mathbf{2 8}$ |
| Total Credits | $\mathbf{1 2 0}$ |

## Bachelor of Science in Construction Management Engineering Technology

The Construction Management Engineering Technology program provides a sound background in principles and practices of residential and commercial construction. Courses of instruction include methods and materials of construction, building codes and specifications, architectural and computer-aided drafting, surveying, cost estimates, and computer principles. Students also take courses in statics, strength of materials, and steel structures. Management courses include construction scheduling, organization and supervision of construction, labor and industrial relations, and legal environment of business. Minimum grade requirement of " C " for all courses required for matriculation.

## Summary of Graduation Requirements

| Subject Area | Credits |
| :--- | :--- |
| General Education Core (p. 41) | 40 |
| Major Requirements | 52 |
| Electives | 6 |
| Other Requirements | 23 |
| Total Credit Hours | $\mathbf{1 2 1}$ |

## Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| CMET 140 | Introduction to Construction Management | 1 |
| CMET 162 | Materials of Construction | 3 |
| CSC 150 | Computer Literacy | 3 |
| ENG 101 | College English I | 3 |
| ENG 102 | College English II | 3 |
| HED 100 | Personal and Community Health | 2 |
| MTH 151 | College Algebra | 3 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| TMD 150 | Engineering Graphics | 3 |
| TMD 151 | Introduction to Cad | 3 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
|  | Credits |  |


| Second Year |  |  |
| :--- | :--- | :--- |
| SEM 201 | Spartan Seminar 201 | 1 |
| CMET 260 | Building Codes and Specifications | 3 |
| CMET 262 | Methods of Building Construction I | 3 |
| CMET 262L | Construction Methods Lab | 1 |
| CMET 263 | Fundamentals of Surveying | 3 |
| CMET 263L | Fundamentals of Surveying Lab | 1 |
| CMET 265 | Architectural Details | 3 |
| CMET 266 | Architectural Drafting | 3 |
| TMD 225 | Mechanics I: Statics | 3 |
| IMT 244 | Industrial Specification \& Technical | 3 |
|  | Documentation |  |
| MTH 184 | Calculus I | 4 |
| PHY 152 | General Physics | 3 |


| PHY 152L | General Physics Laboratory I | 1 | XXX XXX | Elective | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credits | 32 |  | Credits | 27 |
| Third Year |  |  |  | Total Credits | 121 |
| CMET 363 | Methods of Building Construction II | 3 |  |  |  |
| CMET 364 | Steel Structures | 3 |  |  |  |
| CMET 370 | Cost Estimates and Quality Control I | 3 |  |  |  |
| BUS 281 | Legal Environment for Business | 3 |  |  |  |
| CHM 210 | General Chemistry for Engineers | 3 |  |  |  |
| ENG 285 | Public Speaking | 3 |  |  |  |
| IMT 205 | Industrial Safety \& Management | 3 |  |  |  |
| TMD 345 | Mechanics Ii: Strength of Materials | 3 |  |  |  |
| TMD 345L | Mechanics II Laboratory: Properties of Materials | 1 |  |  |  |
| Select one of the following Social Science Electives: |  | 3 |  |  |  |
| HIS |  |  |  |  |  |
| PSY 210 | Introduction to Psychology |  |  |  |  |
| SOC XXX |  |  |  |  |  |
| ECN XXX |  |  |  |  |  |
| Select one of the following Technical Electives: |  | 3 |  |  |  |
| TMD 251 | Advanced Cad |  |  |  |  |
| IMT 303 | Internship in Technology |  |  |  |  |
| CMET 3XX |  |  |  |  |  |
| XXX-XXX | Elective | 1 |  |  |  |
|  | Credits | 32 |  |  |  |
| Fourth Year |  |  |  |  |  |
| CMET 376 | Soil Mechanics | 3 |  |  |  |
| CMET 462 | Problem Analysis and Planning | 3 |  |  |  |
| CMET 464 | Organization and Supervision of Construction | 3 |  |  |  |
| CMET 466 | Construction Management Capstone (Capstone) | 3 |  |  |  |
| IMT 420 | Labor \& Industrial Relations | 3 |  |  |  |
| Select one of the following Cultural Social Science Electives: |  | 3 |  |  |  |
| HIS 335 | African-American History |  |  |  |  |
| HIS 336 | African-American History Since 1865 |  |  |  |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |  |  |  |
| SOC 237 | Racial \& Ethnic Minorities |  |  |  |  |
| POS 315 | African American Politics |  |  |  |  |
| PSY 340 | Psychology of the African-American |  |  |  |  |
| Select one of the following Humanities Electives: |  | 3 |  |  |  |
| FIA 201 | Basic Art Appreciation |  |  |  |  |
| HUM 210 | Humanties |  |  |  |  |
| HUM 211 | Humanities |  |  |  |  |
| HUM XXX |  |  |  |  |  |
| MUS 301 | Music Appreciation |  |  |  |  |
| Foreign language |  |  |  |  |  |
| ENG 207 | Introduction to World Literature |  |  |  |  |
| Select one of the following Cultural Humanities Electives: |  | 3 |  |  |  |
| ENG 383 | African-American Literature, 1940PRESENT |  |  |  |  |
| FIA 370 | African/Afro-American Art |  |  |  |  |
| MUS 234 | African-American Music |  |  |  |  |

## Bachelor of Science in Electronics Engineering Technology

The Electronics Engineering Technology program is designed to provide graduates with technical-management competencies needed for professional careers in science, technology, education and management. These careers often require a thorough understanding of electronic instrumentation, industrial controls, and communications.

## Summary of Graduation Requirements

| Subject Area | Credits |  |
| :--- | :--- | :--- | :--- |
| General Education Core (p. 41) | 40 |  |
| Major Requirements | 45 |  |
| Electives | 7 |  |
| Other Requirements | 28 |  |
| Total Credit Hours | $\mathbf{1 2 0}$ |  |
| Curriculum <br> Course$\quad$ Title |  | Credits |


| First Year |  |  |
| :--- | :--- | ---: |
| IMT 170 | Introduction to Technology | 1 |
| EET 111 | Circuit Analysis I | 3 |
| EET 111L | Circuit Analysis I Laboratory | 1 |
| MTH 153 | College Algebra \& Trigonometry | 3 |
| ENG 101 | College English I | 3 |
| HED 100 | Personal and Community Health | 2 |
| SEM 101 | Spartan Seminar 101 | 2 |
| \& SEM 102 | and Spartan Seminar 102 |  |
| EET 212 | Circuit Analysis II | 3 |
| EET 212L | Circuit Analysis II Laboratory | 1 |
| MTH 184 | Calculus I | 4 |
| ENG 102 | College English II | 3 |
| SOC XXX | Social Science Elective | 3 |
|  | Credits | $\mathbf{2 9}$ |


| Second Year |  |  |
| :--- | :--- | ---: |
| EET 213 | Electronic Devices I | 3 |
| EET 213L | Electronic Devices I Laboratory | 1 |
| EET 220 | Digital Electronics | 3 |
| EET 220L | Digital Electronics Laboratory | 1 |
| IMT 244 | Industrial Specification \& Technical |  |
|  | Documentation | 3 |
| PHY 152 | General Physics | 3 |
| PHY 152L | General Physics Laboratory I | 1 |
| SEM 201 | Spartan Seminar 201 | 1 |
| EET 313 | Electronic Devices II | 3 |
| ELT 313L | Electronic Devices II Laboratory,Elect | 1 |
| CET 304 | Devices II Lab | Digital System Design |
| CET 304L | Digital Systems Design Laboratory | 3 |
| PHY 153 | General Physics | 1 |
| PHY 153L | General Physics Laboratory II | 3 |
| CSC 170 | Computer Programming I | 1 |


| CSC 170L | Computer Programming Laboratory I | 1 |
| :---: | :---: | :---: |
|  | Credits | 32 |
| Third Year |  |  |
| CET 305 | Computer Organization | 4 |
| \& 305L | and Computer Organization Laboratory |  |
| IMT 205 | Industrial Safety \& Management | 3 |
| TMD 151 | Introduction to Cad | 3 |
| MTH 250 | Elementary Statistics Concepts | 3 |
| ENG 285 | Public Speaking | 3 |
| PED 100 | Fundametals of Fitness for Life | 1 |
| EET 314 | Instrumentation Measurement \& Control | 3 |
| EET 315 | Analog Communication Systems | 3 |
| EET 315L | Analog Communication Systems Laboratory | 1 |
| CET 315 | Microprocessors | 4 |
| \& 315L | and Microprocessor Laboratory |  |
| CET 336 | Computer Networks Technology | 3 |
| CET 336L | Computer Networks Technology I Laboratory | 1 |
|  | Credits | 32 |
| Fourth Year |  |  |
| EET 413 | Digital Communications Systems | 3 |
| EET 413L | Digital Communications Systems Laboratory | 1 |
| EET 497L | Sr Project A: a Capstone Experience | 1 |
| IMT 413 | Project Management | 3 |
| Select one of the following Cultural Social Science Electives: |  | 3 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| SOC 237 | Racial \& Ethnic Minorities |  |
| POS 315 | African American Politics |  |
| PSY 340 | Psychology of the African-American |  |
| Select one of the following Humanities Electives: |  | 3 |
| HUM XXX |  |  |
| FIA 201 | Basic Art Appreciation |  |
| MUS 301 | Music Appreciation |  |
| EET 498L | Sr Project B: a Capstone Experience | 1 |
| IMT 445 | Statistical Quality Control | 3 |
| Select one of the following Cultural Perspectives Electives: |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| FIA 370 | African/Afro-American Art |  |
| MUS 234 | African-American Music |  |
| XXX XXX | Electives | 6 |
|  | Credits | 27 |
|  | Total Credits | 20 |

## SCHOOL OF SOCIAL WORK

Dr. Elizabeth Dungee-Anderson, Dean
(757) 823-8668

Dr. Kirsten S. Ericksen, Associate Dean
(757) 823-8296

The Ethelyn R. Strong School of Social Work at Norfolk State University was established in 1960 with the founding of the Baccalaureate Social Work (BSW) program. It's Master of Social Work (MSW) degree and Doctor of Philosophy in Social Work (Ph.D.) degree programs were added in 1974, and 1995, respectively. Thus, the School, along with its Continuing Education Program, offers the full continuum of social work education.

The School's mission is to provide social work education programs which prepare students with competence to develop and deliver services which strengthen and empower individuals, families, and communities. The School and its programs emphasize the values of social justice, social responsibility, and respect for human rights, dignity, and diversity. The School is especially committed to addressing the strengths and challenges for an ethnically and culturally diverse client population in an evolving global community.

## Accreditation

The School of Social Work's Baccalaureate of Social Work and Master of Social Work Programs are accredited by the Council on Social Work Education (CSWE).

## Organization of the School

The School is administered by the Dean. The Associate Dean is responsible for administrative matters. The BSW Program Director is responsible for the BSW Program Curriculum. The MSW Program Director is responsible for the MSW Program Curriculum. The Director of the Ph.D. Program is responsible for the Ph.D. Program.

## Admission Requirements

BSW applicants must meet University requirements for admission. After completing the first two years of pre-social work course requirements, students may apply to the Professional Program for the BSW degree. The formal application process and requirements for admission to the professional phase of the Social Work Program are as follows:

1. The student must have completed the first two years of basic core requirements and pre-social work requirements, and maintain a minimum cumulative grade point average of 2.0 on the 4.0 scale (an overall average of $C$ or better).
2. The student must complete and submit all Professional Program application materials to the Director of the Baccalaureate Social Work Program.
3. The student must complete or be enrolled in ENG 299 Writing Competency Exam.
4. Continued matriculation at the professional level of the Baccalaureate Social Work Program requires that the student:
a. Maintain an overall G.P.A. of 2.0 or better.
b. Maintain an average of 2.5 G.P.A. in social work courses.
c. Must have earned a grade of C or better in social work courses and designated courses as specified in the Social Work curriculum.
d. Complete the degree requirements in accordance with the University Catalog and School of Social Work Field Manual.

## School of Social Work Programs

- Baccalaureate in Social Work (p. 224)


# Baccalaureate in Social Work 

Dr. Kirsten S. Ericksen

Baccalaureate Program Director (I)
(757) 823-8464

Email: Tylane@nsu.edu
The Baccalaureate Social Work (BSW) 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 generalist level of social work practice. Specific criteria are, therefore, established for admission to and continued enrollment in the professional program.

## BSW Program Mission

The Baccalaureate Social Work Program prepares students who are capable of delivering social work services at the foundational level using a generalist practice approach that reflects multi-level systems. The program empowers students to address social injustices, with an emphasis on cultural diversity, critical thinking, and human rights.

## Goals

The goals of the BSW Program are:

1. To prepare the student for employment as a generalist professional social work practitioner utilizing a generalist approach.
2. To prepare the student to work with diverse populations with a particular commitment to the affirmation of the unique diversity of ethnically and culturally diverse populations.
3. To prepare students to deliver direct services that strengthen and empower individuals, families, groups, organizations, and communities.
4. To prepare students to master the core competencies as explicated in the Educational Policy and Accreditation Standards 2015, Council on Social Work Education (CSWE), at the beginning professional level.

| Summary of Graduation Requirements |  |
| :--- | :--- |
| Subject Area | Credits |
| General Education Core (p. 41) | 40 |
| Major Requirements | 51 |
| Other Requirements | 29 |
| Total Credit Hours | $\mathbf{1 2 0}$ |

## Curriculum

Pre-Social Work Requirements

| Course | Title | Credits |
| :--- | :--- | ---: |
| First Year |  |  |
| SEM 101 | Spartan Seminar 101 |  |
| \& SEM 102 | and Spartan Seminar 102 | 2 |
| BIO 105 | Human Biology |  |
| \& 105L | and Human Biology $^{1}$ | 4 |
| CSC 150 | Computer Literacy $^{1}$ | 4 |
| ENG 101 | College English I $^{1}$ | 3 |
| ENG 102 | College English II $^{1}$ | 3 |
| HED 100 | Personal and Community Health | 3 |


| MTH 103 | Mathematics in General Education | 3 |
| :---: | :---: | :---: |
| PED 100 | Fundametals of Fitness for Life | 1 |
| Select one of the following: |  | 3 |
| HIS 100 | History of World Societies I |  |
| HIS 101 | History of World Societies II |  |
| HIS 102 | United States History to 1865 |  |
| HIS 103 | United States History Since 1865 |  |
| PSY 210 | Introduction to Psychology ${ }^{1}$ | 3 |
| SOC 101 | Introduction to the Social Sciences | 3 |
| XXX XXX | Restrictive Elective ${ }^{2}$ | 2 |
|  | Credits | 32 |
| Second Year |  |  |
| SEM 201 | Spartan Seminar 201 | 1 |
| ECN 200 | Basic Principles of Economics | 3 |
| HUM 210 | Humanties ${ }^{3}$ | 3 |
| $\begin{aligned} & \text { POS } 231 \\ & \quad \text { or POS } 100 \end{aligned}$ | American State and Local Government or American National Government | 3 |
| PSY 280 | Abnormal Psychology ${ }^{1}$ | 3 |
| ENG 285 | Public Speaking | 3 |
| SWK 200 | Introduction to Social Work | 3 |
| SWK 207 | Social Welfare Policies \& Services I | 3 |
| SWK 220 | Human Behavior \& Social Environment | 3 |
| SCI 101 | Physical Science for Non-Science Majors | 3 |
| XXX XXX | Optional Elective | 3 |
|  | Credits | 31 |
|  | Total Credits | 63 |

Minimum Grade of C required in all Social Work courses and those with ${ }^{1}$ beside them.
2 Logic, Philosophy, Problem Solving Cluster (i.e. SOC 230 Social Problems)
FIA 201 Basic Art Appreciation or MUS 301 Music Appreciation, ENG 207 Introduction to World Literature

## Professional Social Work Requirements

| Course | Title | Credits |
| :---: | :---: | :---: |
| Third Year |  |  |
| $\begin{aligned} & \text { SOC } 331 \\ & \quad \text { or PSY } 250 \end{aligned}$ | Social Psychology or Social Psychology | 3 |
| SOC 344 | Methods of Social Research ${ }^{1}$ | 3 |
| SOC 355 | Elementary Social Statistics,Social Statistics | 3 |
| SWK 300 | Social Welfare Policies \& Services II | 3 |
| SWK 309 | Human Behavior \& Social Environment II | 3 |
| SWK 312 | Inroduction to Generalist Practice | 3 |
| SWK 313 | Generalist Practice: Individuals/Families | 3 |
| SWK 319 | Human Behavior \& the Social Environment III | 3 |
| SWK XXX | Social Work Elective | 3 |
| Select one of the following Cultural Perspectives (Social Sciences): |  | 3 |
| HIS 335 | African-American History |  |
| HIS 336 | African-American History Since 1865 |  |


| HIS 370 | Early African History and Cultures, From the Beginning of Humankind to 1600 |  |
| :---: | :---: | :---: |
| HIS 371 | Modern African History \& Cultures 1600PRESENT |  |
| JRN 299 | Multiculturalism and Mass Media |  |
| PSY 340 | Psychology of the African-American |  |
| SOC 237 | Racial \& Ethnic Minorities |  |
| POS 315 | African American Politics |  |
|  | Credits | 30 |
| Fourth Year |  |  |
| SWK 318 | Generalist Practice: Groups, Organizations \& Communities | 3 |
| SWK 416 | Generalist Practice: Evaluation | 3 |
| SWK 490 | Practicum Seminar I | 1 |
| SWK 491 | Practicum Seminar II | 1 |
| SWK 495 | Practicum in Social Work I | 5 |
| SWK 496 | Practicum in Social Work II | 5 |
| SWK 498A | Bsw Field Practicum Orientation I | 0 |
| SWK 498B | Bsw Field Practicum Orientation II | 0 |
| Select one of the following Social Work Electives (RestrictedAdvanced Policy): |  | 3 |
| SWK 411 | Contemporary Social Policy Issues |  |
| SWK 497 | MacRo \& Micro Perspectives on International Social Welfare |  |
| XXX XXX | Social Work Elective | 3 |
| Select one of the following Cultural Perspectives (Humanities): |  | 3 |
| ENG 383 | African-American Literature, 1940PRESENT |  |
| FIA 370 | African/Afro-American Art |  |
| MUS 234 | African-American Music |  |
|  | Credits | 27 |
|  | Total Credits | 57 |

1 Minimum Grade of C required in all Social Work courses and those with ${ }^{1}$ beside them.
*****Restrictive Elective (Natural Sciences) - CHM 100 Man/Environment, PHY 100 Physical Science, SCI 101 Physical Science for Non-Science Majors, Astronomy, Geology, Oceanograhy, Meteorology

## COURSE DESCRIPTIONS

## A

- Academic Engagement Seminar (SEM) (https://catalog.nsu.edu/ undergraduate/course-descriptions/sem/)
- Accounting (ACC) (p. 228)
- Arabic (ARA) (https://catalog.nsu.edu/undergraduate/coursedescriptions/ara/)
- Astronmy (AST) (p. 229)


## B

- Biology (BIO) (p. 229)
- Business (BUS) (p. 232)


## C

- Chemistry (CHM) (p. 235)
- Chinese (CHI) (https://catalog.nsu.edu/undergraduate/coursedescriptions/chi/)
- Communication Sciences and Disorder (CSD) (p. 239)
- Computer Engineering Technology (CET) (p. 240)
- Computer Literacy - Music (CLM) (p. 240)
- Computer Science (CSC) (p. 241)
- Construction Management Engineering Technology (CMET) (p. 238)
- Cooperative Education (CED) (p. 244)
- Criminal Justice (CJS) (p. 244)

D

- Drama (DRM) (p. 248)


## E

- Early Childhood Education (ECE) (p. 249)
- Early Childhood Special Education (ECS) (p. 250)
- Economics (ECN) (p. 250)
- Education (EDU) (p. 250)
- Electrical \& Electronics Engineering (EEE) (https://catalog.nsu.edu/ undergraduate/course-descriptions/eee/)
- Electronics Engineering (EEN) (p. 251)
- Electronics Engineering Technology (EET) (p. 254)
- Elementary Education (EED) (p. 255)
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## F

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## G

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- Geography (GEO) (p. 265)
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- Health Education (HED) (p. 265)
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I

- Industrial Mangagement Technology (IMT) (p. 271)
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- Intelligence Studies (INS) (https://catalog.nsu.edu/undergraduate/ course-descriptions/ins/)
- Interdisciplinary Studies (INT) (https://catalog.nsu.edu/ undergraduate/course-descriptions/int/)
- Japanese (JPN) (https://catalog.nsu.edu/undergraduate/coursedescriptions/jpn/)
- Journalism (JRN) (p. 272)


## K

- Korean (KOR) (https://catalog.nsu.edu/undergraduate/coursedescriptions/kor/)


## M

- Management Information Systems (MIS) (https://catalog.nsu.edu/ undergraduate/course-descriptions/mis/)
- Management/Decision Sciences (MGT) (https://catalog.nsu.edu/ undergraduate/course-descriptions/mgt/)
- Marketing (MKG) (https://catalog.nsu.edu/undergraduate/coursedescriptions/mkg/)
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Course descriptions are notated with the following abbreviations and are listed on the following pages in alphabetical order.

| Code | Subject |
| :--- | :--- |
| ACC | Accounting |
| ARA | Arabic |
| AST | Astronomy |
| BIO | Biology |
| BCT | Building Construction Technology |
| BUS | Business Administration |
| CHM | Chemistry |
| CHI | Chinese |
| CSD | Communication Sciences and |
|  | Disorders |
| CIT | Computer Information Technology |
| CSC | Computer Science |
| CED | Cooperative Education |
| CJS | Criminal Justice |
| DSC | Decision Sciences |
| TMD | Design Technology Mechanical |
| DRM | Drama |
| ECN | Economics |
| EDU | Education |
| EEE | Electrical and Electronics |
|  | Engineering |


| ELT | Electronics Technology |
| :---: | :---: |
| EED/ECE | Elementary Education |
| ECS | Elementary Special Education |
| ENG | English |
| EXS | Exercise Science |
| FDM | Fashion Design |
| FNC | Finance |
| FIA | Fine Arts |
| FSN | Food Science Nutrition |
| FRN | French |
| GST/UNI | General Studies |
| GEO | Geography |
| GRM | German |
| HED | Health Education |
| HIM | Health Information Management |
| HRP | Health Related Professions |
| HRS | Health Rehabilitation Services |
| HSM | Health Services Management |
| HIS | History |
| HUM | Humanities |
| IED | Industrial Education |
| IMT | Industrial Management Technology |
| INS | Intelligence Studies |
| INT | Interdisciplinary Studies |
| JPN | Japanese |
| JRN | Journalism |
| KOR | Korean |
| LAT | Latin |
| LOG | Logic |
| MGT | Management |
| MIS | Management Information Systems |
| ITM | Manufacturing Technology |
| MKG | Marketing |
| MCM | Mass Communications |
| MTH | Mathematics |
| MDT | Medical Technology |
| MSL | Military Science |
| MUS | Music |
| NSC | Naval Science |
| NUR | Nursing |
| OEN | Optical Engineering |
| PED | Physical Education |
| PHY | Physics |
| POS | Political Science |
| PSY | Psychology |
| REL | Religion |
| SED | Secondary Education and Leadership |
| SWK | Social Work |
| SOC | Sociology |
| SPN | Spanish |
| SPE | Special Education |


| SCM | Speech Communication |
| :--- | :--- |
| SEM | Spartan Seminar |
| SWA | Swahili |
| DRM | Theatre |
| HRM | Tourism and Hospitality |
|  | Management |
| URP | Urban Planning |

## Variation Code

| Code | Title |
| :--- | :--- |
| SS | Summer School Only |
| FO | Fall Semester Only |
| SO | Spring Semester Only |
| E | Each Semester including Summer |
| EE | Each Semester excluding Summer |
| FS | Fall and Summer Semesters Only |
| SI | Sufficient Student Interest |
| SU | Spring and Summer Semesters |
| O | Offered Every Other Year |

## Accounting (ACC)

## ACC 201 Principles of Financial Accounting (3 Credits)

Study of the fundamental principles and concepts of accounting used in the preparation of financial statements. Emphasis on service and merchandising companies.

ACC 201H Honors Principles of Financial Accounting (3 Credits)
Study of the fundamental principles and concepts of accounting used in the preparation of financial statements. Emphasis on service and merchandising companies.
ACC 202 Introduction to Managerial Accounting (3 Credits) Continuation of ACC 201. Emphasis on accounting for partnerships and corporations, long term debt, analysis of financial statements, statement of cash flows, and introductions to management accounting.

## ACC 301 Intermediate Accounting I (3 Credits)

Rigorous study of the methodology and underlying theory of financial accounting. In-depth analysis of valuation alternatives and their effect on income measurement.

## ACC 301H Honors Intermediate Accounting I (3 Credits)

Rigorous study of the methodology and underlying theory of financial accounting. In-depth analysis of valuation alternatives and their effect on income measurement.
ACC 302 Intermediate Accounting II (3 Credits)
Continuation of ACC 301. In-depth study of the accounting theory and principles surrounding the valuation of accounts in the financial statement.

## ACC 302H Honors Intermediate Accounting II (3 Credits)

Continuation of ACC 301. In-depth study of the accounting theory and principles surrounding the valuation of accounts in the financial statement.

ACC 315 Federal Income Tax I (3 Credits)
Study of the basic concepts of federal income taxation and related reporting requirements. Emphasis on the taxation of individuals.

ACC 316 Federal Income Tax II (3 Credits)
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.

## ACC 325 Introduction to Managerial Accounting (3 Credits)

Focuses on the uses of accounting information in , industry,government, and not-for-profit org., 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).
ACC 330 Accounting Systems (3 Credits)
Study of the analysis, design, and implementation of computerized accounting systems. Emphasis on internal control and reporting. Design issues will be explored through an integrated computerized accounting system.
ACC 361 Financial Statement Analysis (3 Credits)
Study of the methods and tools of analysis, and interpretation of financial statements., Emphasis on financial analysis techniques.
ACC 411 Intermediate Accounting III (3 Credits)
Continuation of ACC 302. Emphasis on the accounting literature and the concepts of accounting theory.

## ACC 412 Advanced Accountng II (3 Credits)

Accounting for partnerships, home offices,branches, combinations, and consolidations.Emphasis on foreign currency translationand other aspects of international accounting.
ACC 412H Honors Advanced Accountng II (3 Credits)
Accounting for partnerships, home offices,branches, combinations, and consolidations.Emphasis on foreign currency translationand other aspects of international accounting.

## ACC 413 Cost Accounting (3 Credits)

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.

## ACC 414 Auditing (3 Credits)

Rigorous study of the examination of financial statements by independent auditors within the framework of generally accepted accounting principles using generally accepted auditing standards.
ACC 418 Governmental \& Not-For-Profit Accounting (3 Credits)
Theory and application of accounting within governmental and non for profit organizations including fund allocations.

ACC 418H Honors Governmental \& Not-For-Profit Accounting (3 Credits) Theory and application of accounting within governmental and non for profit organizations including fund allocations.

ACC 420 Selected Topics in Accounting (3 Credits)
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.

## Astronmy (AST)

## AST 201 General Astronomy (3 Credits)

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.

## AST 301 Methods in Observational Astronomy (3 Credits)

This course teaches the observational techniques of optical astronomy at an intermediate level. 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 and planets. Astrography, Photometry and spectrography using CCD cameras.

## AST 302 Astrobiology (3 Credits)

Study of the 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 extra-terrestrial life.

## AST 303 Introduction to Astrophysics (3 Credits)

Overview of physical fundamentals of astrophysics. Introduction to modern physics: special relativity quantum mechanics, nuclear physics and statistical mechanics. Covers the context of practical application into introductory astrophysics topics. Instructional methods will include lectures, multi-media presentations and exercises.
AST 401 Stellar Astrophysics (3 Credits)
This course presents an overview of the physics of stars. It will cover stellar structure, evolution and nucleosynthesis, with strong emphasis in the underlying fundamental physics. In that sense, it will review many topics covered by undergraduate basic physics courses from the viewpoint of astrophysical applications. By the end of the course, students will be able to write a simple numerical simulation of a star.

## Biology (BIO)

## BIO 100 Biological Science (3 Credits)

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.

BIO 100H Honors Biological Science (3 Credits)
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.

## BIO 100L Biological Science Lab (1 Credits)

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.

## BIO 105 Human Biology (3 Credits)

Survey of the structure and function of the human body and the human life cycle with particular focus on reproduction, growth, and development.

## BIO 105L Human Biology (1 Credits)

Laboratory includes dissection of preserved animals/structures, models and microscopic observations, slide/videotapes, computer-simulated dissections and experiments, and hands-on experiments.

## BIO 110 General Biology (3 Credits)

Survey of basic concepts and principles with emphasis at the molecular and cellular levelsof biological systems. Includes contemporary genetics, metabolism, and organ systems of representative plants and animals.

## BIO 110H Honors General Biology (3 Credits)

Survey of basic concepts and principles with emphasis at the molecular and cellular levelsof biological systems. Includes contemporary genetics, metabolism, and organ systems of representative plants and animals.

## BIO 110L General Biology Laboratory (1 Credits)

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.
BIO 111 General Biology II (3 Credits)
The course is a comprehensive survey of basic biological concepts and principles with emphasis at the organismal level of biological systems. While kingdom organisms are included, plant/animal structure and function, human anatomy/physiology (human organ systems), and ecosystems are also emphasized.

## BIO 111L General Biology II Laboratory (1 Credits)

The second part of an introductory laboratory course for science majors designed as a hands-on study of the organismal level of biological systems. Experimental topics in the course include the structure and function of prokaryotes, plants, and animals. The scientific method is emphasized as students collect, analyze, and discuss data relevance to each topic.

## BIO 160L Gen Zoology Lab (1 Credits)

Biological concepts of animal life, including, morphology, taxonomy, life histories, reproduction, and distribution.
BIO 161 General Botany (3 Credits)
Introductory study of the basic principles of , botany, including comparative studies on , morphology, physiology, genetics,, ecology, and economic uses of major plants.

## BIO 163 Microbiology for the Health Sciences (3 Credits)

General survey of microorganisms that cause human diseases. The mechanisms of body defense and immunity to infectious agents are discussed.
BIO 163L Microbiology for the Health Sciences Laboratory (1 Credits) Study of culture methods, microscopic sterilization, and aseptic techniques.

## BIO 165 Human Anatomy and Physiology (3 Credits)

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.
BIO 165L Human Anatomy and Physiology Laboratory (1 Credits) Emphasis on teaching aids such as computed managed instructions and hands-on experience with animal tissues.
BIO 166 Human Anatomy and Physiology (3 Credits)
One-year course consisting of an integrated study of the structure and function of the human body; BIO 166 presents lecture topics on the structure and function of organs and organ systems. (Must be taken in sequence with BIO 165).
BIO 166L Human Anatomy and Physiology Laboratory (1 Credits)
Emphasis on teaching aids such as computed managed instructions and hands-on experience with animal tissues.
BIO 253 Human Physiology (3 Credits)
Survey of the integration of functions, in the human body, noting their structural , relationships

## BIO 260 Integrative Zoology (3 Credits)

Biological concepts of animal life, including morphology, taxonomy, life histories, reproduction and distribution.

## BIO 260L Integrative Zoology Laboratory (1 Credits)

Biological concepts of animal life, including morphology, taxonomy, life histories, reproduction and distribution.
BIO 261 General Botany (3 Credits)
Introductory study of the basic principles of botany, including
comparative studies on morphology, physiology, genetics, ecology, and economic uses of major plants.

## BIO 261L General Botany Laboratory (1 Credits)

Introductory study of the basic principles of botany, including comparative studies on morphology, physiology, genetics, ecology, and economic uses of major plants.
BIO 263 Vertebrate Embryology (3 Credits)
Study of the mechanics of development, including the origin of gametes, fertilization, organogenesis, and morphogenesis of early development of the frog, chick, pig, and man.

## BIO 263L Vertebrate Embryology Lab (1 Credits)

Laboratory study of the mechanics of development including the origin of gametes, fertilization organogenesis, and morphogenesis of early development of the frog, chick, pig, and man.

## BIO 264 Concepts of Developmental Biology (3 Credits)

Study of the principles of development exemplified, by experimental studies in model organisms, including invertebrates, vertebrates, and plants. , Examines common themes pre-birth, and continued, development and regeneration post-birth.
BIO 264L Concepts of Developmental Biology Labor (1 Credits) Laboratory study of the principles of development, using experimental studies in model organisms, including invertebrates, vertebrates, and plants, to examine embryonic, post-embryonic and, regenerative processes.
BIO 270 Comparative Vertebrate Anatomy and Physiology (3 Credits) Study of the classification, morphology, and anatomy of vertebrates, including the functions of their organs and organ systems.

## BIO 270L Comparative Vertebrate Anatomy \& Physiology Laboratory (1

 Credits)Study of the classification, morphology, and anatomy of vertebrates, including the functions of their organs and organ systems.

## BIO 271 Ecology (3 Credits)

Composition and distribution of biotic communities emphasizing interrelationships of organisms and their physical environment with application to current environmental problems.

## BIO 271H Honors Ecology (3 Credits)

Composition and distribution of biotic communities emphasizing interrelationships of organisms and their physical environment with application to current environmental problems.

## BIO 271L Ecology Laboratory (1 Credits)

Composition and distribution of biotic communities emphasizing interrelationships of organisms and their physical environment with application to current environmental problems.

## BIO 272 Human Anatomy (3 Credits)

Study of the basic structure of organs and organ systems of the body.
BIO 272L Human Anatomy Laboratory (1 Credits)
Study of the basic structure of organs and organ systems of the body.

## BIO 274 Plant Morphology (3 Credits)

Comparative survey of typical representatives of, the plant kingdom with description of form, and structure, reproductive processes (normal life, cycles), and phylogenetic relationships, , of the principal plant groups.

## BIO 274L Plant Morphol Lab (1 Credits)

Laboratory focuses on comparative surveys, of typical representatives of the plant kingdom, with description of form and structure, , reproductive processes (normal life cycles), , and phylogenetic relationships of the principal, plant groups

## BIO 278 Cell Biology (3 Credits)

Study of intracellular mechanisms and the influence of such processes on the cell and its extracellular environment.
BIO 278H Honors Cell Biology (3 Credits)
Study of intracellular mechanisms and the influence of such processes on the cell and its extracellular environment.

## BIO 278L Cell Biology Laboratory (1 Credits)

Study of intracellular mechanisms and the influence of such processes on the cell and its extracellular environment.

## BIO 310 General Microbiology (3 Credits)

Introduction to the microbes, including bacteria, molds, yeasts, and viruses. Investigation of fundamental concepts of microorganisms, including nutrition, ecology, and physiology; principlesof sterilization and methods of control of microorganisms; their economic importance.

## BIO 310L General Microbiology Laboratory (1 Credits)

Introduction to the microbes, including bacteria, molds, yeasts, and viruses. Investigation of fundamental concepts of microorganisms, including nutrition, ecology, and physiology; principlesof sterilization and methods of control of microorganisms; their economic importance.

## BIO 320 Pathophysiology (3 Credits)

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 studyof the adaptive capacity of the human body.

## BIO 350 Parasitology ( 3 Credits)

Study of symbiotic relationships between representatives that are dependent upon asymbiont and the clinical and pathological implications inherent in such a relationship.

## BIO 350L Parasitology Laboratory (1 Credits)

Inquiry-based application of the clinical and pathological implications of inherent relationships established between symbionts.

## BIO 351 Principles of Genetics (3 Credits)

Introductory course dealing with the principles of heredity and variation in plants and animals, including man.

## BIO 351H Principls Genetics - Honors (3 Credits)

Introductory course dealing with the principles, of heredity and variation in plants and animals, , including man
BIO 351L Principles of Genetics Laboratory (1 Credits)
Introductory genetic labs are designed to provide exercises that deal with the principles of heredity and variation in plants and animals, including man.

## BIO 362 Histology and Microtechnique (3 Credits)

Study of the structure and properties of cells the cellular relationships to the main type of tissues and histology of organs; the principles and methods of preparation of plant and animal tissues; and some techniques in histochemistry.
BIO 362L Histology \& Microtechnique Laboratory (1 Credits)
Study of the structure and properties of cells; the cellular relationships to the main type of tissues and histology of organs; the principles and methods of preparation of plant and animal tissues; and some techniques in histochemistry.

## BIO 364 Seminar and Colloquium in Biology (1 Credits)

Consideration of current research and development in biology, including reviews, reports, and discussions of investigations reported in scientific journals.

## BIO 400 Forensic Molecular Biology (3 Credits)

Designed to provide students with the scientific, background and hands-on experience on the molecula, 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.

## BIO 400L Forensic Molecular Biology LB (1 Credits)

Experiment of DNA forensic tests on current, protocols and procedures, including DNA isolation, various sample sources, gel electroresis, PCR, STR, analysis and data interpretation
BIO 452 Biological Instrumental Techniques (2 Credits)
Training and practice in various bio instrumental , techniques, including statistical analysis of , data, respirometry, photo microscopy,, spectrophotometry, chromatography,, electrophoresis, and physiological measurements.

## BIO 459 General Physiology (3 Credits)

Discusses fundamental principles and properties of physiological processes common to animals.

## BIO 459L General Physiology Laboratory (1 Credits)

Demonstrates fundamental principles and properties of physiological processes common to animals.

## BIO 461 Plant Physiology (4 Credits)

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.

## BIO 461H Honors Plant Physiology (4 Credits)

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.

## BIO 461L Plant Physiology Laboratory (0 Credits)

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.

## BIO 469 Biochemistry (3 Credits)

Biochemical analysis of cellular function and consideration of the implications of the properties of cells, including the cell and its organization, protein structure and specificity; biochemistry of lipids, carbohydrates, and nucleic acids; regulation of cell metabolism; cellular basis of hormonecation; and biochemical aspects of synthesis.

## BIO 469L Biochemistry Laboratory (1 Credits)

Designed to analyze biochemical properties of protein structure and specificity; biochemistryof lipids, carbohydrates, and nucleic acids; regulation of cell metabolism; cellular basis of hormonecation; and biochemical aspects of synthesis.

## BIO 474 Molecular Biology (3 Credits)

Introduction to the basic techniques in Recombiant DNA which encompasses the principles and practical aspects of molecular techniques through discussions, demonstrations, and hands on experience, covering isolation of DNA restriction of endonuclease digestion, gel-electrophoresis, transformation of competent cells nick translation, southern and northern blots and DNA sequencing.

## BIO 474L Molecular Biology Laboratory (2 Credits)

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 of endonuclease digestion, gel-electrophoresis, nick translation, southern and northern blots, and DNA sequencing.
BIO 482 Epidemiology (3 Credits)
Basic principles and methods of epidemiology, and the application to communicable and non-, communicable diseases, community health, and , health services research. Reviews oberservational, and experienmental study design; methods and data, analysis; and various indices of assessing , morbidity, mortality and population dynamics

## BIO 484 Cytogenetics (4 Credits)

This course is designed to provide students with , hands on experience in standard cytogenetics, and molecular cytogenetics. Laboratory exercises, will include cell preparations for cytological , analysis, sister chromatid exchange, chromosomal, preparations for Karyotypic analysis using, standard binding techniques.

## BIO 485 Immunology (3 Credits)

General properties of immune responses; cells and tissues of immune system; lymphocyte activation and specificity; effector mechanisms; immunity to microbes; immunodeficiency and aids; autoimmune diseases; transplantation.

## BIO 492 Genetic Toxicology (4 Credits)

General principles of toxicology as they relate, to adverse genetic effects of environmental agents, Basic mechanism of action, including the molecular, and chemical basis for mutagenic effects. , Techniques for the detection and characterization, of chmical mutagen will be included in the , laboratory demonstrations.

## BIO 495 Biostatistics (3 Credits)

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 experienmental and observation studies.

## BIO 496 Spe Prob in Toxic (4 Credits)

Discussion and practical work sessions concerning, the development of ideas and activities for, specific experienmental studies. The specific, features include conversance with current, methodology, initiation of independent and , original protocols as a toxicological tool.

## BIO 497 Introduction to Research (2 Credits)

Introduction to independent experimental work under the guidance of staff members. Provisions for Honors and undergraduate research participation projects and investigations.

BIO 499 Tissue and Cell Culture (4 Credits)
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.

## Business (BUS)

BUS 175 Introduction to Business \& Entrepreneurship (3 Credits) 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 inter-departments and business functional areas.

## BUS 175H Honors Introduction to Business \& Entrepreneurship (3 Credits)

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 inter-departments and business functional areas.

## BUS 270 Business Statistics (3 Credits)

Methods of collecting, tabulating, graphing, and interpreting statistical data, measures of central tendency and variability. Elementary probability with emphasis on binomial and normal distributions, sampling methods, estimating and hypotheses testing.

## BUS 270H Honors Business Statistics (3 Credits)

Methods of collecting, tabulating, graphing, and interpreting statistical data, measures of central tendency and variability. Elementary probability with emphasis on binomial and normal distributions, sampling methods, estimating and hypotheses testing.

## BUS 281 Legal Environment for Business (3 Credits)

Survey of the Anglo-American legal system, the American court system, criminal law, tort law, contracts, property law, the law governing business organizations, and governmental regulation of business. Emphasis on the legal, ethical, social, and political environment in which business and government operate.

## BUS 284 Advanced Microcomputing (3 Credits)

Exploration of complex spreadsheet problems, sensitivity analysis, and the use of database management systems within microcomputer software.

## BUS 284H Honors Advanced Microcomputing (3 Credits)

Exploration of complex spreadsheet problems, sensitivity analysis, and the use of database management systems within microcomputer software.

## BUS 300 Internship (3 Credits)

Supervised work experience in an approved business environment. Students will submit a proposed work plan at the start of the experience and a paper detailing the experience after its completion.

BUS 304H Information Systems Analysis and Design (3 Credits) Introduction concepts and methods used in the, analysis and design of business information, systems. Opportunity to study the SDLC phases, through group projects and CASE tools such as, Visible Analyst.
BUS 310 Risk Management (3 Credits)
Introduction to the theory of insurance, types of personal and business coverage, and the analysis of business risks and riskbearing from the standpoint of risk reaction, risk reduction, risk elimination, and risk evaluation. Emphasis on the fundamental unifying elements of risk and insurance.

BUS 330 Business Communication (3 Credits)
Techniques for writing management- oriented internal and external communications. Emphasis on theory, planning, oral and written presentations, audience perceptions, data organization, media selection, preparation techniques for business letters, and an overview of reports. Includes handson experience with the Internet and presentation software.

## BUS 330H Honors Business Communication (3 Credits)

Techniques for writing management- oriented internal and external communications. Emphasis on theory, planning, oral and written presentations, audience perceptions, data organization, media selection, preparation techniques for business letters, and an overview of reports. Includes handson experience with the Internet and presentation software.

## BUS 350 The Ethics of Management (3 Credits)

This course will focus on issues and perspectives of right and wrong in American business. Students will survey various philosophical approaches, values, moral reasoning, and social responsibility to determine ethical behavior and morality. These approaches will be applies to real world cases drawn from the various functional area or business.

BUS 360 Corporate Finance (3 Credits)
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 funds available including short-term and long-term, internal and external analysis of the firm's capital structure, and alternative longterm financing sources and techniques. Analysis of the ethics involved in various areas of finance and international finance topics.

## BUS 360H Honors Corporate Finance (3 Credits)

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 funds available including short-term and long-term, internal and external analysis of the firm's capital structure, and alternative longterm financing sources and techniques. Analysis of the ethics involved in various areas of finance and international finance topics.

## BUS 362 Investments (3 Credits)

Introduction to investment analysis which analyzes the various types of business and public securities and portfolio management concepts, including international diversification. Study of the process by which a growing small business can issue stock and other securities to the public.

## BUS 363 Financial Institutions (3 Credits)

Fundamentals of financial institutions with emphasis on the actual operations and business of commercial banks, mutual savings banks, savings and loan associations, credit unions and other financial institutions.

## BUS 365 Organizational Behavior \& Theory (3 Credits)

Study of organizational behavior and the various social unitsincluding individuals, groups, and group of groups-that constitute organizations. Exploration of relevant theories of the relations 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.

BUS 365H Honors Organizational Behavior \& Theory (3 Credits)
Study of organizational behavior and the various social unitsincluding individuals, groups, and group of groups-that constitute organizations. Exploration of relevant theories of the relations 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.
BUS 366 Principles of Marketing (3 Credits)
Survey of the field of marketing, concentrating on the marketing mix. Significant emphasis on the relationship between marketing activities and the consumer, the ethical and international aspects of marketing in entrepreneurial and corporate environments.
BUS 366H Priniciples of Marketing (3 Credits)
Survey of the field of marketing, concentrating on the marketing mix. Significant emphasis on the relationship between marketing activities and the consumer, the ethical and international aspects of marketing in entrepreneurial and corporate environments.
BUS 367 Consumer Behavior ( 3 Credits)
Study of customer characteristics needed to write an effective marketing plan. Emphasis on both the household customer and organizational customers in relation to positioning, promotion, and marketing strategy.

## BUS 368 Human Resources Management (3 Credits)

Focus on administering change within organizations through the training and developing of human resources. Experiential activities enhance the development of leadership skill in the training process.

## BUS 370 Total Quality Management (3 Credits)

Introduction to quality management in manufacturing and service organizations with emphasis on the evolution of quality movement worldwide, TQM and "Quality First" Paradigms. 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 organizations, especially those that won the MBNQA.
BUS 374 Programming in Visual Basic (3 Credits)
Study of Visual Basic development, language syntax, and programming in an event-driven environment.
BUS 375 Management Information Systems \& E-Commerce (3 Credits)
Study of functional information systems, e-commerce concepts, and ethical issues in MIS and E-commerce.
BUS 375H Honors Management Information Systems \& E-Commerce (3 Credits)
Study of functional information systems, e-commerce concepts, and ethical issues in MIS and E-commerce.
BUS 376 Statistics \& Quantitative Methods (3 Credits) Introduction to regression techniques and analysis of variance 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.
BUS 376H Honors Statistics \& Quantitative Methods (3 Credits) Introduction to regression techniques and analysis of variance 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.

BUS 382 Commercial Law (3 Credits)
Introduction to commercial law with emphasis, on sales of goods, credit, secured transactions, affecting both real estate and personal property,, negotiable instruments, rules of bankruptcy,, negotiable documents of title, legal aspects of, the bidding process, and liability of accounts, to clients and non-clients.

## BUS 385 Web 2 Applications (3 Credits)

This course will introduce students to emerging technology. Emphasis will be placed on evolving technologies and trends for information systems. Students will have the opportunity to review and evaluate emerging tools, applications, and media that underlie these emerging technologies. More specifically, the concepts of Web 2.0 and Web 3.0 will be discussed. Many of the technologies that make up Web 2.0, including but limited to, social networking and media sharing sites, blogging, vlogging, podcasting, video podcasting, internet broadcasting, wiki technology, tagging, mashups, RSS feeds, folksonomies, enhanced webbased multimedia, etc., and what is on the horizon for Web 3.0 and 4.0 will be evaluated.

## BUS 386 New Venture Finance (3 Credits)

In -depth analysis of the process of funding an entrepreneurial venture with a critical examination of the decisions and alternatives on 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.
BUS 387 Introduction to Entrepreneurship (3 Credits)
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.

## BUS 387H Honors Introduction to Entreprenuership (3 Credits)

 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.BUS 390 Business Database Management (3 Credits)
Introduction to the design and development of database systems. Exploration of the database enviroment; relational aspects of the database theory; structured query language features of SQL server.
BUS 390H Honors Business Database Management (3 Credits) Introduction to the design and development of database systems. Exploration of the database enviroment; relational aspects of the database theory; structured query language features of SQL server.
BUS 391 Introduction to Data Analytics \& Big Data (3 Credits)
This course introduces students to the different data analytics techniques and tools available to solve real-world problems. In addition, the students will learn about the characteristics of big data and software tools available.
BUS 395 Intro to Personal Financial Planning (3 Credits)
Contact the department for specific course information

BUS 396 Introduction to Blockchain: Foundations (3 Credits) One must have a thorough understanding of the, blockchain technology before applying it to a, business project. This course studies the, essential components of blockchain, its, applications, and potential values and risks. By, the end of this course, students will understand, the basics of blockchain, the use cases of the, blockchain applications, such as Bitcoin,, Ethereum, and Hyperledger in various business, domains, the current state of blockchain, and its, issues, limitations and potential solutions.

## BUS 400 Independent Study (3 Credits)

Supervised independent project designed to explore a single topic in a one-to-one learning relationship with a faculty member.

## BUS 410 Leadership \& Diversity in Management (3 Credits)

Focus on how individuals and organizations can effectively, efficiently, and productively adapt to the challenges of diversity in the workforce and in the customer base.

## BUS 411 Salesmanship (3 Credits)

Study of the principles and techniques of personal selling and sales presentations including sales policies and the problems involved.

## BUS 412 Marketing Management (3 Credits)

Study of the organization and management of marketing with emphasis on strategic decision- making for entrepreneurs and corporate entrepreneurs.

## BUS 413 Principles of Retailing (3 Credits)

Provide a basic understanding of the challenges and opportunities involved in the operations of retail business. Major areas of discussion include types of retail institutions, retail locations management, international retailing and the legal and ethical aspects of operating retail business.
BUS 414 Advertising (3 Credits)
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.

## BUS 415 International Management (3 Credits)

Study of current technologies for designing and developing web based e-business applications. Topics include Active Server Pages, Scripting Languages, database integration, and others.

## BUS 416 International Marketing (3 Credits)

Analysis of marketing principles relating to international marketing organizations, marketing channels, channels of distribution, selling, and pricing.

## BUS 417 International Business (3 Credits)

Analysis of the operations and managerial, strategies of various type of businesses in the, international setting. Emphasis on the, socio-cultural, economic, competitive,, political-legal and ethical issues that business, and government leaders mus face in dealing with, international business problems.
BUS 418 Internet Marketing (3 Credits)
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.

## BUS 419 Networking (3 Credits)

Introduction to current networking technology. Exploration of OSI reference model, basic network designs, network components, network architectures, network operations, network administration and support, network hardware and software installation, and NT Server installation and configuration. Extensive hands-on training provided.

BUS 420 Organizational Change \& Development (3 Credits)
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.
BUS 420H Honors Organizational Change \& Development (3 Credits)
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.
BUS 421 Web Application Development for E-Business (3 Credits) Study of current technologies for designing and developing web based e-business applications.Topics include Active Server Pages, ScriptingLanguages, database integration, and others.

BUS 422 International Marketing (3 Credits)
Study of the economic, social, and psychological characteristics of various target markets 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.

## BUS 423 Decision Support \& Expert Systems (3 Credits)

Study of decision support systems and data mining concepts and techniques. Application tools include MS Excel VBA, RapidMiner, and Python.

## BUS 430 Retirement Planning (3 Credits)

A study of the personal and employee-sponsored, retirement plans, and the selection of available, options to achieve the client's retirement goals.
BUS 431 Information Systems Analysis and Design (3 Credits)
Introduction concepts and methods used in the analysis and design of business information systems. Opportunity to study the SDLC phases through group projects and CASE tools such as Visible Analyst.
BUS 431H Honors Info Systems Analysis and Design (3 Credits) Introduction concepts and methods used in the, analysis and design of business information, systems. Opportunity to study the SDLC phases, through group projects and CASE tools such as, Visible Analyst.

## BUS 435 Compensation (3 Credits)

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.

## BUS 440 Taxes and Estate Planning (3 Credits)

A study of the legal, tax, financial and, non-financial aspects of the estate planning, process, covering topics such as: trusts, wills,, probate, advanced directives, charitable giving,, wealth transfers, and related taxes.

## BUS 465 Small Business Management (3 Credits)

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 entrepreneurs and small business management through classroom work.

BUS 469 Entrepreneurship-In-Residence (3 Credits)
The Entrepreneur-in-Residence Program is an integrative seniorlevel applied experience. The EIRP enables students to serve as consultants to prospective entrepreneurs as well as to actual forand not-forprofit businesses. In the case of the former, students assist hopeful entrepreneurs as they perform market research, develop comprehensive business plans, investigate sources for financing, and establish their new ventures. In the latter instance, guided by clients' senior executives and NSU faculty, EIRP students develop solutions to today's complex business problems and present their recommendations to management.

## BUS 474 Intermediate Financial Management (3 Credits)

This course builds on and reinforces concepts that were introduced in FNC 360. Among the topics covered are risk measurement and management, capital market theory, capital budgeting, valuation, capital structure theory, and divided policy. This course concentrates on quantitative techniques and financial theory and integrates the discussion of globalization and ethics throughout the course.

## BUS 476 Operations Management (3 Credits)

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.

## BUS 476H Honors Operations Management (3 Credits)

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.

## BUS 477 Franchising (3 Credits)

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.

## BUS 478 Strategic Management (3 Credits)

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.

## BUS 478H Honors Strategic Management (3 Credits)

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.
BUS 484 Creativity Innovation and Change Management (3 Credits) Foundation for creating or finding new business opportunities, technologies or processes. Study of market research, competitive intelligence, and managing change, with emphasis on evaluation, planning, and leadership while distinguishing between need or idea and the opportunity

## BUS 488 International Finance (3 Credits)

Analysis of the international monetary system and multi-national firms. Evaluation of the environment of direct foreign investments with emphasis on capital budgeting, working capital management, and sources and instruments of international fund remittances.

BUS 488H Honors International Finance (3 Credits)
Analysis of the international monetary system and multi-national firms. Evaluation of the environment of direct foreign investments with emphasis on capital budgeting, working capital management, and sources and instruments of international fund remittances.
BUS 491 Data Analytics \& Visualization (3 Credits)
Students will apply data analytics and visualization techniques using Excel VBA, Pivot tables, Power Pivot, and Tableau.

BUS 492 Business Intelligence (3 Credits)
This course covers advanced business intelligence applications. Students will apply a variety of software tools to build descriptive, predictive, and prescriptive models.
BUS 493 Special Topics in Business (3 Credits)
Examination of trends and emerging issues in dynamic and globalized business world.
BUS 497 Marketing Research (3 Credits)
Focus on problem definition (opportunity analysis) and data analysis techniques and strategies as applicable to small business owners.
BUS 499 Cases in Financial Management (3 Credits)
This is a capstone course for finance majors and is designed to integrate all the material offered under the finance curriculum and reinforce material learned in previous courses. The course uses lectures, class discussion, and case analysis to allow students to synthesize previous course work. Students will work in teams to analyze problems using current technology to resolve financial issues in corporate financial management.
BUS 499H Honors Cases in Financial Management (3 Credits)
This is a capstone course for finance majors and is designed to integrate all the material offered under the finance curriculum and reinforce material learned in previous courses. The course uses lectures, class discussion, and case analysis to allow students to synthesize previous course work. Students will work in teams to analyze problems using current technology to resolve financial issues in corporate financial management.

## Chemistry (CHM)

CHM 100 Man/Environment (3 Credits)

Contact the department for specific course information
CHM 100L Chemistry: Man \& Environment Laboratory (1 Credits) Introduction to Laboratory Techniques in Chemistry.

## CHM 110 Basic Chemistry (3 Credits)

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.
CHM 119 General Chemistry I (3 Credits)
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).

CHM 119L General Chemistry Laboratory (1 Credits)
Study of the basic laboratory methodology, in the form of experiments which relate to , technology and daily experiences. Must be taken, in sequence.

## CHM 120 Gen Chemistry II (3 Credits)

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).

## CHM 120L General Chemistry II Laboratory (1 Credits)

Study of the basic laboratory methodology in the , form of experiments which relate to technology, and daily experiences. Must be taken in sequence.

## CHM 210 General Chemistry for Engineers (3 Credits)

General Chemistry for Engineering Majors, emphasizing theoretical principles necessary for an understanding of the nature of matter and the physical and chemical changes which it undergoes. A good understanding of algebra is needed becauseof the problem solving nature of much of the work.

## CHM 215 Chemistry I (3 Credits)

Study of the main concepts of general, organic, and biological chemistry. Designed for health science students whose curricula require only one year of chemistry.
CHM 215L Chemistry I Laboratory (1 Credits)
Introduction to laboratory techniques in chemistry. For the Health Science/Exercise Science Majors.
CHM 216 Chemistry II (3 Credits)
Contact the department for specific course information
CHM 216L Chemistry II Lab (1 Credits)
Introduction to laboratory techniques in chemistry, For the Health Science/Exercise Science Majors.

## CHM 221 General Chemistry I (3 Credits)

Emphasis on theoretical principles necessaryfor an understanding of the nature of matter and the physical and chemical changes which it undergoes. High school chemistry not required but desirable. Good understanding of algebra desirable. Must be taken in sequence.
CHM 221H General Chemistry I Honors (3 Credits)
Emphasis on theoretical principles necessary for, an understanding of the nature of matter and the, physical and chemical changes which it undergoes. , High school chemistry not required but desirable. , Good understanding of algebra desirable. Must be, taken in sequence.

## CHM 221L General Chemistry I Laboratory (1 Credits)

Experimental chemistry utilizing methods of separation, identification, and purification of mixtures. Emphasis on thermochemical and chemical equilibrium concepts through analysis of experimental data. Must be taken in sequence.

## CHM 222 General Chemistry II (3 Credits)

Emphasis on theoretical principles necessary for an understanding of the nature of matter and the physical and chemical changes which it undergoes. High school chemistry not required but desirable. Good understanding of algebra desirable. Must be taken in sequence.

## CHM 222H General Chemistry II Honors (3 Credits)

Emphasis on theoretical principles necessary for an understanding of the nature of matter and the physical and chemical changes which it undergoes. High school chemistry not required but desirable. Good understanding of algebra desirable. Must be taken in sequence.

## CHM 222L General Chemistry II Laboratory (1 Credits)

Experimental chemistry utilizing methods of separation, identification, and purification of mixtures. Emphasis on thermochemical and chemical equilibrium concepts through analysis of experimental data. Must be taken in sequence.

## CHM 223A General Chemistry I (4 Credits)

General Chemistry for chemistry majors, emphasizing theoretical principles necessary for understanding the nature of matter and the changes it undergoes. High school chemistry or its equivalent is desirable. 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.
CHM 224 General Chemistry II (4 Credits)
General Chemistry for chemistry majors,, emphasizing theoretical principles necessary, for understanding the nature of matter and the, changes it undergoes. High school chemistry, or its equivalent is desirable. 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.

## CHM 224A General Chemistry II (4 Credits)

General Chemistry for chemistry majors, emphasizing theoretical principles necessary for understanding the nature of matter and the changes it undergoes. High school chemistry or its equivalent is desirable. 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.
CHM 231 General Chemistry I (3 Credits)
General Chemistry for chemistry 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.

## CHM 231H General Chemistry I Honors (3 Credits)

General Chemistry for chemistry 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.

## CHM 231R General Chemistry Applications I (1 Credits)

General Chemistry Applications is a two-semester, course sequence for chemistry majors. It aims to, develop in students the critical thinking skills, necessary for success in all their major courses. , Students work in facilitated learning teams,, solving problems related to General Chemistry, content.

## CHM 232 General Chemistry II (3 Credits)

General Chemistry for chemistry 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.

## CHM 232H General Chemistry II Honors (3 Credits)

General Chemistry for chemistry 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.
CHM 232R General Chemistry Applications II (1 Credits)
General Chemistry Applications is a two-semester, course sequence for chemistry majors. It aims to, develop in students the critical thinking skills, necessary for success in all their major courses. , Students work in facilitated learning teams,, solving problems related to General Chemistry, content.

## CHM 312 Organic Chemistry I (3 Credits)

Study of organic nomenclature, structure of, organic compounds, the classes of organic , compounds, and the reactions of organic molecules., A one semester organic chemistry for Health, Science Majors.

## CHM 313 Biochemistry (3 Credits)

Introduction to the structure of molecules in, biochemical systems and the reactions involved in , in their metabolism.. For Health Science Majors.

## CHM 313L Biochemistry Lab (1 Credits)

Introduction to biochemical techniques, including, spectroscopic analysis, study of enzyme activity,, and isolation and characterization of classes of, biomolecules.
CHM 321 Organic Chemistry I (3 Credits)
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 premedicine. Must be taken in sequence.
CHM 321L Organic Chemistry I Laboratory ( 2 Credits)
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.
CHM 322 Organic Chemistry II (3 Credits)
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 premedicine. Must be taken in sequence.
CHM 322L Organic Chemistry II Laboratory (2 Credits)
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.
CHM 323L Synthesis and Analysis in Organic Chemistry Laboratory (2 Credits)
Project-based course providing research-level, laboratory experience in modern organic chemistry, synthesis and analysis and the development of, literature review, and scientific presentation, skills. For chemistry majors (others by, permission of instructor).
CHM 331 Analytical Chemistry I (3 Credits)
Study of volumetric and gravimetric methods ofanalysis with emphasis on chemical equilibrium, including acid-base, precipitation, oxidationreduction, and complex metric methods of analysis.

## CHM 331L Analytical Chemistry I Laboratory (2 Credits)

Practice of volumetric and gravimetric methods of analysis, including the use of instruments such as pH meters and electroanalyzers.
CHM 332 Analytical Chemistry II (3 Credits)
Study of instrumental methods of analysis, including electrochemical, spectroscopic, chromatographic, thermal, and kinetic methods.
CHM 332L Analytical Chemistry II Laboratory (2 Credits)
Methods of analysis employing electrochemical techniques, spectrophotometer, chromatograph, microprocessor analyzers, and thermal analyzers.
CHM 345 Mathematical Methods \& Logic for the Physical Sciences (3 Credits)
Application of differential equations, vector analysis, determinants and functions to problems encountered in the physical sciences. Emphasis on practical problem-solving skills.

## CHM 351 Chemistry Seminar (1 Credits)

Presentation and discussion of current topics in all areas of chemistry. Required of junior chemistry majors.
CHM 352 Chemistry Seminar (1 Credits)
Presentation and discussion of current topics in all areas of chemistry. Required of junior chemistry majors.

## CHM 361 Physical Chemistry I (3 Credits)

Quantitative study of the structure and physical properties of matter including study of the laws governing chemical interaction and the foundations upon which these laws rests. Covers energy change accompanying physical and chemical changes. Must be taken in sequence.

## CHM 362 Physical Chemistry II (3 Credits)

Quantitative study of the structure and physical properties of matter including study of the laws governing chemical interaction and the foundations upon which these laws rests. Covers energy change accompanying physical and chemical changes. Must be taken in sequence.

## CHM 363L Physical Chemistry Laboratory (2 Credits)

Typical physicochemical measurements which seek to refine computational skills and experimental techniques. Instrumentation associated with spectroscopy, kinetics, and macromolecular characterization regularly employed.
CHM 370 Industrial Chmstry ( 3 Credits)
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.
CHM 397 Introduction to Research (1 Credits)
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.)
CHM 398 Introduction to Research (1 Credits)
Investigation of current problems in chemistry, supervised by one of the members of the ChemistryDepartment. (5 hours lab per week required for one semester credit hour.)

## CHM 431 Biochemistry I (3 Credits)

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.

## CHM 431L Biochemistry I Laboratory (2 Credits)

Emphasis on the procedures and operations of modern instrumentation used for isolation, purification, and study of biomolecules including modern chromatography techniques, gel and paper electrophoreses, ultra centrifugation, spectroscopic techniques, etc.

## CHM 432 Biochemistry II (3 Credits)

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.
CHM 432L Biochemistry II Laboratory (2 Credits)
Emphasis on the procedures and operations of modern instrumentation used for isolation, purification, and study of biomolecules including modern chromatography techniques, gel and paper electrophoreses, ultra centrifugation, spectroscopic techniques, etc.
CHM 440 Survey of Analytical \& Physical Chem (3 Credits)
A study of Analytical and physical chemical , principles to give the student a working, knowledge of these topics.

## CHM 451 Chemistry Seminar I (1 Credits)

Presentation and discussion of current topics in all areas of chemistry. Required of all senior chemistry majors.

CHM 452 Chemistry Seminar II (1 Credits)
Presentation and discussion of current topics in all areas of chemistry. Required of all senior chemistry majors.
CHM 473 Advanced Inorganic Chemistry (3 Credits)
Study of chemical bonding, molecular structure coordination compounds, and descriptive inorganic chemistry.
CHM 473H Honors Advanced Inorganic Chemistry (3 Credits)
Study of chemical bonding, molecular structure coordination compounds, and descriptive inorganic chemistry.
CHM 473L Advanced Inorganic Chemistry Lab (2 Credits)
Techniques for synthesis and characterization of transition metal coordination complexes. Utilize methods such as ion exchange chromatography, molar conductivity, electronic absorption, infrared, and nuclear magnetic resonance spectroscopy. The format is that of a unified project rather than a series of separate, unrelated experiments.
CHM 474 Applied Inorganic Chemistry (3 Credits)
The applied inorganic chemistry laboratory will, provide an introduction to the synthesis,, isolation, and characterization of inorganic and, organometallic compounds. The student will, conduct basic synthetic laboratory procedures and, utilize a variety of analytical characterization, techniques. Each student will complete a series, of structured, interconnected laboratory, experiments derived from the current literature.
CHM 474H Honors Applied Inorganic Chemistry (3 Credits) The applied inorganic chemistry laboratory will, provide an introduction to the synthesis,, isolation, and characterization of inorganic and, organometallic compounds. The student will, conduct basic synthetic laboratory procedures and, utilize a variety of analytical characterization, techniques. Each student will complete a series, of structured, interconnected laboratory, experiments derived from the current literature. , Honors students will complete a literature review, and seminar presentation to the department.
CHM 475 Advanced Organic Chemistry (3 Credits)
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.

## CHM 477 Scientific Communication (3 Credits)

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.

## CHM 478 Int Inogr Spectr'y (3 Credits)

Introduction to the basic theories of , structural methods (spectroscopy) in, Inorganic Chemistry. Topics include, Nuclear Magnetic Resonance Spectroscopy;, Electron Spin and Nuclear Quadrapole Resonance, Spectroscopy; Mossbauer Spectroscopy; Mass , Spectroscopy; and Diffraction Methods.
CHM 481 Special Topics in Chemistry (3 Credits)
Emphasis on modular topics including modern chemical bonding, stereochemistry, spectroscopy, ionization equilibrium, macromolecule, acid-basechemistry, organic and inorganic nomenclature, kinetics, advanced analytical techniques, etc.
CHM 481A Special Topics (3 Credits)
Emphasis on modular topics including modern , chemical bonding, stereochemistry, spectroscopy,, ionization equilibrium, macromolecule, acid-base, chemistry, organic and inorganic nomenclature, , kinetics, advanced analytical techniques, etc.

CHM 481B Special Topics: Atomic/Molecular Spectroscopy (3 Credits) Emphasis on modular topics including modern chemical bonding, stereochemistry, spectroscopy, ionization equilibrium, macromolecule, acid-base chemistry, organic and inorganic nomenclature, kinetics, advanced analytical techniques, etc
CHM 481C Special Topics: Organic Optoelectronic Mat (3 Credits) Emphasis on modular topics including modern chemical bonding, stereochemistry, spectroscopy, ionization equilibrium, macromolecule, acid-base chemistry, organic and inorganic nomenclature, kinetics, advanced analytical techniques, etc
CHM 482 Special Topics in Chemistry (3 Credits)
Emphasis on modular topics including modern chemical bonding, stereochemistry, spectroscopy, ionization equilibrium, macromolecule, acid-base chemistry, organic and inorganic nomenclature, kinetics, advanced analytical techniques, etc.

CHM 482A Special Topics: Molecular Dynamics (3 Credits)
Emphasis on modular topics including modern chemical bonding, stereochemistry, spectroscopy, ionization equilibrium, macromolecule, acid-base chemistry, organic and inorganic nomenclature, kinetics, advanced analytical techniques, etc
CHM 497 Introduction to Research (1 Credits)
Investigation of current problems in chemistry supervised by one of the Chemistry Department instructors. (5 hours per week).
CHM 498 Introduction to Research (1 Credits)
Investigation of current problems in chemistry supervised by one of the Chemistry Department instructors. ( 5 hours per week).

## Construction Management Engineering Technology (CMET)

CMET 140 Introduction to Construction Management (1 Credits) This course gives students an overview of, construction industry, project delivery methods,, project participants and their roles, industry, organizations and contract documents. The course, also requires students to make presentations in, class with objective to enhance public speaking, and presentation skills. The course will also, have guest speakers from industry to give students, a good understanding of current status of industry, and how to prepare for a career in construction.

## CMET 162 Materials of Construction (3 Credits)

A comprehensive study of construction materials, their characteristics, advantages, and limitations. Emphasis will be placed upon how these materials are used in various building systems, with emphasis on costs and durability.
CMET 260 Building Codes and Specifications (3 Credits)
Emphasis on regional and national building codes, history of building regulations, zoning and its influence on construction and business, including specifications and acceptance on costs and durability.

## CMET 262 Methods of Building Construction I (3 Credits)

A comprehensive study where emphasis is placed on the design, planning and methods of the 16 CSI divisions. Local and national building codes and techniques are emphasized.

CMET 262L Construction Methods Lab (1 Credits)
An introducation to construction methods and their, applications. This is a hands-on course which has, four components: construction safety,, concrete/masonry, caprentry and woodworking. , Students will learn to use math, blueprints,, building specifications, optical leveling, equipment, hand tools, portable power tools, and, stationary power tools, in a sequence of learning, activities designed for students to be able to do, and understand the work of the construction labors, and subcontractor, they will manage at the site.

## CMET 263 Fundamentals of Surveying (3 Credits)

Principles and practices of using basic surveying instruments, error analysis, and note keeping. (Meets 4 hrs. per week.)

CMET 263L Fundamentals of Surveying Lab (1 Credits)
This course is designed to teach the basic, fundamentals of surveying with in-depth hands-on, experience with land surveying equipment. It is, designed to prepare students to work as as a, member of surveying field party, including the, position of instrument man. It teaches basic, fieldwork and the office procedures required in, the construction industry.
CMET 264 Intermediate Surveying (3 Credits)
Practice of obtaining horizontal, vertical, and angular measurements; azimuths and bearing; traverse surveys and computations; triangulation of ordinary precision; stadia; land area calculation, and construction surveys. (Meets 4 hrs. per week.)
CMET 265 Architectural Details (3 Credits)
A comprehensive study of building, components for light residential construction. It covers all aspects of residential planning and design. The basic planning principles and procedures are presented in detail. Electrical and mechanical systems will be covered to include the efficient use of energy in architecture design.
CMET 266 Architectural Drafting (3 Credits)
A comprehensive study of building components for light commercial construction. It covers all aspects of residential planning and design. The basic planning principles and procedures are presented in detail. Electrical and mechanical systems will be covered to include the efficient use of energy in architecture design. (Meets 6 hrs. per week.)
CMET 363 Methods of Building Construction II (3 Credits)
Comprehensive study of building construction techniques in the construction industry. Emphasis on residential and commercial type structures. Field trips are included.
CMET 364 Steel Structures (3 Credits)
Theory and practice in the design and fabrication of structural steel in conformance with current codes and practices.
CMET 370 Cost Estimates and Quality Control I (3 Credits) 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., as well as, blueprint reading techniques.

## CMET 376 Soil Mechanics (3 Credits)

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.
CMET 462 Problem Analysis and Planning (3 Credits)
Consideration given to individual problem solving and analysis in specialized areas.

CMET 464 Organization and Supervision of Construction (3 Credits) 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.

CMET 466 Construction Management Capstone (3 Credits)
Comprehensive study of construction documents for group project, including preparation of working drawings, specifications, scheduling and cost estimates for project.

## Communication Sciences and Disorder (CSD)

## CSD 101 Oral Communication Enhancement (3 Credits)

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.
CSD 116 Orientation to Communication Sciences and Disorders (1 Credits)
Introduction to the professions of speech-language, pathology and audiology with emphasis on the role, of the American Speech-LanguageHearing 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).

## CSD 211 Phonetics (3 Credits)

Scientific study of English speech sounds, production, reception and symbolic use, including transcribing words and sentences with use of phonetics.
CSD 212 Speech and Language Development (3 Credits) 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 intentionality. Examines relationship between cognition and language. The latter portion of the course introduces students to some aspects of disordered speech and language development.
CSD 213 Use of Computers and Other Instrumentation in Communication Sciences and Disorders (1 Credits)
Study of basic electronics, computer hardware design, and software programs germane to the fields of speech-language pathology and audiology.
CSD 218 Anatomy and Physiology of the Speech Mechanism (3 Credits) Study of the basic structure of the organs that function in the production of speech with emphasis on the processes of respiration, phonation, resonation, and articulation, including neurological aspects of speech and language production. (web-based course).

CSD 311 Methods and Materials in Communication Sciences and Disorders (3 Credits)
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 these materials in clinical practicum activities.
CSD 312 Phonological, Articulatory and Related Language Disorders (3 Credits)
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 therapy procedures conducted by certified speechlanguage pathologists working with speech-impaired children and adults.
CSD 313 Introduction to Audiology and Hearing Sciences (3 Credits) 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.

## CSD 314 Audiology and Hearing Sciences II (3 Credits)

Audiology II is a continuation to the introduction to Audiology and hearing sciences Students identify the various auditory pathologies and their associated audiological manifestations. Assessments of special populations are considered.
CSD 315 Neurogenic \& Other Organic Communication Disorders (3 Credits)
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.
CSD 320 Voice and Speech Sciences (3 Credits)
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.
CSD 413 Research Methods in Communication Sciences \& Disorders (3 Credits)
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 (e.g., professional conference) and/or publishing (e.g., professional publication) their research findings.

## CSD 414 Voice and Fluency Disorders (3 Credits)

Introduction to the etiological, evaluative or diagnostic, and therapeutic procedures used with persons with voice disorders and various types of verbal dysfluency behaviors.

CSD 415 Clinical Procedures in Communication Sciences \& Disorders (3 Credits)
Study of the philosophy underlying clinical procedures for speechlanguage pathology. Current methods used in 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.

CSD 416 Rehabilitation of Hearing Disorders (3 Credits)
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. (web-based course.)
CSD 417 Clinical Practicum in Communication Sciences and Disorders (3 Credits)
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.

## CSD 420 Differential Diagnostic Audiology (3 Credits)

A comprehensive review of the hearing process in health and disease; the medical aspects of hearing impairment, techniques currently in use to evaluate hearing disorders, treatment and management of patients with advanced types and degrees of auditory pathology.

## Computer Literacy - Music (CLM)

## CLM 165 Computer Literacy for Musicians (3 Credits)

Contact the department for specific course information

## Computer Engineering Technology (CET)

## CET 304 Digital System Design (3 Credits)

Study of the building blocks of digital system design: encoders, decoders, comparators, multiplexers, demultiplexers, adders, subtractors, arithmetic logic unit, programmable logic devices and an introduction to microprocessors.

## CET 304L Digital Systems Design Laboratory (1 Credits)

Practical experience in building and testing digital systems and methods with emphasis on programmable logic devices, programming and introduction to microcontrollers.
CET 305 Computer Organization (3 Credits)
Study of microcomputer operating systems with emphasis on MSDOS, utility and diagnostic software, virus protection, preventative maintenance data protection and recovery, computer architecture and design.
CET 305L Computer Organization Laboratory (1 Credits)
Practical experience in DOS commands, windows, utility and diagnostic software and data protection and recovery.

CET 315 Microprocessors (3 Credits)
Study of the microprocessor as a programmable device. The 80286, 80386 and 80486 microprocessors will be examined with primary emphasis on the 80286. Examination of the instruction set to program the microprocessor is covered, and applications using the assembler program will be studied.

## CET 315L Microprocessor Laboratory (1 Credits)

This course is an introduction to the detailed knowledge of microcontroller peripherals and their use. The course makes use of the Microchip IDE (integrated development environment) and the assembler to control complex systems.

## CET 336 Computer Networks Technology (3 Credits)

Introduction to the administration of computer networks with emphasis on management of users workstation and other system resources, including the Internet and intranets.
CET 336L Computer Networks Technology I Laboratory (1 Credits)
This course is the laboratory component of CIT 336 Computer Networks I lecture. Students will perform laboratory exercises on such topics as cabling, programming network devices and setting up simple networks.
CET 340 Soil and Foundations ( 3 Credits)
Contact the department for specific course information
CET 432 Computer Interfaces \& Peripheral Devices (3 Credits)
Study of computer interfaces and peripheral devicethe 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 computeraided design (CAD) with emphasis on The Advanced Intel Microprocessor Family.
CET 432L Computer Interfaces Laboratory (1 Credits)
Course consists of individual or small group projects of building a Microprocessor controlled robot.

## CET 436 Computer Networks Technology II (3 Credits)

The study of advanced networking concepts. Topics include variable length, subnet masking, link state router protocols, Internet Protocol Version 6 (IPV6), Virtual Lans (VLANS), Asychronous transfermode (ATM), Virtual Private Networks, Security, Voice over Internet Protocol (VOIP) and optical networking.

CET 436L Computer Networks Technology II Laboratory (1 Credits) This course is the laboratory component for CIT 436 lecture. The student will perform laboratory exercises related to computer network design, development and troubleshooting.

## Computer Science (CSC)

CSC 101 Introduction to the Computer Science Profession (1 Credits) An introduction to career opportunities for computer scientists and strategies to improve academic performance in the discipline. Course topics include lectures by computer science professionals and seminar on active coping, collaborative learning, pair programming, and the development of inclusive relationships.

## CSC 111 Information Technology Principles (3 Credits)

An introductory course that exposes students to, the academic discipline of Information Technology, (IT). Pervasive IT themes; IT history,, organizational, social, and ethical issues, and, relationship of IT to other computing disciplines, will be covered.

CSC 150 Computer Literacy ( 3 Credits)
Introduction to computers and information processing. Primary emphasis is placed on three standard applications: Word Processing, Spreadsheet, and Data Base. Extensive laboratory assignments and hands-on exercises using the microcomputer laboratory are mandatory.
CSC 150H Honors Computer Literacy (3 Credits)
Introduction to computers and information processing. Primary emphasis is placed on three standard applications: Word Processing, Spreadsheet, and Data Base. Extensive laboratory assignments and hands-on exercises using the microcomputer laboratory are mandatory.
CSC 151 Internet Working I (4 Credits)
Study of network terminology and protocols,, local-area networks (LANs), wide-area networks, (WANs), Open System Interconnection (OSI) models,, cabling, cabling tools, routers, router, programming, Ethernet, Internet Protocol (IP), addressing, and network standards.

CSC 160 Basic Programming (3 Credits)
Introduction to problem analysis and Visual, Basic Programming. Emphasis on the orderly, analysis of a problem and the programming and , testing of that problem.
CSC 169 Introduction to Computer Science (3 Credits)
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.
CSC 170 Computer Programming I (3 Credits)
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.
CSC 170L Computer Programming Laboratory I (1 Credits)
The study of the hardware and software aspects of computer and communications networks, topics include cabling, local area networks (LANs), wide area networks (WANs), protocols, standards and the OSI reference model. The setup and programming of switches, routers (distance vector), security devices and other network devices is included.

## CSC 192 Introduction to the Internet (1 Credits)

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).

## CSC 195 Internet Prog W/ Java (3 Credits)

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.
CSC 200 Advanced Computer Concepts (3 Credits)
Advanced study of electronic research and presentations, utilizing the Internet and World Wide Web. Primary emphasis on E-Mail, SearchEngines, 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.
CSC 211 Information Technology Operating Systems (3 Credits) An introduction to the basics of computer, operating systems including file systems,, configuration, interprocess communication,, security, administration, interfacing,, multitasking, and performance analysis.

CSC 251 Internetworking III (4 Credits)
Study of advanced IP addressing techniques, (Variable Length Subnet Masking [VLSM]),, intermediate routing protocols (RIP v2, single-, area OSPF, EIGRP), command-line interface, configuration of switches, Ethernet switching,, Virtual LANs (VLANs), Spanning Tree Protocol, (STP), and VLAN Trunking Protocol (VTP).
CSC 252 Internetworking IV (4 Credits)
Introduction to advanced IP addressing techniques, (Network Address Translation [NAT],, Port Address Translation [PAT], and DHCP), WAN, technology and terminology, PPP, ISDN, DDR, Frame, Relay, network management, and introduction to, optical networking.

## CSC 260 Computer Programming II (3 Credits)

Introduction to data structures, algorithms and building objects. Topics include linked lists, stacks and queues, recursion and binary trees.
CSC 260L Computer Programming II Laboratory (1 Credits)
Supplementary course to CSC 260 structured as a closed computer laboratory to complete specific programming tasks within a fixed time.

## CSC 268 Computer Organization (3 Credits)

Fundamentals of the architecture and operation of modern computers. Computer arithmetic: binary, hexadecimal and decimal number conversions, binary number arithmetic and IEEE binary floating point number standard. Basic computer logic: gates, combinational circuits, sequential circuits, adders, ALU, SRAM and DRAM. Basic assembly language programming, basic Instruction Set Architecture (ISA), and the design of single cycle CPU. The MIPS based computers are used as example architecture, and alternative architectures are also discussed.
CSC 275 Fundamentals of Cybersecurity ( 3 Credits)
This course is designed for IT professionals to learn computer and network security theories and practices that can be used to significanlty reduce the security vunerability of computers on internal networks or the internet. The course assumes some familiarity with various operating systems and computer networks. Topics include, cryptography, program security, operating systems security, database security, network security, security administration, computer ethics, and legal issues.

## CSC 290 Survey of Video Gaming (3 Credits)

This course will provide a general understanding, of the world of computer and video games,, including an evaluation and analysis of the, cultural, historical, literary, psychological, and, technological impact of games on society, education, and industry. Critical play (playing, games in order to better understand and appreciate, them) is an important aspect of this course., Surveys of the different types of game genres, along with an overview of the design,, implementation, and testing issues that confront, game developers will be conducted by the students., The course also covers how games redefined our, standard notions of interactivity, learning, and, storytelling.

## CSC 292 Unix and C Programming (3 Credits)

Introduction to C programming in a UNIX environment, including the UNIX command interpreter, Shell; how Shell scripts can be used as powerful tools and applications and the development of application and systems programs using $C$.

## CSC 295 Java Applications Programming (3 Credits)

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 $\mathrm{C}++$ and the fundamentals of the World Wide Web.

CSC 311 Fundamentals of Networking (3 Credits)
This is an introductory course that covers the, basics of how networks work, including the topics, of OSI model, Internet model, network components," LANs, WANs, routers, switches, wireless, communication, network security, TCP/IP Internet, protocols, and network applications such as web, and email. It also covers the fundamental aspects, of configuring and troubleshooting network, features on a Windows or Unix workstation.

## CSC 312 Topics in Information Technology (3 Credits)

Advanced Information Technology topics not generally covered in the curriculum. Designed as a Computer Science Applied Computing elective, not as a replacement for any specific required course. Course topic and syllabus must be approved by Department Head.

## CSC 313 Network Administration (3 Credits)

This is an intermediate-level course for students who are interested in Networking. This course is designed to provide students with essential knowledge and skills which an effective network administrator must possess. It provides an overview of the essential TCP/IP protocols, and discusses how to properly configure and manage the network services based on these protocols (including DNS, DHCP, AD/LDAP directory services, print and file servers, NFS/NIS, and routing services). It also has a hands-on lab component for students to learn how to setup, configure, troubleshoot, and administer these network services in both Windows and Linux/Solaris environments.

## CSC 314 Advanced Internet Programming (3 Credits)

A second Internet programming course concentrating on advanced Internet application development. Creation of relatively sophisticated web pages and application that allow interactions between web page users and the web page as well as network programming, JSP, JDBC, XML processing are the main focus of the course. Different Internet programming language and tools will also be included.

## CSC 360 Interface Design (3 Credits)

Introduction to the techniques used for designing, implementing, and testing human/computer interfaces, including methods of user centered interface design, implementing user interfaces, techniques and tools for event driven programming, testing and evaluation of user interfaces.

## CSC 361 Survey of Programming Languages (3 Credits)

Survey of programming languages such as FORTRAN, PL/1, ALGOL, Pascal, APL, SNOBOL, Ada, Prolog, C, and LISP with emphasis on data structures and storage, control structures, execution environment, input/ output, and the syntax and semantics of the languages.
CSC 369 Introduction to 3D Animation and Visual (3 Credits) This course is an applied introduction to the, techniques used for modeling, animating,, texturing, lighting, rendering, and creating 3D, content for games, animation, and visualizations, using unity in a team environment.

## CSC 372 Data Structures (3 Credits)

Analysis of data structures and algorithms using C++ as the implementation language. Detailed examination of lists, heaps, trees, graphs, file structures, and the use of formal methods with emphasis on the development and analysis of efficient algorithms.
CSC 373 Algorithms Design and Analysis (3 Credits)
This course focuses on the practical applications, of computer algorithm design and analysis,, emphasizing correctness and efficiency. , Wellknown data structures, problem-solving, paradigms and algorithms are explored to, illustrate alternative ways to develop automated, solutions, to argue the correctness of, implementations, and to recognize opportunities to, attain greater efficiences versus naive, approaches.

CSC 380 Software Engneerng ( 3 Credits)
Introduction to the design of software projects with the analysis, design, implementation, testing and maintenance of the software life cycle with emphasis on significant and varied writing components, including group projects paralleling realistic software development projects.
CSC 390 Technical Strategies in Game Design (3 Credits)
This is a course that introduces the student to, the basic concepts of Game User Interface Design,, process flow charts, storytelling, storyboarding,, and the basics of project management all with, respect to game design.

## CSC 411 Web Server Administration (3 Credits)

An introductory course providing individuals with the core skills needed to meet the demands of the Web development and Internet community. The three key skill areas focused in this course are Web management, content management, and technical management.

CSC 420 Database Principles and Design (3 Credits)
An introductory course emphasizing the basic concepts and principles of database systems. Topics include introduction to database systems and databases, different system models, basic systems and language support for database systems; relational modes, relational algebra and introduction to relational database design as well as overview of common database system issues.

## CSC 422 Database Implementation (3 Credits)

Introduction to database design methodology and tools, designing and building of forms and reports, database programming using embedded SQL, Internet/Web database and database administration.

## CSC 430 Data Communications (3 Credits)

Study of principles of computer communication as well as hardware and software designs, including transmission media, data encoding, transmission techniques, protocols, switching networks, broadcast networks, and local area networks.

## CSC 432 Wireless Data Networking (3 Credits)

This course introduces the students to various, wireless data network standards at a technical, level. The student will learn about wireless, network architectures for wireless LAN's wireless, PAN's broadband wireless access (BWA) and cellular, data networks (3G and beyond).
CSC 435 Computer Security I (3 Credits)
Introduction to Information Assurance concepts in addition to logging, encryption and decryption, effects on operating systems and machine architecture, countermeasures, risk analysis, security administration, legality and ethics, and computer forensics.

## CSC 445 Computer Network Defense (3 Credits)

Course designed to engage students in a hands-on analysis of defending computer networks against the common methods and tools used to harm them. Topics covered include the weakness of current network topologies, passive and active information gathering and common attack methods including viruses, worms, denial of service attacks, emailbombs, and buffer overflow attacks. Ethics and legal implications are also discussed.

## CSC 449 Cryptography and Network Security (3 Credits)

The course introduces the principles of number theory and the practice of network security and cryptographic algorithms. Topics include: number theory, cryptography, key management, network security, web security, and protocols for secure electronic commerce.

CSC 464 Operating Systems ( 3 Credits)
Introduction to the history and evolution of operating systems, the concepts behind and structure of various operating systems, process scheduling, interprocess communication, input and output, multiprogramming, memory management and file systems. Concepts of distributed operating systems are also introduced.

CSC 466 Advanced Computer Topics I (3 Credits)
Elective course for Computer Science.
CSC 467 Adv Cmptr Topic II (3 Credits)
Elective course for Computer Science.

## CSC 468 Computer Architecture (3 Credits)

Study of computer organization and architecture that deals with processors, their architectures, memory, input, output, the micro architectural level, instruction set architectural level and the operating system machine level.

## CSC 470 Artificial Intelligence (3 Credits)

In-depth study of concepts and problem solving techniques of artificial intelligence, including knowledge representation, functional and logic programming, machine learning, natural language understanding, computer vision, robotics, and societal impact.
CSC 471 Introduction to Game Design and Development (3 Credits) This course introduces students to game design and development concepts. Topics include the history of games, genres, play elements, story and character development, game play and storyboard design, level and user interface design, and the game design document.
CSC 472 3D Game Programming (3 Credits)
This is a project-oriented course on 3D Game Programming. Students will work in teams to design, implement and test a three- dimensional game with interactivity, game state diagrams, animation, sound, and constraints.

## CSC 476 Advanced CompTop III (3 Credits)

Advanced computer topics not generally covered, in the curriculum. Designed as a Computer, Science elective, not as a replacement, for any specific required course.

## CSC 477 Adv Comp Topic IV (3 Credits)

Advanced computer topics not generally covered in, the curriculum. Designed as a Computer Science, elective, not as a replacement for any specific, required course.

## CSC 480 Computer Graphics ( 3 Credits)

Study of interactive computer graphics, hardware and software: display devices," 2D and 3D geometric transformations, raster , algorithms, representation of curves and surfaces,, hidden line removal and surfaces, shading, algorithms, and color graphics.

## CSC 485 Software Quality Assurance and Testing (3 Credits)

This course is an introduction to concepts and, techniques for testing and modifying newly, developed and evolving software applications. , Emphasis is placed on quantitative and practical, software methods that can be applied within phases, of the software development life cycle (SDLC). , Topics include testing techniques (test first, development, graph coverage and criteria, logic, based and syntax based techniques), automatic and, manual testing, testing measurability, design of, test plans, and validation of software changes.

CSC 486 Software Project Management (3 Credits)
This course introduces the student to the, different aspects of software project management. , It will emphasize the main activities and, techniques that characterize the development of a, software product cover and the project management, body of knowledge (РМВОК): The main knowledge, areas are covered, including scope, time, cost,, team, risk, and communication management while, focusing on software development. Agile, Management (e.g. SCRUM) and other emerging, practices will be covered.
CSC 487 Engineering Secure Software Systems (3 Credits)
This is a required course in the BS in Computer, Science - Software Engineering Track (BS.CSC.SET), and an elective in the BS in Computer Science, (BS.CSC) program. It explores the foundations of, software security, considering important software, vulnerability.
CSC 488 Principles of Distributed Software Syste (3 Credits)
Parallel and Distributed Software Computing deals, with the use of large scale computing platforms, including desktop multicore procesessors, SMPs,, message passing platforms, and virtualized cloud, computing environments. The course consists of, topics on parallel and distributed programming, platforms, algorithms and applications. Design, and implementation of distributed software, components include process and memory management, underlying software applications; sockets,, protocols, threads, XML, serialization,, reflection, security, and events.
CSC 490 Game Design Capstone Project (3 Credits)
This course represents the capstone experience of, the Game Design and Development minor and serves, to prepare students to pursue further game, education or possibly to enter the game design and, development workforce. Students work to form teams, (e.g. 3-5 members) to design, develop, and publish, an original video or mobile game. Final projects, are judged by a curated group faculty and industry, professionals
CSC 492 Independent Study (3 Credits)
Supervised independent project designed to explore a single topic in a one-to-one learning relationship with a faculty member.
CSC 493 Systems Programming (3 Credits)
Fundamentals of system and network, programming methodology, techniques, system, calls and library calls

CSC 494 Digital Forensics (3 Credits)
This course focuses on practical applications of Information Assurance (IA) policies and technologies in enterprise network environments. The course will include lecture and demonstrations, but is designed around a virtual lab environment and scenario that provides for robust and realistic hands-on experiences in dealing with a range of information assurance topic areas. Students will be provided numerous practical opportunities to apply information security practices and technologies to solve realworld IA problems.

## CSC 498 Computer Science Seminar I (2 Credits)

Culminating course designed to synthesize computer, science knowledge and experiences through, participation in a research project of the, student's choice. Results of the research are, presented to peers and other interested members of, the computer science community.

CSC 499 Computer Science Seminar II (2 Credits)
Culminating course designed to synthesize computer science knowledge and experiences through participation in a research project of the student's choice. Results of the research are presented to peers and other interested members of the computer science community.

## Cooperative Education (CED)

CED 250 Career Development and Leadership Seminar (1 Credits) 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.

## CED 350 Cooperative Educat (3 Credits)

Required for all students who have secureda, 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

## CED 450 Cooperative Educat (3 Credits)

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)

## CJS 200 Introduction to Criminial Justice (3 Credits)

Study of systematic analysis of the functions of the police, courts and corrections in dealng with lawbreakers with emphasis on basic theories and empirical research findings.

## CJS 220 Juvenile Delinquency (3 Credits)

Systematic analysis of juvenile delinquency as a major social problem in American society with emphasis on the prevenyion 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.

## CJS 225 Law Enforcement (3 Credits)

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.

CJS 230 Introduction to Correctioms (3 Credits)
Examines various attempts to control crime and deliqency 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 extra legal and institutional and community based programs.

## CJS 310 Criminology (3 Credits)

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.

CJS 313 American Ct Systems Honors (3 Credits)
Introduction to the operation of the judicial court system with emphasis on the police, agents of the FBI, the Treasury Department, and other agencies, the prosecutor, the courts, and institutions, special treatment programs, and probation and parole officers. Analysis of problems in the administration of justice such as overcrowding, delays, discrimination and the role of the negotiations in the sentencing process.

CJS 313H American Ct Systems Honors (3 Credits)
Introduction to the operation of the judicial court system with emphasis on the police, agents of the FBI, the Treasury Department, and other agencies, the prosecutor, the courts, and institutions, special treatment programs, and probation and parole officers. Analysis of problems in the administration of justice such as overcrowding, delays, discrimination and the role of the negotiations in the sentencing process.
CJS 315 Sociology of Drug Usage (3 Credits)
Examines facts and theories of drug usage in different cultures, focuses primary attention on contemporary US. Includes medical aspects of different kinds of drugs and psychological effects, legal aspects of the origins of criminal drug laws and the consequences of drug use; epidemiologial aspects of the sociopsychological factors as to why persons use and abuse drugs; and control aspects including prevention and rehabilitation programs.

## CJS 340 Cybercrime (3 Credits)

The purpose of this course is to introduce, students to the criminal justice aspects of, cybersecurity. The course will examine, theoretical frameworks and methods of, investigation. This 300-level Cybercrime course, offers students studying criminal justice an, understanding of the new frontier in which, cyber-victims and cyber-perpetrators exist.
CJS 492 Topics in Criminal Justice (3 Credits)
This course examines the gender differences in criminal behavior, victimization, and criminal justice processing, emphaizing the unique experiences of racial minorities in these areas.

## CJS 492F Special Topic: Dis Min Ctct \& Ctvr Iss Juv Just (3 Credits)

 This course examines many of the contemporary issues presently impacting the juvenile justice system. Some of the issues are controversial because there is a lack of consensus of experts as to the most effective way to handle the issues.CJS 492I Topics in Criminal Justice (3 Credits)
Introduction to a contemporary criminal justice, subject with emphasis on a specific criminal , justice issue or a combination of issues in, greater depth.
CJS 492L Spe Tpics: Women in the Crim Just System (3 Credits)
Research Development Activities for Graduate Stude
CJS 492M Special Topic: Environmental Crime \& Justice (3 Credits) This course provides a critical analysis of enviromental crime and justice. A sociological understanding of crime provides the context for examining the issues of enviromental equity and implications for the criminal justice system.

## CJS 510 Crime Prevention (3 Credits)

All crime prevention programs advocate proactive rather than reactive methods to combat crime. This course studies programs intended to address the ability, motivation, and opportunity for persons to commit crimes. Specific approaches and programs such as crime prevention through environmental design (CPTED), Neighborhood Watch, TRIAD, and DARE are considered.
CJS 571 Youth Crime and the School (3 Credits)
The role of school experiences in the etiology of juvenile crime has been debated for a long time. Recent incidents of violence occurring on school grounds have increased concern for the safety of students. The response of schools to violence, drug abuse and other crimes will be examined to identify programs that have been successful in reducing youth crime.

CJS 575 Legal Aspects of Juvenile Justice (3 Credits)
Juvenile justice has made a distinction between criminal and status offenses. Courts have recognized this distinction in specifying the rights of juveniles when violating cultural norm. The course studies legal policies affecting youth including their transference to criminal courts. Procedures in the United States are compared to those in other societies.

## CJS 590 Readings in Criminal Justice (3 Credits)

This is an intensive directed reading course in criminal justice.
CJS 592A Spe Tpics: Resear in Cri \& Del (3 Credits)
See department for specific course information.
CJS 592B Sp Tpics:writ Care in Cj (3 Credits)
See department for specific course information.
CJS 592D Sp Top: Terr \& Homeland Sec (3 Credits) See department for specific course information.
CJS 592E Sp Top: Prof Wrtg in Just Sys (3 Credits) See department for specific course information.
CJS 592F Sp Top: Dis Min Ctct \& Ctvr Iss Juv Just (3 Credits) See department for specific course information.

CJS 592I Tpics in Crimi Justice (3 Credits)
See department for specific course information.
CJS 592J Spec Top: Terrorism \& Homeland Security (3 Credits) See department for specific course information.
CJS 592K Spec Topics: Cult Sensit Appch (3 Credits) See department for specific course information.
CJS 592L Spe Tpics: Women in the Crim Just System (3 Credits) See department for specific course information.
CJS 592M Spec Tpcs: Environ Crime \& Justice (3 Credits)
See department for specific course information.
CJS 601 Systems of Criminal Justice (3 Credits)
This course examines the traditional model of criminal justice in the United States by comparing it to criminal justice systems of selected other countries. The course also introduces a restorative justice model as an alternative to the adversarial system currently followed by most jurisdictions.

## CJS 607 Minorities in Criminal Justice (3 Credits)

Although minorities are disproportionately overrepresented in arrests, conviction and incarcerations, they are disproportionately underrepresented among criminal justice practitioners. This course examines theories advanced to account for and methods offered to alter these figures.

## CJS 610 Theories of Crime and Delinquency (3 Credits)

A number of theories of crime and delinquency have been developed from a variety of perspectives, for example, biological, psychological, sociological, feminist and conflict. This course addresses the major ideas offered to explain criminal behavior. Similarities and differences between the theories are noted. Criteria for evaluating the usefulness of a theory are identified.

CJS 611 Administration of Criminal Justice Organizations (3 Credits) This course rests upon the premise that criminal justice agencies need to apply sound principles of organizational management in order to be efficient. The course studies how corporate and public administration techniques may be applied to criminal justice agencies.

CJS 612 Strategic Planning for Criminal Justice (3 Credits) Increasingly, criminal justice practitioners recognize the importance of planning and preparing for criminal situations before they occur. This course examines ways to use current information to plan for the future in structuring organizations, setting priorities, and identifying resources needed to be more effective.

## CJS 613 Community Policing (3 Credits)

Recently, police departments have adopted techniques to bring community citizens and police officers closer together so that by working together crime may be reduced. This course compares different models of community policing and techniques for evaluating their impact.

## CJS 614 Jails and Prisons (3 Credits)

While jails and prisons incarcerate inmates, salient differences between these institutions pose problems for sheriffs and wardens. This course studies jails and prisons as complex organizations with varied sometimes- conflicting goals.

## CJS 615 Community Corrections ( 3 Credits)

Increasingly, the criminal justice system is implementing intermediate sanctions to supervise offenders in the community. Although probation and parole have a political history, newer programs have been devised to take advantage of emerging technology. This course examines factors that enhance or impede the successful adjustment of offenders in their efforts to live crime-free in the community.

## CJS 616 Restorative Justice ( 3 Credits)

Restorative justice recognizes that any response to crime should bring victims and offenders to reconciliation in which a sense of community is reestablished. A number of theoretical perspectives exist within this broad framework. The course introduces techniques of mediation and other methods of restorative justice.

## CJS 617 Offender Reentry Program (3 Credits)

The vast majority of incarcerated criminals are released from jail and prison to return to the community. They often face problems of adjusting to a lifestyle with some freedom but a number of restrictions. Reentry to a free society poses problem for the offender, families, and others.
CJS 618 Legal Issues in Criminal Justice Management (3 Credits) This course focuses on the examination and analysis of legal implications and challenges of criminal justice management decisions, policies, programs, and the roles of the criminal justice manager.
CJS 644 Research Methods in Criminal Justice (3 Credits) Information about criminal behavior shapes theories and responses to crime. Therefore, it is important to develop valid and reliable data which can be used to understand criminal justice issues. Standards for obtaining and evaluating empirical data are articulated in this course.
CJS 645 Quantitative Analysis in Criminal Justice (3 Credits) Quantitative data are the backbones of theory testing and organizational decision making. This course identifies statistical databases and introduces analytical techniques to produce meaningful information. Skills with computer applications are developed.

## CJS 646 Computer Applications in Criminal Justice (3 Credits)

Advances in computer technology have had a major influence on criminal justice practices. This course introduces students to some of the innovative hardware and software developments for criminal justice. Topics include but are not limited to crime mapping, statistical analysis of quantitative data, surveillance and identification procedures, and techniques to combat cyber crime.

## CJS 650 Criminal Justice Policy Analysis (3 Credits)

Scientific based facts are essential for sound criminal justice policies. At the same time, such policies reflect political forces in the society. This course examines procedures for analyzing how policies are enacted and implemented by focusing on specific case studies.
CJS 651 Criminal Justice Ethics (3 Credits)
Any system of justice must acknowledge the importance of an ethical foundation. This course studies different paradigms of ethical behavior and procedures that may be followed if unethical acts occur. The course recognizes that all citizens, not just criminal justice professionals, must address ethical principles.

## CJS 660 Crime Victims and Victim Services (3 Credits)

This course introduces students to some of the important issues and controversies concerning victims 141 of crime. Students will develop an appreciation for the victimization experience by studying the major perspectives concerning the roles of victims in criminal events and the criminal justice system, the provision of services to crime victims, and the importance of power related to crime victims. The course will examine crime victims in the United States and other countries

CJS 665 Criminal Justice Internship (3 Credits)
Students will perform various duties agencies and organizations activein criminal justice. An agency supervisor and the internship supervisor will direct each student in mastering relevant skills to compete the tasks associated with a significant position in the internship agency. During the internships each student will be considered a quasi-working member of the agency.

## CJS 670 History/Philosophy of Juvenile Justice (3 Credits)

Even though the first juvenile court in the United States was established at the end of the 19th Century, concern about how to respond to juvenile offenders has varied historically. The course traces trends across eras and cultures to consider ways that adults have tried to control the behaviors of juveniles. It examines how philosophical movements have influenced criminal justice policy.
CJS 672 Policing and Adjudicating Juveniles (3 Credits)
The course considers the advantages and disadvantages of special youth bureaus in police departments. Further consideration is given to the structure and procedures of juvenile justice.

## CJS 674 Juvenile Corrections and Treatment (3 Credits)

The philosophy of protecting juveniles has been the traditional perspective of the United States. Consequently, rehabilitation rather than punishment has been the objective in responding to juvenile delinquents. Changing perspectives on youth have brought about more punitive responses to young criminals, however. The conflict between corrections and treatment is considered in how societies seek justice for juveniles
CJS 676 Juvenile Delinquency and the Justice System (3 Credits) Examines the meaning of the concept of juvenile delinquency as a separate entity in the criminal justice system. The course also surveys youth victimization and offending patterns and analyzes the diverse theoretical explanations of delinquency.
CJS 678 Juvenile Offenders and Youth Gangs (3 Credits)
Juvenile delinquency has come to be almost synonymous with gang membership. Yet, there is some question about the prevalence of juvenile gangs and there criminality. The course examines gangs throughout history and traces their structures using research-based facts explicating the importance of youth gangs in society

## CJS 680 Status Offenders and the Community (3 Credits)

Status offenders pose a special concern for the juvenile justice system. The course compares status offenders and juvenile delinquents to determine similarities and differences in their behaviors and causal backgrounds. The community model will be employed.

## CJS 681 Youth and Society (3 Credits)

This course introduces students to some of the important issues and controversies concerning youth in society. The course will examine youth in the United States and other countries. The basic point of view is that youth is a social construct reflecting both social structural and cultural influences. This course examines how the roles of youth are defined for different age groups and cultures. The emphasis is on understanding how societal factors influence youthful behavior for conformity and deviance.

## CJS 688 Family Based Intervention (3 Credits)

The primary influence of families on youth has been long recognized.
This course considers how families may be used as instruments of crime prevention and rehabilitation. By focusing on the family unit, the course examines how family structure and dynamics shape children at different stages of development. Specific family counseling techniques will be studied.

## CJS 689 Gender, Crime, and Justice (3 Credits)

Examination of gender issues within the criminal justice system. This course focuses on women as offenders, prisoners, victims and survivors of crime, and professionals.
CJS 690 Independent Study in Criminal Justice (3 Credits)
Students under faculty guidance analyze specific areas of interest in criminal justice.

## CJS 699 Thesis (6 Credits)

Students in this course will design and conduct original criminal or juvenile justice research under the guidance of a faculty committee. The final, written report will present the research problem, theoretical rationale, methodology, results, and interpretation with policy implications as appropriate. An approved thesis proposal is required as a prerequisite to this course. Permission of instructor is required.

## CJS 750 Continuing Registration (0 Credits)

To allow Criminal Justice graduate students who have completed course work to remain in good standing while working on their thesis or comprehensive examination.

## CJS 752 Comprehensive Examination ( 0 Credits)

This course is required for all students taking the comprehensive examination. Students should register for the course the semester they intend to sit for the comprehensive examination.

## CJS 200 Introduction to Criminial Justice (3 Credits)

Study of systematic analysis of the functions of the police, courts and corrections in dealng with lawbreakers with emphasis on basic theories and empirical research findings.

## CJS 220 Juvenile Delinquency (3 Credits)

Systematic analysis of juvenile delinquency as a major social problem in American society with emphasis on the prevenyion 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.

## CJS 225 Law Enforcement (3 Credits)

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.

## CJS 230 Introduction to Correctioms (3 Credits)

Examines various attempts to control crime and deliqency 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 extra legal and institutional and community based programs.

## CJS 310 Criminology ( 3 Credits)

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.

## CJS 313 American Ct Systems Honors (3 Credits)

Introduction to the operation of the judicial court system with emphasis on the police, agents of the FBI, the Treasury Department, and other agencies, the prosecutor, the courts, and institutions, special treatment programs, and probation and parole officers. Analysis of problems in the administration of justice such as overcrowding, delays, discrimination and the role of the negotiations in the sentencing process.

## CJS 313H American Ct Systems Honors (3 Credits)

Introduction to the operation of the judicial court system with emphasis on the police, agents of the FBI, the Treasury Department, and other agencies, the prosecutor, the courts, and institutions, special treatment programs, and probation and parole officers. Analysis of problems in the administration of justice such as overcrowding, delays, discrimination and the role of the negotiations in the sentencing process.

## CJS 315 Sociology of Drug Usage (3 Credits)

Examines facts and theories of drug usage in different cultures, focuses primary attention on contemporary US. Includes medical aspects of different kinds of drugs and psychological effects, legal aspects of the origins of criminal drug laws and the consequences of drug use; epidemiologial aspects of the sociopsychological factors as to why persons use and abuse drugs; and control aspects including prevention and rehabilitation programs.

## CJS 340 Cybercrime ( 3 Credits)

The purpose of this course is to introduce, students to the criminal justice aspects of, cybersecurity. The course will examine, theoretical frameworks and methods of, investigation. This 300-level Cybercrime course, offers students studying criminal justice an, understanding of the new frontier in which, cyber-victims and cyber-perpetrators exist.

## CJS 492 Topics in Criminal Justice (3 Credits)

This course examines the gender differences in criminal behavior, victimization, and criminal justice processing, emphaizing the unique experiences of racial minorities in these areas.

## CJS 492F Special Topic: Dis Min Ctct \& Ctvr Iss Juv Just (3 Credits)

This course examines many of the contemporary issues presently impacting the juvenile justice system. Some of the issues are controversial because there is a lack of consensus of experts as to the most effective way to handle the issues.
CJS 492I Topics in Criminal Justice (3 Credits)
Introduction to a contemporary criminal justice, subject with emphasis on a specific criminal, justice issue or a combination of issues in, greater depth.
CJS 492L Spe Tpics: Women in the Crim Just System (3 Credits)
Research Development Activities for Graduate Stude

CJS 492M Special Topic: Environmental Crime \& Justice (3 Credits)
This course provides a critical analysis of enviromental crime and justice. A sociological understanding of crime provides the context for examining the issues of enviromental equity and implications for the criminal justice system.

## Drama (DRM)

## DRM 111 Practical Theatre Arts I (1 Credits)

Study of the general principles and techniques of interviewing, auditioning and rehearsing for careers in theatrical performance, design and technology.

## DRM 112 Practical Theatre Arts II (1 Credits)

Methods and approaches for future theatre professionals on how to seek and obtain employment and graduate study opportunities for careers in theatrical performance, design and technology.

DRM 113 Theater Movement I (3 Credits)
Development of performer's physical conditioning and awareness of expressive artistic movement.

DRM 114 Introduction to Theatre (3 Credits)
Survey of theatrical forms, techniques, and practices. Reading of selected plays. Attendance at Norfolk State Players' productions required. Lab included.

DRM 115 Dramatic Theory \& Criticism (3 Credits)
Major critical theories from Aristotle to present.
DRM 120 Stagecraft I (3 Credits)
Study of practical and theoretical knowledge of scenery, lighting, and sound design for the Theatre. Lab included.
DRM 123 Theory and Techniques of Acting (3 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 characterization.

## DRM 200 Intermediate Acting (3 Credits)

Study of the physical and vocal demands involved in the creation of a role for the stage.
DRM 212 Improvisation for the Theatre (3 Credits)
Development of the performer by encouraging spontaneity, including group ensemble work through improvisation.
DRM 219 African-American Drama (3 Credits)
Study of major African-American, African and Caribbean playwrights and their plays.
DRM 220 Stagecraft II (3 Credits)
In-depth studies of technical direction, carpentry, lighting, properties, sound, welding, and special effects. Advanced study of technical theatre.

## DRM 226 Children's Theatre (3 Credits)

Study of theories adn methods of children's, theatre with concentration on educational goals. , Survey of literature and production techniques., Practical work in production of Children's Theatre
DRM 238 Stage Management (3 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.

DRM 240 Theatre Management (3 Credits)
Study of principles and techniques of organizing and managing theatre production programs in educational, community, and commercial settings.

## DRM 310 Stage Make-Up (3 Credits)

Study of stage make-up techniques/designs, practices and equipment. Demonstrations of make-up design for an experimental producation required.
DRM 315 History of Theater I (3 Credits)
Study of history of theatre from beginning to 1650
DRM 316 Hist of Theatre II (3 Credits)
Study of history of theatre in Europe and America, 1650 to the present.
DRM 320 Lighting Design (3 Credits)
Emphasis on sources and control of light, equipment, and light design.
DRM 321 Stage Design (3 Credits)
Experience with floor plans, elevations, modules, and perspective designs for theatrical events. Lab included.
DRM 324 Advanced Acting Theory (3 Credits)
Focus on acting, theories, advanced techniques in acting, and styles of acting.
DRM 325 Rehearsal \& Performance I (3 Credits)
Student participation as actor, designer or technician in mainstage or studio productions.
DRM 328 Contemporary Drama (3 Credits)
Detailed study of the plays, playwrights, and dramatic movements of the post-World Warll period.
DRM 410 Costume Design (3 Credits)
Study of elements of design in relationship to the planning and constructing of production designs concepts. Lab included.
DRM 413 Shakespeare for the Stage (3 Credits)
Focus on acting, theories, and advanced techniques in performing Shakespearean text.

## DRM 415 Theatre Design With Computer (3 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.

## DRM 420 Play Production (3 Credits)

Study of the process of mounting a play for public performance.
DRM 425 Direction of Plays (3 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.
DRM 426 Special Project in Theater I (3 Credits)
The practical application course designed to explore theatre concepts within a group setting and involving an exchange of ideas and practical methods, skills, and principles.

DRM 430 Playwriting (3 Credits)
Script development with emphasis on material, characters, conflict, unity, dramatic action, suspense, and dialogue in relationship to plot, character, thought, diction, music, and spectacle.
DRM 435 Advanced Technical Theatre (3 Credits)
Advanced design theory and stage practice. Design of stage lighting, scenery, and sound.

## DRM 436 Sound Design (3 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.

## DRM 450 Research Seminar (3 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.
DRM 491 Drama Internship (3 Credits)
Provides students with the opportunity to earn academic credit for an approved theatre internship.

## Early Childhood Education (ECE)

## ECE 110 Introduction to the Profession (2 Credits)

Introduction to various fields of education, thought and practice with some emphasis on the , historical influences on our present system of , education. Study includes the role and place of , education in a democracy and principle and, practices in elementary and secondary schools. , Lecutures, discussions, demonstrations, films, , field trips, observation and participation in , elementary and secondary school classrooms are, provided. Conducted as a career decision seminar.
ECE 113 Facilitating Reading Instruction (3 Credits)
This course is designed to provide the, paraprofessional with some basic understanding of, the dynamics involved in the complex activity of, reading. In addition tips hints, and strategies, for supporting students with reading instruction, will be provided.
ECE 198 Practicum for Paraprofessionals (3 Credits)
This course is designed to provide a period of, supervised observation and participation in early, childhood settings including the Norfolk State, University child development lab. All placement , will provide the paraprofessional with , opportunities to interact with culturally, , linquistically and academically diverse children.

ECE 224 Children's Literature for Ece (3 Credits)
Study of children's literature (prose and, poetry), and an appraisal of its value in meeting, the basic needs of the preschool, kindergarten,, and primary children. Emphasis on reading aloud,, storytelling, and choral speaking. Practical, experiences with children are required.

## ECE 232 Creative Activities for Children (3 Credits)

This is a lecture and experientially based course, that focuses on the development of creative, abilities ages three to six. Emphasis is placed on, planning teaching and learning experiences in art,, music, movement, nutrition, health, dramatic play,, sociallemotiinal development and computer, applications.
ECE 299 Internship for Paraprofessionals (3 Credits)
This course is designed to provide a period of, supervised educational experiences during which, the paraprofessional takes increasing, responsibility for a given group of pre-K through , 6th grade for a definite period of time. It is , organized on a semester basis with emphasis on , early-childhood elementary. All placement will, provide students with opportunities to interact, with culturally, linquistically and academically, diverse children.

## ECE 324 Children Literature for Ece (3 Credits)

Study of children's literature (prose and poetry),, and an appraisal of it's value in meeting the , basic needs of the preschool, kindergarten, and, primary children. Emphasis on reading aloud, , story telling, and choral speaking. Practical, experiences with children provided.

## ECE 360 Curriculum and Instruction for Primary Grades (pre K-3rd) (3 Credits) <br> Contact the department for specific course information

ECE 362 Mth/Mat of Instr in Math for Young (3 Credits)
Methods and techniques of teaching mathematics to, elementary school children. Includes preparation, and practice with materials in classroom, situtations. Designed especially to meet the, needs of elementary school teachers in grades K-6.

ECE 370 Analyz Behav Chldr (3 Credits)
This is a lecture and experientially based course, that focuses on obsewation methods as it applies, to young children. Both formal and informal, assessment methoddogy and strategies to diagnose, and assess young children's learning and, development will be used to create developmentally, appropriate experiences. Candidates must complete, twenty hours of observation and participation.

## ECE 375 Children's Drama (3 Credits)

Study of theories and methods of children's drama, and creative development with a concentration on, literacy and educational goals. Survey of, literature and production techniques. Practical, work in a production of a Children's Drama with an, emphasis on the pre-school years.

## ECE 420 Parent Education (3 Credits)

This course will focus on strategies for helping, child care personnel and parents work together, more effectively. This course will idenhfy how the, home, childcare settings/ schools, and community, interact and provide a forum for discussion of, ways in which these settings interact to affect, children's lives. Candidates are required to spend, 20 hours of observation and participation.

## ECE 460 Admn of Child \& Family Programs (3 Credits)

The purpose of this course is to expose you to the, administrative aspects of earty childhood, education. You will be introduced to a range of, administrative demands in different types of early, childhood centers as well as maintaining and, developing ongoing programs. Twenty observation, hours will be required for this class.

## ECE 495 Practicum (9 Credits)

Emphasis on designing and implementing, developmentally appropriate learning, experiences for children ages 2 to 5 in a, child-care setting. Study of the role of the, child-care director, with an emphasis on, administrative tasks.

## ECE 497 Student Teaching (12 Credits)

Contact the department for specific course information

# Early Childhood Special Education (ECS) 

ECS 300 Introduction to Elementary Special Education (3 Credits) This course is a lecture based course in which students will be expected to engage in readings, class discussions and participate in activities both in class and on Blackboard. The course will cover the history, philosophy, legislation, and practices of early and practices of early childhood special education. The purpose of this course is to provide students with an overview of the field's history, current trends, and future directions. Students will also have opportunities to form their own philosophies of early intervention. The course will encompass (1) the examination of federal legislation and policies related to early childhood education, (2) models of service delivery in early childhood special education, (3) social issues and societal events; including bias (e.g., cultural, linguistic) in curricula that affect early childhood special education programming
(4) handicapping conditions and conditions that put children at-risk,
(5) the role of the family and community supports, (6) inclusion, (7) transition issues, and (8) outcome and efficacy of early childhood special education, including adaptation of curricula for children and families with diverse socioeconomic, language, ethnic, and religious backgrounds, (10 hours) will be required for this class.

## Economics (ECN)

## ECN 200 Basic Principles of Economics (3 Credits)

This course provides an introduction to basic core concepts of microeconomics and macareconomics. The emphasis is on the theories and applications of economics. This includes supply-demand analysis; theories of firm; economic functions of household, business, and government; national income accounting; and international trade. This course is meant for non-business students.
ECN 200H Honors Basic Principles of Economics (3 Credits) This course provides an introduction to basic core concepts of microeconomics and macareconomics. The emphasis is on the theories and applications of economics. This includes supply-demand analysis; theories of firm; economic functions of household, business, and government; national income accounting; and international trade. This course is meant for non-business students.

## ECN 210 Economics (3 Credits)

Contact the department for specific course information

## ECN 211 Principles of Microeconomics (3 Credits)

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.
ECN 211H Honors Principles of Microeconomics (3 Credits)
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.

## ECN 212 Principles of MacRoeconomics (3 Credits)

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.

ECN 212H Honors Principles of MacRoeconomics (3 Credits)
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.

## Education (EDU)

## EDU 100 Career Analysis in Education (1 Credits)

This course is an introduction to education in, America and the potential roles to be played both, in schools and in the broader community. , Selfassessments, field experiences, and, contemporary topics are explored to determine how, the student's educational experiences beliefs,, interests, and abilities match the demands of the, education profession. The roles,, responsibilities, and daily life of teachers,, schools, and students are examined. The, requirements for obtaining a Virginia teaching, license are reviewed., , Prerequisite: Under 30 credits
EDU 101 Preparing for Math and Science Real Worl (1 Credits)
EDU 101 is designed to attract students who are, interested in teaching Mathematics and the, Sciences in P-12. Self-assessments and virtual, mentoring/tutoring are explored to determine the, studetnts' interests and abilities in mathematics, and the sciences. Educational technologies that, enhance general knowledge will be utilized and are, applicable to real world applications. A special, emphasis is made to increase the numbers of women, and the Black, Indigenous and People of Color, (BIPOC) community into the pool of potential, teachers. , Prerequisite: Majors only and under 30 credits
EDU 115 Facilitating Learning Mathematics and, Science Concepts (3 Credits)
This course is designed to provide the, paraprofessional with some basic strategies for, supporting students with their mathematics and, science instruction. In addition, the course , provides historical approach to undergrid the role, of mathematics and science in today's classroom.

## EDU 201 Foundations of Education (3 Credits)

This course is designed to provide pre-service, teachers with a clear understanding of the, profession and the issues and controversies, confronting American education. Emphasis will be, placed on preparing reflective teachers who will, be able to make informed decisions that will, impact a diversified population: students, schools, and society. This course does include a 10 hour, observation requirement to be coordinated by the, Office of Student Teaching and the course, instructor.

## EDU 202 Human Growth \& Development (3 Credits)

This course is designed to analyze the nature and, range of human characteristics through the study, of principles and procedures in evaluating student, growth in skills, attitudes, and understanding. , Participants will conduct an in-depth study of, moral development, values clarification, and, perceptual and cognitive factors in learning and, reading. Emphasis is placed on the application of, these theories and principles to develop curricula, and validate program in urban education.

EDU 381 Classroom and Behavior Management (3 Credits)
This course will promote an understanding and, application of classroom behavior management, including discipline-specific methodology and, individual interventions as well as classroom, management techniques designed to maintain decorum, in the classroom and enhance learning in the $\mathrm{Pk}-12$, settings. Emphasis will be placed on teaching, strategies using structured lesson plans to help, minimize opportunities for behavioral issues. The, link between classroom management and student's, ages will be studied and demonstrated in the, classroom techniques used to enhance effective, classroom and behavior management. The course, will address diverse approaches based on, behavioral, cognitive, affective, social, and, ecological theory and practice. Approaches are, intended to support professionally appropriate, practices leading to the positive redirection of, behavior, development of social skills and of, selfdiscipline.

## EDU 381H Honors Classroom and Behavior Management (3 Credits)

This course will promote an understanding and, application of classroom behavior management, including discipline-specific methodology and, individual interventions as well as classroom, management techniques designed to maintain decorum, in the classroom and enhance learning in the Pk-12, settings. Emphasis will be placed on teaching, strategies using structured lesson plans to help, minimize opportunities for behavioral issues. The, link between classroom management and student's, ages will be studied and demonstrated in the, classroom techniques used to enhance effective, classroom and behavior management. The course, will address diverse approaches based on, behavioral, cognitive, affective, social, and, ecological theory and practice. Approaches are, intended to support professionally appropriate, practices leading to the positive redirection of, behavior, development of social skills and of, selfdiscipline.

## EDU 420 Education Technology (3 Credits)

This course is designed to broaden students', ability to effectively integrate technology in the, $\mathrm{K}-12$ setting. Furthermore, this course will focus, on instructional strategies to supplement, instruction through technology design and, assistive technologies to increase student, achievement. Students will investigate the use of, computer-based technologies, technology tools and, best-practices with technology to improve the, teaching and learning process.

## EDU 486 Human Growth and Development (3 Credits)

In this course students will be able to contribute, and gain an understanding of the physical, social,, emotional, speech and language, and intellectual, development of children and the ability to use, this understanding in guiding learning, experiences. The interaction of children with, individual difference - economic, social, racial,, ethnic, religious, physical, and mental - should, be incoporate4d to include skills contributing to, an understanding of developmental disabilities and, developmental issues related to but not limited to, attention deficit disorders, gifted education, including the use of multiple criteria to identify, gifted students, substance abuse,child abuse and, family disruptions.

EDU 486H Honors Human Growth and Development (3 Credits) In this course students will be able to contribute, and gain an understanding of the physical, social,, emotional, speech and language, and intellectual, development of children and the ability to use, this understanding in guiding learning, experiences. The interaction of children with, individual difference - economic, social, racial,, ethnic, religious, physical, and mental - should, be incoporate4d to include skills contributing to, an understanding of developmental disabilities and, developmental issues related to but not limited to, attention deficit disorders, gifted education, including the use of multiple criteria to identify, gifted students, substance abuse,child abuse and, family disruptions.

## EDU 499 Directed Teaching ( 12 Credits)

This program is designed to provide two supervised, experiences at two levels, PK-3 and 4-6, and for, SPE K-12 elementary level and secondary level, placements during which the prospective teacher of, grades PK-6 takes gradual responsibility for a, group of pupils for a specified period of time. , The teacher is observed by a university supervisor, a minimum of three times during each experience. , This sixteen-week practicum/ student teaching, experience including a one-week observation is a, mandatory requirement of the program.

## Electronics Engineering (EEN)

## EEN 100 Introduction to Engineering (3 Credits)

The Introduction to Engineering course is an activity-based course with a number of life skills exercises, and hands-on activities integrated into the lectures. The intent of this course is to familiarize students with many of the skills that engineers must perform on a daily basis in the workplace with emphasis on engineering ethics and introductory concepts in electronics and optical engineering.

## EEN 101 Engineering Problem Solving (2 Credits)

This course will provide an overview of the salient math topics most heavily used in the core sophomore-level engineering courses. These include algebraic manipulation of engineering equations, trigonometry, vectors and complexnumbers, sinusoids and harmonic signals, systems of equations and matrices, differentation, integration and differential equations. All math topics will be presented within the context of an engineering application, and reinforced through extensive example of their use in the core engineering courses. This course will also provide an introduction to the engineering analysis software MATLAB, which is used throughout the engineering curriculum.

## EEN 102 Eng Use Computers (3 Credits)

This course is an introduction to the use of , computers to model systems and to solve, engineering problems using a high level language., Flowcharts and algorithms will be used in the, process of program design.

## EEN 200 Introduction to Electronics (3 Credits)

This course is designed for non-electronics, engineering majors with coverage of specific, principles of electrical circuit theory (Ohm's Law, Kirchhoff's Laws, nodal analysis, and loop , analysis), and selected electronics topics , (junction diodes, BJT transistors, op-amps,, and firstorder filters).
EEN 200L Introduction to Electronics Laboratory (1 Credits)
Laboratory experience of basic principles of electronics

## EEN 201 Electrical Network Theory I (3 Credits)

This course is an introduction to the basics of DC electrical circuit theory for electrical engineering and other technology majors. The focus of the course is the study of methods for analyzing resistive circuits. Circuits incorporating independent and dependent energy sources are studied. Methods covered include: Ohm's Law, Kirchhhoff's Laws, nodal analysis, superposition, Thevenin's Theorem, Norton's Theorem and the maximum power transfer principle. Computer software tools such as MATLAB and Electronics Workbench are also utilized as an analysis aid.
EEN 201L Electrical Network Theory I Laboratory (1 Credits)
This course provides hands-on experience in constructing, troubleshooting, and testing simple DC electrical circuits. The student experiences circuit theory in action by performing a series of increasingly difficult experiments. Basic instruments such as the digital multimeter DC power supply, and laboratory breadoard are introduced and utilized.

## EEN 202 Electrical Network Theory II (3 Credits)

Introduction to the application of unit-step as forcing function, power and energy, polyphase circuits, complex frequency and frequency response transformers and other two-part networks, linear network analysis using Laplace transform methods, and fourier analysis, etc., and PSPICE. Design project required.
EEN 202L Electrical Network Theory II Laboratory (1 Credits)
This is the laboratory that accompanies EEN 202 Electrical Networks II. This course provides the students with hands-on experience with advanced electrical circuit components, measurement techniques, and data collection. The student will construct advanced electrical circuits that illustrate principles covered in the lecture. To successfully complete this course, the student will be required to perform a series of experiments of increasing difficulty. A formal report is required for each experiment.

## EEN 203 Electronic Principles (3 Credits)

This is the second engineering course for second year optical engineering majors. This course provides the student with advanced concepts of circuit theory as well as an introduction to the theory and application of electronic devices. The following topics are studied: first and second order transient circuits, AC circuit analysis, diodes, transitors, and operational amplifiers. Computer modeling of electronic circuits using SPICE or an equivalent software will be implemented in this course.

## EEN 211 Material Science \& Engineering (3 Credits)

This course introduces students in the optical and electronics engineering programs to concepts that are necessary to understand important ideas in materials science and engineering. Also, this course relates these concepts to engineering design and manufacturing of electronic and photonic devices.

## EEN 231 Digital Electronics Logic Design (3 Credits)

Study of number systems, binary aritmetic and codes, Boolean algebraic simplification, Quine-MeCluskey method and Karnaught Maps, Diode and transistor logic flip-flops, sequential networks, state tables, state assignments, etc.

## EEN 231L Digital Logic Design Laboratory (1 Credits)

This is a laboratory course that accompanies EEN-231 Digital Logic Design. The goal of this course is to provide the student with hands-on experience with the design and analysis of combinational and sequential logic design. Topics include: code converters, multiplexer design, synchronous and asynchronous sequential circuits design including counters and shift registers.

EEN 301 Engineering Electronics I (3 Credits)
Introduction to the theory and application of electronic devices; linear equivalent circuits, amplifier 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.

## EEN 301L Electronic Devices Laboratory (1 Credits)

This is the laboratory that accompaines EEN 301 Engineering Electronics I. The goal of this course is to provide the student hands-on experience with electronic components such as BJTs, FETs and diodes. The student will design and construct electronic circuits that will illustrate principles covered in the lecture. This course includes practical examinations, laboratory experiments and report preparation.

## EEN 302 Microelectronics (3 Credits)

This is the second course in electronics for electronics engineering and technology majors. The goal of this course is to provide the student with an understanding of advanced electronics concepts. The following topics are covered: multistage amplifiers, frequency response using Bode plots, feedback, oscillators, and active filters. To successfully complete this course, the student must demonstrate a working knowledge of the concepts covered through assignments and written examinations.
EEN 302L Microelectronics Laboratory (1 Credits)
This is the laboratory that accompanies EEN 302 Engineering Electronics II. The goal of this course is to provide the student additional handson experience with more advanced electronic circuits. The student will construct advanced electronics circuits that will illustrate principles covered in the lecture. To successfully complete this course, the student will be required to perform a series of experiments of increasing difficulty. A formal report is required to be turned in one (1) week after performing an experiment.

## EEN 305 Signals and Systems (3 Credits)

This course is an introduction to system representations and analysis, representation of signals methods of linear system analysis using convolution, Fourier series and transforms, and Z-transforms.
Formulation and solution of state-variable equations as well as introduction to amplitude and analog pulse modulation are also studied. A design project is required.

## EEN 311 Engineering Economics (3 Credits)

This course provides an introduction to economic principles and techniques used in making decisions about the acquisition and retirement of capital goods by government and industry. Special emphasis is given to methods of analysis based on the mathematics of compound interest. Study of time value of money, annual cost, present worth, future worth, future value, capitalized cost along with break-even analysis, valuation, and depreciation, and ethics in economics is covered. The class will also include entrepreneurial topics as business plans, sources of capital and marketing stategies.

## EEN 321 Electromagnetic Field Theory (3 Credits)

This course involves the study of static and propagating electro-magnetic fields, a reviewof Maxwell's equations, propagation of EM-fields in dielectric waveguides, transmission theory and an introduction of antennas.

## EEN 321H Honors Electromagnetic Field Theory (3 Credits)

This course involves the study of static and propagating electro-magnetic fields, a reviewof Maxwell's equations, propagation of EM-fields in dielectric waveguides, transmission theory and an introduction of antennas.

## EEN 331 Microprocessors (3 Credits)

Introduction to the structure of microprocessors and microcomputers. Representation of information in the computer logic an storage devices. Processor stucture registers, transfer of information, and control programming in microcomputers. I/O structure and auxiliary electonics. Interrupt structures direct memory access. LSI and its implication for microcomputers. Arithmetic operations. Different microcomputer architectures.

## EEN 331L Microprocessor Lab (1 Credits)

Procedures for reliable digital microcomputer design, understanding manufacturer's specifications, use of special test equipement, machine representation of numbers, assmembler basics, experiments to assemble, debug, and interface with peripherals are studied in this course.

## EEN 333 Digital Integrated Circuits (3 Credits)

This course involves the study of digital CMOS circuits, MOSFET transistors, combinational circuits, and sequential circuits. The design of simple digital gates and circuits at the transistor level, and simulation of designed circuits for performance verification are also studied.
EEN 333L Ditigal Integrated Circuits Laboratory (1 Credits)
Laboratory work and a design project are intended verification of CMOS logic circuits. Laboratory exercises to cover CMOS propagation Delay and Layout Parasitics, Gate Styles, CMOS Arithmetic Blocks, Bipolar Devices, Bipolar Devices Propagation Delay, Very High Speed Combinational Logic, Sequential Circuits, Sequential Circuits and Timing Issues, Memory and Array Structures are also done.

## EEN 350 Scientific Instrumentation (3 Credits)

This course covers integrated hardware and software applications to communicate and control instruments. Communication interface standards such as IEEN- GPIB and RS232, and use of data acquisition (DAQ) boards will be studied. Timing issues, real-time data acquisition and instrument control will also be covered.

## EEN 351 Communications Engineering I (3 Credits)

Study of amplitude, frequency, and phase inlcuding modulation, smpling and pulse modulation; time division, multiplexing detection and frequency mixing, filters, receivers, transmitters and noise analysis.

## EEN 371 Control Systems (3 Credits)

Introduction to control systems; mathematical models, feedback control systems characteristics and stability, root locus, frequency responses, stability in the frequency domain analysis.

## EEN 384 Enginr Prob/Statis (3 Credits)

This course covers the applications of random, variables and random processes to engineering, analysis and design, cumulative and probability, density functions, error functions, central, limit theorem; finite samples, auto correlation, , power spectral density and the effect of filters, on digital data. The probabilistic and statistica, design of systems is also discussed.

## EEN 401 Electronics Engineering Seminar (1 Credits)

This course provides an introduction to various aspects of engineering practice and engineering ethics.

## EEN 402 Power Electronics (3 Credits)

This course is being added to the curriculum to aid in the enhancement of the students' knowledge of electronics required for various power delivery systems.

## EEN 411 Engineering Economics (3 Credits)

Introduction to economic principles and techniques used in making decisions about the acqisition and retirement of capitalgoods by government and industry. Special emphasis on methods of analysis based on the mathematics of compound interest. Study of time value of money, annual cost, present worth, future value, capitalized cost along with break-even analysis, valuation and depreciation, and ethics in economics.

## EEN 431 Microcontrollers (3 Credits)

This course is a study of microcontrollers and, microcontroller-based systems including the, description of the hardware architecture, assembly, language programming and system interfacing, through handson projects.

## EEN 451 Communications Engineering (3 Credits)

This course will introduce wireless communication technologies. Topics covered include: transmission fundamentals, signal encoding techniques, coding and error control, cellular wireless networks, Mobile IP and wireless access protocols.

## EEN 453 Computer Networks (3 Credits)

Analyze network topologies; backbone design; , performance and queuing theory; data-grams and, virtual circuits; technology issues; layer, architectures; standarts; survey of commercial , networks; local area networks, and contention-, based communication protocols; encryption; , performance analysis, and security.

## EEN 461 Optics and Lasers (3 Credits)

Reviews the electromagnetic principles of optics; , Maxwell's equations; reflection and transmission , of electromagnetic fields at dielecteric , interfaces; Gaussian beams; interference and, diffraction; laser theory with illustrations, chosen from atomic, gas, and semiconductor laser, systems; detectors including photomultipliers and, semiconductor-based detectors, and noise theory, and noise sources in optical detection.

## EEN 462 Semiconductor Processing Technology (3 Credits)

This course presents the fundamentals of semiconductor processing technology, including semiconductor substrates, microfabrication techniques, and process integration. Lithography, oxidation, diffusion, ion implantation, methods of film deposition and etching, metal interconnections, measurement techniques and packaging will be discussed.

## EEN 471 Control Systems (3 Credits)

This course is an introduction to system representations and analysis; representation using convolution, Fourier series and transforms, and Ztransforms. The formulation and solution of state-variable equations as well as introduction to amplitude and analog pulse modulation will also be discussed. A design project is a required part of the course.

## EEN 472 Game Development Studio (3 Credits)

Project-based class where students work in, multi-disciplinary groups of 4-8 to research and, develop a novel game concept, create a Game, Design Document, and build a working game, prototype that will be reviewed by an external, advisory committee. Students will learn to work, in development teams and various aspects of, software development project management.

EEN 473 Process Control and Instrumentation (3 Credits)
This course aims to give a sound understanding of, instrumentation systems from a stand point of, Process Control, convering transducers, signal , conditioning and processing elements, telemetry, , computer systems, recording and display systems. , Basic operation of the system components will be , considered together with accuracies, limitations, , range of applicability and costs. Particular , emphasis in the course is placed on the systems, aspects of these components. A graphical , programming enviroment will be used to develop, programs for data acquisition and instrument, control. Basic concepts, terminology, evaluation, of types of control systems as they apply to, industrial process control and positioning systems, will be covered.

## EEN 475 Design of Robotic Systems (3 Credits)

This course will focus on core principles in the design and development of robotic systems. The course will build upon principles in electrical engineering, mechanics, and computer science.

## EEN 475H Honors Design of Robotic Systems (3 Credits)

This course will focus on core principles in the design and development of robotic systems. The course will build upon principles in electrical engineering, mechanics, and computer science.

## EEN 476 Renewable Bio Energy (3 Credits)

This course presents an overview of our present status of knowledge on renewable bio energy. This course will cover the processes for recovery, productions, and usage of bio fuels and, bio products generated from these three types of biomasses to ultimately produce heat, electricity, transportation fuel, chemicals, and materials. The types of bio-waste and their use for energy and product generation will also be examined. The economic and environmental aspects of global bioenergy markets will also be examined.
EEN 481 Biomedical Engineering Micro-Devices \& Systems (3 Credits) This course introduces the concepts of biomedical engineering devices, especially for sensing and modulation applications. The course covers electronic or optical transduction techniques for applications such as neurochemicals, biopotentials and cellular ions. The course also includes a laboratory component for the design and fabrication of microscale biomedical sensors.

## EEN 481H Honors Biomedical Engineering Micro-Devices \& Systems (3 Credits)

This course introduces upper-level students to the concepts and theory of biomedical engineering devices, especially for sensing and modulation purposes. The course provides classroom lectures on the operation mechanism and applications of micro-sensors and modulators for glucose, neurochemicals, biopotentials, and cellular ions using electronic or optical transduction. In addition to classroom lectures, students will have a laboratory component for the design and fabrication of micro scale biomedical sensors.
EEN 482 Bioelectrics ( 3 Credits)
Basic electrical engineering will be applied to understand how electrical signals are generated in a biological cell, and their role in proper functioning of various bioelectrical systems in our body. This course covers the important concepts of bioelectrics, bioelectric system modeling and diagnosis. Although emphasis will be given to cardiovascular system, students will be able to apply the principles of bioelectricity to any bioelectrical system.

EEN 483 Vsli Systems Design (3 Credits)
Introduction, design tools, the CMOS transistor, , fabrication, layout and design rules implementing , logic in CMOS, design of adders, dynamic CMOS, logic high speed adders and ALUs, CMOS transitor, theory, circuit characterization, delay estimation, , CMOS performance optimization, clocking, strategies, other building and memory, control , design, electrical effects, introduction to design, verification, introduction to testing, design of , high performance circuits, low power design high , performance processor design, introduction to , timing verification, introduction to formal, verification, verification of large designs, , design of asynchronous circuits, future tends.
EEN 498 Sr Project I (3 Credits)
In this course students plan and design capstone engineering projects incorporating realistic and diverse constraints of technical, budgetary, and social aspects. Both written reports and oral presentations are required.
EEN 499 Sr Project II (3 Credits)
This course is the implementation phase of, capstone projects designed in EEE 498., Demonstration of the final working project is, required along with a written report and oral, presentation.

## Electronics Engineering Technology (EET)

## EET 111 Circuit Analysis I (3 Credits)

Introduction to direct current circuits with emphasis on voltage, current, resistance, Ohm's Law, energy and power. Series, parallel, and seriesparallel circuits, voltage and current dividers, and Kirchhoff's Law are studied, as well as DC network analysis, network theorem and magnetism circuits.

## EET 111L Circuit Analysis I Laboratory (1 Credits)

Introduction to "live" and computer simulated experiments in DC theory with emphasis on breadbording electric circuits, using meters, and using electronic simulation software. (Meets 3 hrs. per week.)

## EET 212 Circuit Analysis II (3 Credits)

Study of alternating current circuits, with emphasis on alternating current and voltage capacitors, RC circuits, inductors, RL circuits, resonance, AC network anaylsis, network theorem and transformers.
EET 212L Circuit Analysis II Laboratory (1 Credits)
Introduction to "live" and computer simulated experiments in AC theory with emphasis on breadbording electric circuits, using meters, and using electronic simulation software. Develops skills in measuring AC circuit parameters. (Meets 3 hrs. per week.)

## EET 213 Electronic Devices I (3 Credits)

Examination of semiconductor junction devices, with emphasis on characteristics and operation of diodes, bipolar junction transistors and field-effect transistors; DC characteristics biasing, and DC stability.
EET 213L Electronic Devices I Laboratory (1 Credits)
Experiments with semiconductor junction devices, with emphasis on characteristics and operation of diodes, bipolar junction transistors and field-effect transistors; DC characteristics, biasing, and DC stability.

## EET 220 Digital Electronics (3 Credits)

Study of digital devices and circuits, logic devices, integrated circuits, binary, and hexadecimal.
EET 220L Digital Electronics Laboratory (1 Credits)
Experiments on logic circuits, integrated circuits and microprocessors, circuit and device troubleshooting and analysis. (Meets 3 hrs. per week.)

## EET 313 Electronic Devices II (3 Credits)

Examination of power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

## EET 313L Electronic Devices II Laboratory (1 Credits)

Experiments with power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

EET 314 Instrumentation Measurement \& Control (3 Credits)
Study of the characteristics and limitations of instrumentation, measurement and control systems. Emphasis is on measurement systems, including transducers, signal conditioners, and telemetry systems. Various types of control systems are also addressed including: on-off, proportional, derivative, PID and fuzzy logic. Programmable logic devices are also introduced.

## EET 315 Analog Communication Systems (3 Credits)

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.

## EET 315L Analog Communication Systems Laboratory (1 Credits)

This is the lab component of ELT 315. Emphasis is on measurement and analysis of communications signals and evaluation of communication systems.

## EET 413 Digital Communications Systems (3 Credits)

Theory of communications systems utilizing digital signals. Includes coding, multiplexing, digital modulation, information codes, and error detection codes

EET 413L Digital Communications Systems Laboratory (1 Credits)
This course is the laboratory component for ELT 413 lecture. Students will design, build, and troubleshoot such circuits and systems as modulators, transceivers, line coders, multiplexers, fiber optics and data acquisition systems.

## EET 497L Sr Project A: a Capstone Experience (1 Credits)

This is the first of a two-course capstone experience. Students will develop a career portfolio, review soft skills, and gain approval for a formal proposal for a senior project. The project will be completed in the second course in the sequence.

## EET 498L Sr Project B: a Capstone Experience (1 Credits)

This is the second of a two-course capstone experience. Students will build the project approved in the first course and complete their project with the requirement of project presentation.

## Elementary Education (EED)

EED 233 Critical Thinking and Assessment Skills (3 Credits)
Study and application of theories, methods, and materials used in acquiring critical thinking, skills, with emphasis on areas of development and reinforcement include writing, schema, concept mapping, and multiple stimulus reinforcement.

## EED 274 Study of Young Children (3 Credits)

This course is a comprehensive introduction to the growth and 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.

## EED 360 Curriculum and Instruction for Primary Grades (pre K-3rd Grade) (3 Credits)

This course is designed to prepare teachers to implement an effective curriculum for children in grades preK-3. As a prerequisite, you will need to have adequate content knowledge to teach mathematics, science, reading, social studies, physical education, health and technology. The course will assist you in the development of a broad- based educational philosophy, extensive knowledge of human growth and development, practical experience with children, and the ability to digest and interpret a body of research about teaching and learning, creating learning communities, differentiating instruction for all learners, managing the classroom, assessment, the effective use of technology, and working with colleagues and parents. PRAXIS Principles of Learning and INTASC Standards will be covered. Ultimately, the goal is for you to use and apply theoretical and search knowledge to improve learning at the early childhood level.

EED 450 Teaching Literacy in the Elementary School (3 Credits) This course is designed to teach pre- service teacher candidates how to prepare children for a lifetime of literacy appreciation and how to diagnose, correct, and remediate mild to moderately severe reading difficulties among children in grades kindergarten through six. Emphasis will be placed on developing students' competencies in teaching oral communication, phonemic awareness, phonics, fluency, vocabulary, text comprehension, and literature appreciation. Teacher candidates will also be provided with knowledge of ways to utilize various types of media to support literacy in classrooms, including technological media instruction

## EED 461 Curriculum and Instruction for Early School (3 Credits)

Curriculum, instructional processes, learning environments and the professional responsibilities of teachers for linking knowledge of subject fields, pedagogy, classroom management and insights will be the thrust of this course. It will focus on fourth, fifth, and sixth grade curriculum and will also include three major components: Goal, setting, content, and methodology. Candidates are required spend twenty scheduled hours during the semester in a fourth, fifth or sixth grade classroom. They will plan, design, and implement activities. Videotaping of activities/lessons, demonstrations, and classroom simulations will be required.
EED 465 Methods and Materials for Teaching Science, Mathematicsand Technology (3 Credits)
The objective of this course is to provide the, novice teacher with the knowledge for math \& science teaching and learning in the elementary, school. Though not exclusive, topics covered will, include math and science; assessing student, learning; planning units, lessons, and activities,, effective instructional strategies; and knowledge, of math and science content.

## EED 470 Methods of Teaching Social Studies in the Elementary

 School (3 Credits)The objective of this course is to provide you, the novice teacher, the knowledge for social studies teaching and learning in the elementary school. Though not exclusive, topics covered will include the what and why of social studies; assessing student learning; planning units, lessons, and activities; effective instructional strategies; and knowledge of social studies content. The course will include a focus on technology integration, the Virginia Standards of Learning, the Virginia teaching standards and the standards proposed by the Association of Childhood Education International, the National Council for the Accreditation of Teacher Education, and the National Council for Social Studies.

## EED 490 Diagnostic Reading ( 3 Credits)

Preparation for elementary school student teachers to diagnose and correct mild to moderately severe reading difficulties. Perceptual skills, decoding skills, experiences, language background, mind set, and the reasoning ability of the readers influence comprehension of written symbols. Elementary school students anticipate meaning on the basis of what they have just read. Serious 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.

## EED 490H Honors Diagnostic Reading (3 Credits)

Preparation for elementary school student teachers to diagnose and correct mild to moderately severe reading difficulties. Perceptual skills, decoding skills, experiences, language background, mind set, and the reasoning ability of the readers influence comprehension of written symbols. Elementary school students anticipate meaning on the basis of what they have just read. Serious 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.

## EED 499 Directed Teaching and Seminar ( 12 Credits)

This program is designed to provide two supervised, experiences at two levels, PK-3 and 4-6, during, which the prospective teacher of grades PK-6 takes, gradual responsibility for a group of pupils for a, specified period of time. The teacher is observed, by a university supervisor a minimum of three, times during each experience. This sixteen week, practicum experience including a one week, observation is a mandatory requirement of the, program.

## English (ENG)

ENG 100E English As a Second Language (3 Credits)
Preparation for foreign students to attain freshman entry level writing proficiency. Students who score less than 500 on the TOEFL must enroll in this course. Offered in lieu of ENG 100.

## ENG 101 College English I (3 Credits)

Experiences in multiple-draft writing of expository themes through the writing-process approach. Focus on thesis analysis and development, and analyses of audience, purpose, tone, style, and diction. Selected readings included. MUST BE BE PASSED WITH A "C" OR ABOVE.

## ENG 101H Honors College English I (3 Credits)

Experiences in multi-draft writing of expository themes through the writing-process approach. Focus on thesis analysis and development, and analyses of audience, purpose, tone, style, and diction. Selected reading included. Must be passed with "C" or above.

ENG 102 College English II (3 Credits)
Development of critical and analytical skills in communication which provides experience in argumentative reading and writing and in techniques of research. MUST BE PASSED WITH A "C" OR ABOVE.

## ENG 102H Honors College English II (3 Credits)

Development of critical and analytical skills in communication which provides experience in argumentative reading and writing and in techniques of research. Must be passed with "C" or above.
ENG 108 Analytical Reasoning, Writing and Comprehension II (3 Credits) Introduction to vocabulary building, literal and inferential comprehension, reading, writing and the development of critical reading and cognitive skills.
ENG 109 Analytical Reasoning, Writing and Comprehension I (3 Credits) Emphasis on the application of comprehension and cognitive skills.
ENG 111 Introduction to Language Studies (2 Credits)
Orientation for various facets of written and oral language studies or to students' respective sequences of study and to some related professional positions.
ENG 114 Techniques of Vocabulary Building (2 Credits)
Introduction to the study of language with emphasis on processes of vocabulary building and some techniques of vocabulary expansion.

## ENG 203 Advanced Communication Skills (3 Credits)

Emphasis on the writing of analytical essays based on selected readings. Researched, documented exposition is stressed.
ENG 203H Honors Advanced Communication Skills (3 Credits)
Emphasis on the writing of analytical essays based on selected readings. Researched, documented exposition is stressed.

## ENG 207 Introduction to World Literature (3 Credits)

Close attention to works selected from world literature for their exemplary literary qualities and their bearing upon cultural heritage.

## ENG 207H Honors Introduction to World Literature (3 Credits)

Close attention to works selected from world literature for their exemplary literary qualities and their bearing upon cultural heritage.

## ENG 210 Practical English Grammar (3 Credits)

Structure of the English language and the principles underlying both sentence construction and standard English usage, establishing the connection between grammar and writing.

## ENG 210H Honors Practical English Grammar (3 Credits)

Structure of the English language and the principles underlying both sentence construction and standard English usage, establishing the connection between grammar and writing.
ENG 212 Electronic Research \& Techincal Writing (3 Credits)
This course provides experience in electronic, research and technical writing. Students will be, introduced to electronic research via the, Internet and databases within the context of, performing technical writing tasks.
ENG 214 Introduction to Creative Writing (3 Credits)
Introduction to the process and practice of imaginative writing in the various genres. Brief study of the marketing of manuscripts. Practical experience in both writing and editing.
ENG 215 Writing Short Stories (3 Credits)
Introduction to the art of short story writing with emphasis on the elements of a story as well as models of classic literature. Students are expected to understand the construction of poems.

ENG 218 Writing Poetry I (3 Credits)
Introduction to the art of poetry writing with emphasis on writing about literature and the nature and function of the English language. Required of all English majors in lieu of ENG 203.
ENG 250 Topics in English (3 Credits)
This course provides an introductory level survey, of a special topic in English. Students will need

## ENG 285 Public Speaking (3 Credits)

English 285 focuses on the theory and practice of public speech. Students will learn the principles of discovering and evaluating arguments and evidence, organization, style, preparation, delivery, analysis of issues, the nature of argument, audience psy

## ENG 285H Honors Public Speaking (3 Credits)

Focuses on the theory and practice of public speech. Students will learn the principles of discovering and evaluating arguments and evidence, organization, style, preparation, delivery, analysis of issues, the nature of argument, audience psychology, critical listening, and the ethics of persuasive discourse.

## ENG 286 Writing About Literary Texts (3 Credits)

Principles and techniques of grammar, rhetoric and logic with emphasis on writing about literature and the nature and function of the English language. Required of all English majors in lieu of ENG 203.
ENG 299 Writing Competency Exam (0 Credits)
Contact the department for specific course information
ENG 303 Professional \& Technical Writing (3 Credits)
Discipline-specific course designed to provide writing experiences across the curriculum.
ENG 303H Honors Professional \& Technical Writing (3 Credits)
Discipline-specific course designed to provide writing experiences across the curriculum.
ENG 304 Electronic Research \& Tech Writing (3 Credits)
Provides experience in electronic research and, technical writing.
STudents will be introduced to, electron research via the internet and databases.

## ENG 305 Multimedia Writing (3 Credits)

Provides experience in organizational patterns,, navigation systems, and internet etiquette and, teaches students basic skills for creating, hypertext and hypermedia documents.
ENG 306 Introduction to Literary Criticism (3 Credits)
Survey of various critical approaches (biographical, sociological, mythical, structural, psychological, etc.) and their application to specific works and genres.
ENG 312 Writing in a Genre (3 Credits)
Introduction to the process and practice of imaginative writing in a specific genre or genres to be determined by the instructor. Study of works by important genre authors and poets. Practical experience in writing, editing, manuscript preparation, and marketing.

ENG 313 Writing Autobiography \& Memoir (3 Credits) Introduction to the genres of autobiography, and memoir. Experience in reading and writing, samples of each genre as well as demonstrating , critiques in a workshop atmosphere. Emphasis, on organizing and shaping perceptions of, students loves into coherent form, both for, self expression and for publication.

## ENG 314 Screenwriting (3 Credits)

Screenwriting will train students in the, fundamental components of screenwriting. Through, an analysis of character motivation, pacing, and, plot structure, the course teaches the techniques, used by professional writers in crafting movie, shorts and full-length feature films.
ENG 315 Survey of English Literature I (3 Credits)
Study of the major authors and major works in English literature from the Anglo-Saxon period through the 18th Century.
ENG 316 Survey of English Literature II (3 Credits)
Study of the major authors and major works in English literature from the Romantic period through the Modern Age.

ENG 317 The Bible As Literature (3 Credits)
Reading selections from the Old and New Testaments and the Apocrypha with emphasis on their literary aspects.
ENG 318 Writing Poetry II (3 Credits)
Development of an advanced knowledge of , self expression and creativity as well as the use, of poetic devices such as meter, rhythm and, symbolism in traditional and comtemporary, forms.
ENG 318H Honors Writing Poetry II (3 Credits)
Contact the department for specific course information
ENG 336 Modern English and American Literature (3 Credits)
Study of the major writers of the twentieth century with emphasis on main currents of thought within the century.
ENG 341 American Literature I (3 Credits)
Survey of American Literature from the Colonial Period to the Civil War.
ENG 342 American Literature II (3 Credits)
Survey of American Literature from the Civil War to the present.
ENG 342H Honors American Literature II (3 Credits)
Survey of American Literature from the Civil War to the present.
ENG 350 Seminar in Literary Analysis and Interpretation (3 Credits) Offers students in-depth instruction in the skills of analysis and interpretation of literary texts to prepare them for thesis-writing. Students practice close reading and analysis of texts in different genres and learn to develop thesis-driven essays about literature.
ENG 383 African-American Literature, 1940-PRESENT (3 Credits) Survey of African American literature, including selected AfricanAmerican writers from slavery to the present time.
ENG 384 African-American Literature: Poetry (3 Credits)
Study of selected works of major African-American poets with emphasis on dominant thems and forms, and attention to the historical and literary background of the poetry.
ENG 385 African-American Literature: Fiction (3 Credits)
Development of African-American fiction from 1853 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.
ENG 401 Literature and Medicine ( 3 Credits)
This course explores the psychosocial effects of, chronic illness and the proces of coming to terms, with one's own death as expressed in various, literary works. It also examines social, expectations of gender that inform medical, diagnosis and treatments as well as society, responses to various physical disfigurements that, contribute to individual psychological effects.

ENG 404 Career-Focused Technical Writing (3 Credits)
The course provides technical writing experiences that are career focused. Readings and discussions are based on career goals, emphasizing web-based compositions. This course will prepare students to write effectively in their respective career fields.
ENG 405 Professional Presentation (3 Credits)
This course provides instruction in the development of workplace documents using audience analysis, visual communication, research, organization, and complex technical manuscripts.
ENG 406 Digital Writing \& Corporate Publications (3 Credits) This course focuses on digital writing, including proposals, communication plans, training documents, program and operational documents, white papers, and collateral workplace publications.
ENG 410 History of the English Language ( 3 Credits)
Structure and development of the language in England and America with emphasis on historical grammar and linguistic changes with the cultural factors involved.

ENG 410H Honors History of the English Language (3 Credits)
Structure and development of the language in England and America with emphasis on historical grammar and linguistic changes with the cultural factors involved.

## ENG 412 Chaucer (3 Credits)

Designed to provide a general acquaintance with The Canterbury Tales and Troilus and Criseyde and some of Chaucer's minor poems.

## ENG 413 Shakespeare (3 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.
ENG 413H Shakespeare (3 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.

ENG 419 Contemporary American English Grammar (3 Credits) Survey of the function of American English grammar in modern communication with emphasis on usage, dialectology, stylistics, and aesthetics.

ENG 420 Black Eng, Dialects, \& Linguistic Universals (3 Credits) Introduction to 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.

## ENG 430 Romantic Writers (3 Credits)

Critical study of the development of the Romantic Movement. Special emphasis upon Wordsworth, Coleridge, Byron, Shelly, and Keats.
ENG 430H Honors Romantic Writers (3 Credits)
Critical study of the development of the, Romantic Movement. Special emphasis upon, Wordsworth, Coleridge, Byron, Shelly, and Keats.

## ENG 432 African \& African-American Novel (3 Credits)

Detailed study of selected African and African-American novelists and their works.
ENG 433 African \& African-American Biography and Autobiography (3 Credits)
Study of selected biographies and autobiographies of noted Africans and African-Americans, including Malcom X, Richard Wright, Alex Haley, and Wole Soyinka.
ENG 435 Victorian Literature (3 Credits)
Study of representative British writers from, 1837-1901.

ENG 440 Seminar in African and African American Literature (3 Credits) Study of selected works and authors in the African and AfricanAmerican tradition.
ENG 449 Teaching of Composition (3 Credits)
Study of the traditional and contemporary theories, practices, and research that inform the teaching of composition from late elementary school through freshman English.
ENG 450 Research Seminar and Sr Thesis (3 Credits)
Independent reseracg on a topic selected by the student, approved by the departmental advisor and completed under the guidance of the advisor.
ENG 452 Literature for Children and Adolescence (3 Credits)
Preparation for pre-service teachers in becoming acquainted with and capable of evaluating the great wealth of trade books (library literature) available to today's children ages 0-12. Emphasis on the issues that result from the trends in publishing, selecting, and using these literary selections
ENG 453 Women's Literature and Contemporary Issu (3 Credits) Survey of relevant contemporary social issues in, wome's literature of various ethnic groups. , Issues relate to domestic battering, rape, child, abuse/incest/pornography, prostitution and, genital mutilation.
ENG 454 Young Adult Literature (3 Credits)
Survey of the reading needs and preferences of adolescent readers with emphasis on integrating literature throughout the curriculum and utilizing methods of maintaining the integral connection between reading and writing.
ENG 455 Lit/Popular Cultre (3 Credits)
Introduction to the systematic study of , popular media, focusing on the development, of slected print, film and video genres.
ENG 455H Honors Literature and Popular Culture (3 Credits)
Introduction to the systematic study of popular media, focusing on the development of selected print, film, and video genres.
ENG 456 Women's Studies: Myths and Images (3 Credits)
Exploration of the universal myths that promote certain images of women that relate to their biological function in modern fiction written by women.
ENG 456H Honors Women's Studies: Myths and Images (3 Credits)
Exploration of the universal myths that promote certain images of women that relate to their biological function in modern fiction written by women.
ENG 458 Southern Black Female Aesthetic (3 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 the racial, sexual politics influencing their cultural expressions.
ENG 459 International Women's Literature (3 Credits)
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.
ENG 460 Assessment \& Evaluation of Writing (3 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.
ENG 465 Special Topics in Literature and Language (3 Credits)
Engaging in modern literary or linguistic topics by using a variety of perspectives, disciplines, and related themes.

## ENG 490 Internship (3 Credits)

This course offers students the opportunity to, apply their skills and knowledge in actual work, situatioons under the supervision of a, professional in the field and to explore career, options or to engage in sustained scholarly, research on a selected topic under the guidance of, a major professor.

## Entreprenural Studies (ENT)

## ENT 364 Managing the Family Business (3 Credits)

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 cases; and realize, the career paths and opportunities.

## ENT 386 New Venture Finance (3 Credits)

In-depth analysis of the process of funding an, entrepreneurial venture with a critical, examination of the decisions and alternatives on, 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 capita, investment banks, government, and commercial banks, Study of how entrepreneurs identify and commit, the necessary resources to create and , fund ventures.
ENT 387 Introduction to Entrepreneurship (3 Credits)
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.
ENT 465 Small Business Management (3 Credits)
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 entrepreneurs and small, business management through classroom work.

## ENT 467 Contemporary Topics in Entrepreneurship (3 Credits)

Study of the latest concepts, theories, and, applications in all aspects of entrepreneurship, and small business management.

## ENT 476 Franchising (3 Credits)

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.
ENT 482 Managing Growing Venues (3 Credits)
Study of managing growing companies in a, professional manner while maintaining the, entrepreneurial spirit. Emphasis on financing, growth, measuring economic performance, and , obtaining information for management decision , making; management control systems for innovative, companies; short-and long-run planning in owner, managed businesses; and entrepreneurship, and management.

ENT 484 Creativity Innovation \& Change Management (3 Credits) Foundation for creating or finding new business, opportunities, technologies or processes. Study, of market research, competitive intelligence, and, managing change, with emphasis on evaluation,, planning, and leadership while distinguishing, between need or idea and the opportunity.

## ENT 486 Entrp. Field Studies (3 Credits)

Experience in working on an entrepreneurial, venture with the instructor serving as a coach., Requirements are construction of a business plan, and presentation of an assessment of the outcome.

## ENT 495 International Entrepreneurship (3 Credits)

Analysis of the operations and the managerial, strategies of various types of businesses in the, international setting. Emphasis on the, intellectual, political, social, economic, and , moral issues that business and government , leaders must face in dealing with international, business problems.

## Exercise Science (EXS)

## EXS 170 Introduction to Exercise Science (3 Credits)

Review of the health related professional, the impact exercise has on a healthy lifestyle, and as a disease prevention tool. Exercise testing, basic exercise principles, and their use in fitness and rehabilitation are addressed.
EXS 265 Activies for Handicap (2 Credits)
Introduction to therapeutic physical activities and sports that afford the disabled success, recognition, and approval among a variety of handicapping conditions.

## EXS 266 Therapeutic Exercercise and Sport (2 Credits)

Introduction to therapeutic physical activities and sports that afford the disabled success, recognition, and approval among a variety of handicapping conditions.

## EXS 267 Therapeutic Exercise \& Sports (4 Credits)

This course is designed to give a general overview of patho-physiology, and the effects of specific diseases/conditions on the exercise response as outlined in the Kinesiotherapy Scope of Practice and Kinesiotherapy Standards of Practice. This includes the effects of exercise training on the condition, management of medications, recommendations for exercise testing, exercise programming, and research within the Kinesiotherapy discipline.

## EXS 291 Care \& Prevention of Athletic Injuries (3 Credits)

Theoretical foundation for care and prevention of athletic injuries, while addressing anatomy, medical conditions, and evaluation techniques with emphasis on basic first aid skills.

## EXS 292 Stress Management (3 Credits)

This course offers a comprehensive and proactive, approach to stress management and prevention., Students will investigate and critically analyze, factors that cause stress within their lives and, discuss how those stressors can be managed by the, use of various relaxation techniques and practice, strategies and techniques to initiate and maintain, lifestyle changes that will help to both manage, and prevent stress.

## EXS 300 Exercise Physiology (3 Credits)

This course is concerned with the study of how the body responds, adjusts, and adapts physiologically to the acute stress of exercise, or physical activity, and the chronic stress of physical training so that appropriate application are considered for safe exercise programming to include injury prevention and rehabilitation.

EXS 300L Exercise Physiology Lab (1 Credits)
This course is designed to familiarize students with basic laboratory procedures and tests and to provide experience in subject recruitment, data collection, and abstract presentation. This course is a co-requisite to the Exercise Physiology Lecture class.
EXS 355 Anatomical Kinesiology (3 Credits)
Study of anatomical terminology and gross human osteology, anthropology, mycology, neurology, and angiology.

EXS 356 Biomechanics of Human Motion (3 Credits)
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.
EXS 357 Organization of Management of Exercis Science (3 Credits) 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.

## EXS 363 Clinical Aspects of Aging (2 Credits)

Clinical Aspects of Aging is designed to expose students to the important aspects of the application of the principle of fitness evaluation and prescription to the older adult population with emphasis on the physiology of aging, motivational techniques, and evaluation and programming with attention to chronic conditions. The role of good health habits and physical exercise in modifying functional age and quality of life of older adults will also be presented and proactive

## EXS 364 Clinical Experience Practicum (3 Credits)

This course is the clinical experience practicum course required for the Kinesiotherapy program. The course is taken concurrently with some of the required Kinesiotherapy internship hours. It will include discussion and lecture on topics about appropriate and inappropriate exercise interventions.
EXS 369 Research Methods and Statistical Evaluation (3 Credits) Introduction to the role of valid, reliable and objective testing methods in evaluation and decision making. Basic study design and statistical method prepare the student to make fundamental decisions using norm and criterion referenced criteria.

## EXS 380H Honors Stress Management (3 Credits)

This course offers a comprehensive and proactive, approach to stress management and prevention., Students will investigate and critically analyze, factors that cause stress within their lives and, discuss how those stressors can be managed by the, use of various relaxation techniques and practice, strategies and techniques to initiate and maintain, lifestyle changes that will help to both manage, and prevent stress.
EXS 430 Neurological and Pathological Foundations in Exercise (3 Credits)
Survey of illnesses relating to neurological dysfunction, and the nature and physiological consequence of disease processes for healthy and diseased populations
EXS 483 Clinical Kinesiology I (3 Credits)
Practical application of the knowledge with emphasis on physical musculoskeletal function, neurological involvement, goniometry, anthropometry, and gait analysis.

EXS 484 Clinical Kinesiology II (3 Credits)
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.
EXS 491 Clinical Experience Practicum (3 Credits)
This course is the clinical experience practicum, course required for the Kinesiotherapy program., The course is taken concurrently with some of the, required Kinesiotherapy internship hours. It will, include discussion and lecture on topics about, appropriate and inappropriate exercise, interventions.
EXS 493E Clinical Internship in Exercise Science (6 Credits)
Practicum experiences require 1,000 hours of, supervised field work conducted at an approved, setting which provide the opportunity to utilize, and personalize knowledge gained in the classroom, in a practical environment.

## EXS 493F Clinical Internship in Exercise Science (6 Credits)

Practicum experiences require 1,000 hours of, supervised field work conducted at an approved, setting which provide the opportunity to utilize, and personalize knowledge gained in the classroom, in a practical environment.
EXS 493G Clinical Internship in Exercise Science I (10 Credits) Practicum experiences require 500 hours of supervised field work conducted at an approved setting which provide the opportunity to utilize and personalize knowledge gained in the classroom in a practical environment.
EXS 493J Clinical Internship in Exercise Science II (10 Credits)
Practicum experiences require 500 hours of supervised field work conducted at an approved setting which provide the opportunity to utilize and personalize knowledge gained in the classroom in a practical environment.

## Fashion Merchandising (FDM)

## FDM 149 Apparel Production I (3 Credits)

Study of basic procedures used in the conversion of fabric to acceptable wearing apparel. (Students who demonstrate exceptionally high construction skills may opt to test out of the course).

## FDM 250 Pattern-Making I (3 Credits)

Using draping, flat pattern, and drafting procedures to develop and construct one original muslin garment in half or full size

## FDM 334 Textiles (3 Credits)

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.
FDM 362 Fashion Forecasting and Sourcing (3 Credits)
Explorations in the use of the Internet and other resources to determine trends and sources related to fashion apparel and accessories.

## FDM 365 Design Studio II (2 Credits)

Studio practice in the creation and production of original fashion apparel using computer applications.

## FDM 373 Fashion History (3 Credits)

Introduction to social, economic, technological, cultural, and aesthetic factors influencing trends in design, merchandising, production, distribution, and consumption of textiles and apparel over time.

FDM 449 Design Collections (3 Credits)
Developing an original line of apparel and/or accessory items for one of the major apparel industry categories. A minimum of 5 items must be included.

FDM 454 Current Issues in Fashion Design/Merchandising (3 Credits)
Seminar course in which emerging issues related to the fashion industry will be explored.

## FDM 496 Fashion Merchandising Internship (3 Credits)

Two hundred hours of supervised work experiences in an approved apparel retail agency are required. With faculty approval, plans for this experience may be submitted and the experience completed during summer prior to senior year.

## Finance (FNC)

FNC 499H Cases in Fianancial Management (3 Credits)
Contact the department for specific course information

## Fine Arts (FIA)

## FIA 110 Introduction to Art (3 Credits)

This course is designed to provide students with an understanding of the position, place, and role of art and artists in the culture in which they lived. The course focuses on the work of artists throughout history and in various cultures, and how their work enhanced the intellectural, spiritual, social, economic, and political developments of man from the cave to the present.

## FIA 114 Basic Design (3 Credits)

Study of basic elements of two-dimensional design and visual communication using a variety of media. Emphasis on visual problemsolving and critical decision making.
FIA 115 Basic Design II (3 Credits)
Exploration of color using the basic elements and principles of twodimensional design, including color theory and the practical application of theory in solving visual problems using a variety of media

## FIA 116 Basic Design III (3 Credits)

Exploration of the relationship between form, space, and ideas in threedimensional design. The sequence of projects begins with simple constructions and structures, then evolves to an investigation of complex three-dimensional form.
FIA 120 Drawing (3 Credits)
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. Emphasis on drawing in still life, the live model, and outdoor sketching.
FIA 121 Drawing (3 Credits)
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. Emphasis on d

## FIA 140 Ceramics (3 Credits)

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.
FIA 141 Ceramics (3 Credits)
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.

FIA 160 Lettering (3 Credits)
Study of various techniques in poster layouts; practice in freehand pen and brush lettering; study of old style and modern alphabets; designing monograms, book covers and jackets, and constructing, printing, and illustrating a book.

FIA 165 Foundations of Photo 1 (3 Credits)
Introduces students to the foundations of the principles of photography and fundamental camera techniques using a digital single lens reflex (DSLR) camera. Requires outside shooting and lab work. Computer experience is advised.

## FIA 166 Foundations of Photo 2 (3 Credits)

This course emphasizes principles of photography and intermediate camera techniques in photography, where students will continue to create more imagery based on the competency introduced in FIA 165. This class has added features requiring advanced shooting assignments and a higher level of understanding of the use in Adobe Photoshop techniques as presentation tools. This class will also require more outside shooting and lab work. Computer experience is required.

## FIA 201 Basic Art Appreciation (3 Credits)

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 artists' works related to the world around them, and an explanation of the periods of art.

## FIA 201H Honors Basic Art Appreciation (3 Credits)

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 artists' works related to the world around them, and an explanation of the periods of art.

## FIA 211 Fashion Drawing (3 Credits)

Introduction to drawing from the live model and other sources. Emphasis is on developing skills necessary for competent illustration of the figure for fashion drawings.

## FIA 214 Craft Design Workshop (3 Credits)

Experimentation with basic processes and individual problems in woodcarving, ceramics, leather, metal, textiles and plastics. Develops appreciation of artistic craftsmanship, research, lectures, demonstration and participating experiences.

## FIA 220 Life Drawing (3 Credits)

Drawing from live models in an attempt to familiarize the student with various approaches to the figure.

## FIA 221 Life Drawing (3 Credits)

Drawing from live models in an attempt to familiarize the student with various approaches to the figure.

## FIA 234 Painting (3 Credits)

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.

## FIA 235 Painting (3 Credits)

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.

## FIA 240 Sculpture (3 Credits)

Introduction to the basic rules and techniques of sculpture, familiarizing students with the various tools and materials peculiar to this area. Emphasis on clay, plaster of Paris, wire and plastics, and traditional materials such as wood, stone, and metal, wherever feasible. Elementary sculpture is basrelief and in the round.

## FIA 260 Introduction to Graphic Design (3 Credits)

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.

## FIA 261 Printmaking Workshop (3 Credits)

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.

## FIA 262 Printmaking Workshop (3 Credits)

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

## FIA 265 Studio Lighting 1 (3 Credits)

Examines advanced lighting and camera techniques under controlled studio conditions. Includes digital camera use, electronic flash, advanced lighting techniques, color temperature and filtration, and lighting ratios. Requires outside shooting and lab work. At least two semesters of continuous and relevant software application experience is required.

## FIA 266 Studio Lighting 2 (3 Credits)

Reinforces more advanced lighting and camera techniques under controlled studio and on location conditions. Includes advanced camera use, electronic flash, advanced lighting techniques, and lighting ratios with speed lights and studio strobes. Also increases the amount of work to include food, product, and people as subject matter and cultivating and producing conceptual ideas. Requires outside shooting and lab work. Computer experience is mandatory.

## FIA 270 History of Art Survey I (3 Credits)

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.
FIA 271 History of Art Survey II (3 Credits)
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 the Renaissance through contemporary.
FIA 280 Computer Applications in the Arts (3 Credits)
Study of the concepts and skills necessary to explore the use of computers in the arts. Emphasizes intuitive understanding of technical material and encourages artistic experimentation with computer- related ideas.

## FIA 295 Sophomore/Junior Review (1 Credits)

This course is a review of student work in their, first two years in the Fine Arts program. Faculty, will evaluate the student's strengths and discuss, areas that may require further development. The, student's portfolio must include two works from, each studio course completed at Norfolk State, University and a written narrative statement for, each piece of work must also be submitted.

## FIA 320 Intermediate Drawing (3 Credits)

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.

## FIA 321 Intermediate Drawing (3 Credits)

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.

FIA 335 Art Composition \& Painting (3 Credits)
Emphasis on the strengthening of organization principles of good drawing and design within a painting, including the application of effective painting methods, techniques, and thematic concepts.

## FIA 360 Typography ( 3 Credits)

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.

## FIA 361 Advance Printmaking (3 Credits)

Contact the department for specific course information

## FIA 362 Graphic Design I (3 Credits)

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.
FIA 363 Graphic Design II (3 Credits)
Study of commercial art including video and the Web. Emphasis on layout, illustration, typography, computer graphics, photography, video, animation (such as Flash), and the various processes of reproduction as they pertain to graphic design.
FIA 365 Fashion Photography I (3 Credits)
Contact the department for specific course information
FIA 370 African/Afro-American Art (3 Credits)
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 metallurgy, design and textiles.

## FIA 370H Honors African/Afro-American Art (3 Credits)

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 metallurgy, design and textiles.
FIA 372 Introduction to Fibers (3 Credits)
Study of contemporary sculptural forms in the following categories soft sculpture, body adornments, container forms, and wall hangings. Techniques used are wrapping, coiling, weaving, offloom weaving, knot forming, trapunto, and fabric manipulation.

## FIA 380 Computer Imaging ( 3 Credits)

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.

## FIA 420 Advanced Drawing (3 Credits)

Establishment of individual responses to the environment while building drawing concepts by working in series and presenting work in a professional manner.

## FIA 460 Advanced Graphic Design (3 Credits)

Study of the means and methods of relating pictorial images, lettering, type, paper and color for use in publicity, book design, and allied fields

## FIA 461 Advanced Graphic Design (3 Credits)

Focus on research and experimentation in specialized visual communication media in a topical studio. Extensive experience in computer graphics required.

## FIA 462 Design in Commerce (3 Credits)

Study of contemporary visual communications, with emphasis on systematic and methodological approaches to communication design through the solving of practical, complex problems in visual communication. Extensive experience in computer graphics required.

## FIA 463 Design in Commerce (3 Credits)

Study of graphic design with emphasis on sharpening mechanical skills, promoting professional work and compiling a strong portfolio. Developing a sense of clarity and style in visual communication of the goal.
FIA 465 Studio Workshop 1 (3 Credits)
This advanced photography course requires photography students to apply what they have learned; what has been previously emphasized and reinforced in all their photography courses. This facilitates their ability to create a more concise portfolio in their selected concentration, which includes fashion, food, portrait, product, and fine art. This workshop will prepare the students to design, construct, and present their photographs for portfolio reviews needed to complete their preferred areas of expertise. Theoretical and historical relationships to the student artwork are discussed.

## FIA 466 Studio Workshop 2 (3 Credits)

This advanced photography course will continue emphasizing the requirements the photography students are to apply; what they have learned and what has been previously emphasized and reinforced in all their photography courses. This facilitates their ability to continue creating a more concise portfolio in their selected concentration, which includes fashion, food, portrait, product, and fine art. This workshop will prepare the students to design, construct, and present their photography for portfolio reviews needed to complete their preferred areas of expertise. Theoretical and historical relationships to the student artwork are discussed.

## FIA 467 Studio Workshop 3 (3 Credits)

This advanced workshop course requires students to apply what they have learned and what has been previously emphasized and reinforced in all their related courses. This facilitates their ability to create a more concise portfolio in their selected concentration, which includes pertinent and instructor approved subject choice. This workshop will prepare the students to design, construct, and present their work for portfolio reviews needed to complete their preferred areas of expertise and prepare them for transition into graduate school or the work place. Theoretical and historical relationships to the student artwork are discussed, reinforced, and applied.

## FIA 468 Studio Workshop 4 (3 Credits)

This advanced workshop course requires students to apply what they have learned and what has been previously emphasized and reinforced in all their related courses. This facilitates their ability to create a more concise portfolio in their selected concentration, which includes pertinent and instructor approved subject choice. This workshop will prepare the students to design, construct, and present their work for portfolio reviews needed to complete their preferred areas of expertise and prepare them for transition into graduate school or the work place. Theoretical and historical relationships to the student artwork are discussed, reinforced, and applied.

FIA 469 Printmaking Workshop 1 - Intalglio Printmaking (3 Credits) Designed to apply experimental methods for digital media in printmaking, this course will teach the use of digitally generated images, chemical processes in combination with traditional hand- drawn images to create intaglio prints. With a focus in printmaking workshop practice, this course will require a minimum of six hours in studio practice per week with significant time for additional research, preparation, execution and print proofing. Regular consultation between student and instructor is required to develop a strong conceptual, philosophical, and personal exploration of imagemaking techniques and methods, as well as the development of manual dexterity skills associated with printmaking processes. The final products will be original handmade prints and digital print outputs, which explore the inter-relationship digital photographic, computer generated images as a means to an end for intaglio printmaking processes.

## FIA 470 Printmaking Workshop 2 (3 Credits)

Designed to reinforce experimental printmaking techniques, methods, concepts and philosophy in application of digital media in intaglio printmaking; will build upon content covered in FIA 469 by expanding upon the use of digitally generated images, chemical processes in combination with traditional hand- drawn images for the creation of intaglio prints. With a focus in printmaking workshop practice, this course will require a minimum of six hours in studio practice per week with significant time for additional research, preparation, execution, and print proofing. Regular consultation between student and instructor is required to develop a strong conceptual, philosophical and personal exploration of image- making processes and the development of manual dexterity skills associated with printmaking processes. The final products will be original handmade prints and digital print outputs, which explore the interrelationship of digital photographic, computer generated images as a means to an end for intaglio printmaking processes

## FIA 491 Advanced Studio Problems (3 Credits)

Study of studio problems in drawing, painting, printmaking, graphic design, sculpture, ceramics, and photography.
FIA 491C Advanced Studio Problems (3 Credits)
Study of studio problems in drawing, painting, printmaking, graphic design, sculpture, ceramics, and photography.
FIA 492 Advanced Studio Problems (3 Credits)
Studio problems in drawing, painting, printmaking, graphic design, sculpture, ceramics, and photography. May be used for one semester major-field-related internship.
FIA 492A Advanced Studio Problems (3 Credits)
Study of studio problems in drawing, painting, printmaking, graphic design, sculpture, ceramics, and photography.

## FIA 492B Advanced Studio Problems (3 Credits)

Studio problems in drawing, painting, printmaking, graphic design, sculpture, ceramics, and photography. May be used for one semester major-field-related internship.
FIA 495 Portfolio Preparation and Sr Exhibition (2 Credits)
Preparation of a professional art portfolio which includes selecting pieces, presenting and documenting work, applying for graduate school or the profession. Portfolio reviewed by faculty and outside elevators. To be taken only in the final semester of major course work for graduation.

## Food Science and Nutrition (FSN)

FSN 101 Introduction to Dietetics \& Food Science (2 Credits)
Study of dietetics history, philosophy, and career choices. Emphasis will be placed on skills, attitudes, educational preparedness, and work experiences necessary for the performance in the field of dietetics.

FSN 101H Honors Introduction to Dietetics \& Food Science (2 Credits) Study of dietetics history, philosophy, and career choices. Emphasis will be placed on skills, attitudes, educational preparedness, and work experiences necessary for the performance in the field of dietetics.
FSN 102 Professional Development \& Experiences Seminar (1 Credits) Exploration of opportunities in the Nutritional Sciences and Dietetics Professions. Career planning and exposure to nutrition and dietetics professionals as role models. Emphasis will be placed on orientation and development of professional behavior in the work place; evaluation and analysis of on-thejob work experiences in the dietetics and nutrition professions coupled with classroom preparation. Supervised work experience to include a minimum of thirty clock hours per semester

FSN 102H Honors Professional Development \& Experiences Seminar (1 Credits)
Exploration of opportunities in the Nutritional Sciences and Dietetics Professions. Career planning and exposure to nutrition and dietetics professionals as role models. Emphasis will be placed on orientation and development of professional behavior in the work place; evaluation and analysis of on-thejob work experiences in the dietetics and nutrition professions coupled with classroom preparation. Supervised work experience to include a minimum of thirty clock hours per semester
FSN 110 The Science of Human Nutrition (3 Credits)
This course will emphasize the principles of, nutrition, the six basic nutrients, and related, health issues. The impact of nutrition on the, body systems, wellness, and disease states will be, explored. Valuable insights will be gained on, various eating behaviors, disease interventions,, recommended dietary guidelines and tools, food, safety and dietary supplements. The influences of, socioeconomic, cultural and psychological factors, that determine food and nutrition behavior will, also be presented.

## FSN 160 Food Cost Control (3 Credits)

Theoretical and practical applications of food cost control in food service systems.

FSN 312 Physiological \& Chemical Foundations of Nutrition (3 Credits)
Study of nutritional requirements as related to individuals at different stages of the life cycle from conception to the aged.

## FSN 320 Food Service Management (3 Credits)

Study of the theoretical foundations involved in the organization and management of public and private food service institutions. Emphasis is placed on personnel management and labor policies.
FSN 330 Scientific Food Development (3 Credits)
Application of experimental methods to food preparation considering physical, chemical, and biological changes.
FSN 330L Scientific Food Development Laboratory (1 Credits)
The laboratory portion of this class will provide experiments and applications that illustrate the chemical and physical changes that occur in foods and food systems during their preparation, processing, and storage.

## FSN 340 Nutrition Education (3 Credits)

The study of the skills of communication, business management, and education for the performance of the task of translating nutrition information into nutritious eating patterns and healthy behavior.
FSN 356 Advanced Nutrition \& Human Metabolism (3 Credits) Understanding the interrelations among nutrients in metabolism, effect of diets on the biophysical process and factors that may alter nutrient requirements in humans.

FSN 410 Nutrition in Aging (3 Credits)
This course will provide the basic knowledge about the particular nutrition and food needs of older people. Emphasis is placed on making informed decisions about the nutritional needs of the elderly with careful attention to seeking alternatives and evaluating each client as an individual.

## FSN 426 Nutrition in Disease (3 Credits)

Advanced study of nutrition as it related to human disease with theoretical dietary management.

## FSN 426L Nutrition in Disease Laboratory (1 Credits)

A course which provides experience in completing nutritional assessments, energy-nutrient analysis, non-energy nutrient analysis, and drug-nutrient interactions. These structured laboratory experiments via case studies and simulations will reinforce the concepts covered in FSN 426: Nutrition in Disease.

## FSN 449 Nutrition in Sports \& Fitness (3 Credits)

The application of nutrition principles to enhance the health of the athlete and to optimize physical performance including: metabolic demands of exercise, fuel source, energy expenditure, vitamins and minerals, fluids and electrolytes, and diet planning. Also, the study of nutrient and quasi nutrient supplementation efficacy or ergogenic aids and eating disorders as they relate to the athlete.
FSN 450 Professional Seminar (3 Credits)
The course allows for preparation and delivery of literature review. Exploration into problems in dietetics, nutrition, food science, health education and public health including history, mission, terminology, philosophy, ethical principles and scientific foundations which will provide a basis for research.
FSN 460 Quantity Food Production (3 Credits)
Selection, use, and care of institutional equipment. Food preparation principles applied to quantity production. Experiences in a food service establishment.
FSN 484 Rural/Urban Nutrition (3 Credits)
Cultural and scientific aspects of food and nutrition as applied to the individual, the family, and community.

## French (FRN)

## FRN 111 Elementary French I (3 Credits)

Introduction to fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

## FRN 111H Honors Elementary French I (3 Credits)

Introduction to fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

## FRN 112 Elementary French II (3 Credits)

Introduction to fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

## FRN 211 Intermediate French I (3 Credits)

Review of grammar, reading moderately difficult prose, oral practice, and written compositions.

## FRN 212 Intermediate French II (3 Credits)

Intensive and extensive study and reading of modern prose, oral practice, and composition.

FRN 330 Literature of the 18th Century (3 Credits)
Origins and foundations of French Classicism, including its philosophical and artistic implications and its main representatives: Descartes, Pascal, Corneille, Racine, Moliere, La Fontaine, and minor classicists.

FRN 331 Literature of the 17th Century (3 Credits)
Presentation of the main trends in the political and literary developments of the Age of Enlightenment. Special emphasis on the contributions of Voltaire, Rousseau, Montesquieu and the Encyclopediats.

## Geography (GEO)

## GEO 130 Principles of Geography (3 Credits)

Survey of the basic factors that explain the interactions and adaptations of human beings with their environments. Critical thinking and writing competencies are introduced and emphasized.
GEO 130H Honors Principles of Geography (3 Credits)
Survey of the basic factors that explain the interactions and adaptations of human beings with their environments. Critical thinking and writing competencies are introduced and emphasized.

GEO 141 World Regional Geography (3 Credits)
Contact the department for specific course information

## GEO 336 Political Geography (3 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.

## GEO 337 Geography of Africa (3 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 Sub-Saharan African Realms.

## GEO 338 Caribbean Geography (3 Credits)

This course examines Caribbean cultural and, historical landscapes. The course will give an, overview of the cultures, environmental and, social issues, historical geography, geopolitics,, economics and social processes in the Caribbean. , Focus will be on current developments in the, Caribbean islands and the role of this region in, the world.

## GEO 360 Introduction to Gis (3 Credits)

Students will be introduced to the concepts and theories of geographical information systems. This course and program are not about learning any one piece of software or software training. Course emphasis is on creation, visualization and analysis of geographically referenced data.
GEO 366 Illicit and Illegal Geographies (3 Credits)
The concepts of "moral" and "legal" are socially defined and dynamic in nature. This course considers how social values associated with illicitness and illegality have ever-changing spatial expressions including conformity, concealment, resistance and transgression. Students will also consider the roles that cultural landscapes play in this dynamic geography.
GEO 366H Honors Illicit and Illegal Geographies (3 Credits)
The concepts of "moral" and "legal" are socially defined and dynamic in nature. This course considers how social values associated with illicitness and illegality have ever-changing spatial expressions including conformity, concealment, resistance and transgression. Students will also consider the roles that cultural landscapes play in this dynamic geography.

GEO 420 Disability Geographies (3 Credits)
This course examines how ability and disability shape each individual's experience in the world, and the spatial dimensions of that experience, issues of mobility, access, identity and citizenships, and how they are affected by discrimination and social marginalization are addressed. The course surveys research in the social sciences and humanities, with a focus on recent academic literature in the discipline of geography.
GEO 430 Geography of Atlantic World Slavery (3 Credits)
This course examines the spatial expression of slavery in Africa, Europe and the European New World colonies from 1450 onward. Focal topicswill include 1) the role geographically played in the unique experience of enslaved people throughout the Atlantic World, 2) the role of landscape in slave revolts and other forms ofresistance, 3) the spatial legacies of slavery, and 4) geographic nature of remembering and forgetting slavery throughout the Atlantic Ocean.

## GEO 450 Cultural Geography (3 Credits)

This seminar considers the sub-filed of cultural geography. There are two foci of this course: 1) to give the student an overview of culutrial geography and its history considering major themes in the last century, and 2) to consider moore deeply theories, themes and concepts associated with the "new" cutural geography of the last four decades and how ideas in cultural geography influence and are influenced by related disciplines. (SI-Sufficient Student Interest)

## Health Education (HED)

HED 100 Personal and Community Health (2 Credits)
Study of a basic knowledge of current personal and community health problems which empowers students to make informed decisions and helps them to develop more positive attitudes towards practicing a lifestyle of healthful living.
HED 170 Personal and Community Health (3 Credits)
Study of a basic knowledge necessary for meeting the state's approved professional preparation and responsibilities in the area of health.
HED 170H Personal and Community Health (3 Credits)
Study of a basic knowledge necessary for meeting the state's approved professional preparation and responsibilities in the area of health.

HED 254 School and Community Health Education Programs (3 Credits) This course will investigate the history, theories, principles and practices underlying the organization and administration of school and community health education programs. It considers the role of the health educator in the relationship between the school health program, and the whole school program. Additionally, principles, introduction to lesson planning, goals, and the structure of community agencies that provide health education programs will also be explored
HED 368A Cur/Meth Health Ed (3 Credits)
Contact the department for specific course, information.
HED 442 General Safety Education (3 Credits)
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 Professionals (HRP)

## HRP 120 Medical Terminology (3 Credits)

A study of medical terminology including abbreviations, prefixes, suffixes, root words, and technical terms with emphasis on proper spelling and usage.

## HRP 220 Community Meal Management (3 Credits)

This course focuses on selecting foods and making, diets/menus based on various chronic diseases, which have implications for individuals at, different stages of life. The influence of, culture in the meal planning process will be, emphasized. Educational experiences in community, facility will be arranged. Cooking, demonstrations will show healthy food preparation.
HRP 310 Current Trends in Health Care Delivery (3 Credits)
A 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.
HRP 320 African American Health (3 Credits)
This course will systematically examine the health care issues of African Americans in comparison to other racial/ethnic minority populations. The racial disparities in the leading causes of deaths identified by the Centers for Disease Control and Prevention will be examined in the context of the five social determinants of health (physical environment, access to health services, biological and genetics, social environment, and individual behavior). Additionally, the course will examine the delivery of health care by health related historical events and the changing social, political and economic influences.

## HRP 320H Honors African American Health (3 Credits)

This course will systematically examine the health care issues of African Americans in comparison to other racial/ethnic minority populations. The racial disparities in the leading causes of deaths identified by the Centers for Disease Control and Prevention will be examined in the context of the five social determinants of health (physical environment, access to health services, biological and genetics, social environment, and individual behavior). Additionally, the course will examine the delivery of health care by health related historical events and the changing social, political and economic influences.

## Health Services Management (HSM)

HSM 300 Health Services Management (3 Credits)
Orientation to the health delivery system, and the role of the health services manager and/or supervisor which provides organization theory and practical information about health adminstration. Investigation of the organizational and environmental context within which a health manager works.

HSM 300L Health Services Management Laboratory (1 Credits) Study of various problems and work settings of a health manager. Visit to various community health facilities required. The course introduces techniques to help students learn how to apply basic rules of APA style in writing assignments, literature reviews, research proposals, and presentations.

## HSM 310 Health Personnel Management (3 Credits)

Principles and practices in personnel recruitment, selection, management, and utilization. Emphasis on unique characteristics of professional, technical, skilled and unskilled health-care workers. Indepth study of legal responsibilities contract administration, grievance procedures, and in-services training and education.

HSM 311 Legal Aspects \& Ethics of Health-Care Delivery (3 Credits) Presentation of the historical perspectives, current status, and future projections in the field. Concepts of corporate liability, malpractice, and professional negligence. Informed consents, incident reporting, and the importance of accurate and complete records. Emphasis on the prevention of legal actions. Examination of the role of ethics and moral decision-making in the everyday life of the health-service manager with special emphasis on the various professional Codes of Ethics.

## HSM 331 Health Financial Management (4 Credits)

Overview of economic theory and practice in the financial interactions between consumers and providers on health-care services, including all forms of public and private prepayment mechanisms. Broad orientation to financial management problems and practices is provided.

## HSM 368 Healthcare Marketing (3 Credits)

This course provides a broad background in healthcare marketing, market management, interpersonal skills for the healthcare marketer, and strategic actions of the healthcare marketer.
HSM 387 Population Health (3 Credits)
This course is an overview of the essentials of population health practices to address the prioritized healthcare needs of populations with a goal of making recommendations to improve access to care, improve quality of care, and reduce cost of care. Health issues will be examined from a population health perspective.

## HSM 397 Healthcare Information Systems (3 Credits)

This course focuses on the impact of government policy and healthcare information technology (HIT), the various elements of an information system, HIT governance and strategic planning, key operational and technical processes for maximizing HIT efficiencies and effectiveness, electronic health records and financial applications, and major techniques used to evaluate HIT investment.

## HSM 451 Comprehensive Health Planning (3 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.

HSM 451H Honors Comprehensive Health Planning (3 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.
HSM 454 Long-Term Care Administration (3 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 longterm 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.
HSM 460 Public Health Administration (3 Credits)
Study of public health administration at the local, state, and national level. The focus is on the administration skills needed to achieve the goals of public health. Emphasis is on leadership and management, health poilicy, finance and marketing, public health surveillance, health systems and disaster preparedness.

## HSM 470 Managerial Epidemiology (3 Credits)

This course illustrates how health service managers can use epidemiological concepts and tools to improve management decisions. Emphasisis placed on population health management, managerial epidemiological analyses, assessment of medical care processes/ outcomes, study designs, descriptive epidemiology, quantitative measures, and related terminolgy.
HSM 470H Managerial Epidemiology (3 Credits)
This course illustrates how health service managers can use epidemiological concepts and tools to improve management decisions. Emphasisis placed on population health management, managerial epidemiological analyses, assessment of medical care processes/ outcomes, study designs, descriptive epidemiology, quantitative measures, and related terminolgy.
HSM 494 Health Services Management Internship (6 Credits) 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-visitations.
HSM 494H Hon Health Services Mangment Internship (6 Credits) 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-visitations.
HSM 497 Health Services Management Problems and Research (3
Credits)
This course provides an introduction to research design. Applying statistical and research techniques to a problem in health care, each student will be required to develop a research proposal to its completion.

## History (HIS)

## HIS 100 History of World Societies I (3 Credits)

A comparative study of societies and cultures, and their interactions, from the earliest humans to the sixteenth century. Encourages critical thinking and geographical understanding, offers exercises in writing, discussion, and computer applications.

HIS 100H Honors History of World Societies I (3 Credits)
A comparative study of societies and cultures and their interactions from the earliest humans to the sixteenth century. Encourages critical thinking and geographical understanding: offers exercises in writing, discussion, and computer_applications.

## HIS 101 History of World Societies II (3 Credits)

A comparative study of societies and cultures, and their interactions, from the sixteenth century to the present, emphasizing modern issues. Encourages critical thinking and geographical understanding, offers exercises in writing, discussion, and computer applications.
HIS 101H Honors History of World Socities II (3 Credits) A comparative study of societies and cultures and their interactions from the sixteenth century to the present, emphasizing modern issues. Encourages critical thinking and geographical understanding: offers exercises in writing, discussion and computer applications.
HIS 102 United States History to 1865 (3 Credits)
Survey of American History to 1865.

HIS 102H Honors United States History to 1877 (3 Credits)
A comprehensive surve of American history from the development of indigenous cultures tot he passage of the Thirteenth Amendment in 1865. Encourages critical thinking and geographical understanding: offers exercises in writing, discussion, and computer applications.
HIS 103 United States History Since 1865 (3 Credits)
Survey of American History from 1865 to the present.
HIS 205 Introduction to the Study of History (3 Credits)
HIS 205, a required course for history majors to be taken in the sophomore year, is designed to introduce students to the meaning, and problems of historical study and to the skills required to conceptualize, analyze, and synthesize historical materials.

## HIS 304 Western Thought, Global Challenges (3 Credits)

Studies the development and characteristics of Western thought and ideologies, and their application to modern global issues and challenges. Emphasizes critical thinking, writing, and oral discussion.
HIS 305 The Three R's of History. Reading, Writing and Research (3 Credits)
An in-depth engagement with the craft of reading, writing, research and rhetoric for historians, this clas reinforces the skills learned in History 205 and builds upon them by introducing historical research methods and discussing the variety of historical thought and theory.
HIS 310 Age of Encounter, 1415-1607 (3 Credits)
This course examines European overseas expansion from the exploration of West Africa in 1415 to the settlement of Jamestown colony in 1607. It focuses on cross- cultural encounters among Europeans, Africans, Native Americans, and Asians, with an emphasis on the Columbian Exchange, the African slave trade, Atlantic commerce, European colonization, and the Asian contribution to overseas exploration.
HIS 313 United States Early National Period, 1788-1815 (3 Credits) This course examines the development of the federal government from the ratification of the US Constitution through the end of the War of 1812. The course will emphasize the development of an American social and political identity and the challenges the new nation faced as it developed not only a strong central government, but also struggled to be recognized internationally.
HIS 314 Antebellum America, 1815-1850 (3 Credits)
This course examines the social, cultural, and political history of the United States during the antebellum period, from the end of the War of 1812 to the election of Abraham Lincoln as president. Particular attention will be paid to the changing role of women, the struggle to end slavery, and the arrival of new immigrants and their position in American Society.
HIS 320 Independent Latin America ( 3 Credits)
Latin America through the prism of the impact of imperialism, migration and revolutions since independence: Relations with the United States leding up to the United States; the Aftermath of slavery; comparative approaches to sovereignty, ideology, race, gender and ethnicity.

## HIS 328 History of Virginia (3 Credits)

This course traces the history of Virginia from Native American kingdoms through colonial development to the present. Virginia was one of the most important English colonies in North America; later, it would be one of the most important states in teh American Union. Its decision to leave the Union for the Confederacy was very controversial and painful, and it took the Old Dominion nearly hundred years to recovr from that path. Today, Virginia has become one of the wealthiest and most influential states again, thanks in part to government and military spending

## HIS 330 Colonial History (3 Credits)

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.

## HIS 331 The American Revolution and Federal Era,, 1763-1800 (3

 Credits)Surveys 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.
HIS 332 The United States: Early National Period, 1800-1840 (3 Credits) Study of the Jeffersonian and Jacksonian eras, with special emphasis on economic, political, and social forces shaping American development.
HIS 333 The Civil War \& Reconstruction (3 Credits)
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

## HIS 335 African-American History (3 Credits)

Survey of African-American history from its African origins to the abolition of slavery in 1865. Emphasizes critical thinking, writing and oral competency.

HIS 335H Honors African-American History to 1865 (3 Credits)
Survey of African-American history from its African origins to the abolition of slavery in 1865. Emphasizes critical thinking, writing and oral competency.
HIS 336 African-American History Since 1865 (3 Credits)
Survey of African-American history from 1865 to present.
HIS 336H Honors African-American History Since 1865 (3 Credits)
Survey of African-American history from the abolition of slavery in 1865 to the present. Emphasizes critical thinking, writing and oral competency.

## HIS 337 United States Women's History (3 Credits)

This course examines women's participation in the founding, developing and growth in the United century with special focus on women's struggle for legal, economic and social equality.

## HIS 340 From England to Great Britain 1485-1832 (3 Credits)

Study of the transformation of Tudor and Stuart, England into eighteenthcentury Great Britain. , Emphasis on the making and maintenance of, England's limited monarch 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

## HIS 341 Great Britain Since 1832 (3 Credits)

Study of the rise and fall of Great Britain as the world's leading industrial and imperial power. Focuses also on the effects of decolonization, including African, West Indian, and Asian immigration to the United Kingdom, as well as the making of the welfare state after the Second World War.
HIS 346 Twentieth-Century Europe ( 3 Credits)
Study of the problems of the states of Europe, emphasizing the causes 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.

HIS 346H Honors Twentieth-Century Europe (3 Credits)
Study of the problems of the states of Europe, emphasizing the causes 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.

## HIS 348 Ancient History (3 Credits)

Study 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.

## HIS 350 Borders and Moving People (3 Credits)

Examines the contemporary history of border violence, migration patterns, government controls, and ideologies of ethnic and national belonging in global and comparative perspective. Emphasis on understanding how racially exclusive and politically authoritarian ideologies triumph over the diverse and democratic promises of revolution, nation building, \& construction of the people.

## HIS 350H Borders and Moving People (3 Credits)

Examines the contemporary history of border, violence, migration patterns, government controls,, and ideologies of ethnic and national belonging in, global and comparative perspective. Emphasis on, understanding how racially exclusive and, politically authoritarian ideologies triumph over, the diverse and democratic promises of revolution,, nation building, and constructions of the "the, people".
HIS 360 Latin America: Readings in Latin-American History (3 Credits) Analysis of the political, economic, and social histories of these nations, 1810 to present.
HIS 361 Latin America: Readings in Latin-American History (3 Credits) Intensive directed reading for exceptionally able students.
HIS 362 Introduction to the Modern Middle East, Part 1 (3 Credits)
Survey 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.
HIS 364 Readings in American History (1-3 Credits)
Readings and discussions in selected historical problems.

## HIS 365 Caribbean History ( 3 Credits)

Cultures and comparative historical experiences in the Caribbean, from the early modern European expansion to the present. Analyze the ways in which race, ethnicity, gender and class contributed to shared memories and political discourse as well as to social conflict, revolution, dictatorship and democracy, and the intersections of this past with the rise of the United States from the perspective of diplomacy, imperialism and migration. Thematic focus will vary.

## HIS 370 Early African History and Cultures, From the Beginning of Humankind to 1600 (3 Credits)

This course introduces students to the political, social, economic, and cultural history of Africa from the beginning of humanity to the 17thcentury. During the semester, students explore several themes with a view to understanding the vast diversity of African peoples and cultures before European colonial rule. Using multiple teaching and learning strategies to expose students to variety of viewpoints, the course emphasizes the inter-disciplinary richness of Africa's historical study, drawing interpretive paradigms from anthropology, archaeology, ethnography, religion, ethno-linguistics, and geography.

HIS 371 Modern African History \& Cultures 1600-PRESENT (3 Credits) This course examines the history and cultures of Africa from the 17th century to the 21 st century. Emphasis will be on the internal dynamics of African societies before European colonization, Africa and the global maritime networks, European colonization and Africans' response, end of colonization, challenges of post-colonial nation building, apartheid in South Africa, and Africa's recovery and economic growth in the age of globalization.

## HIS 371H Honors Modern African History \& Cultures, 1600-PRESENT (3 Credits)

This course examines the history and cultures of Africa from the 17th century to the 21 st century. Emphasis will be on the internal dynamics of African societies before European colonization, Africa and the global maritime networks, European colonization and Africans' response, end of colonization, challenges of post-colonial nation building, apartheid in South Africa, and Africa's recovery and economic growth in the age of globalization.

## HIS 372 African Diaspora History and Culture (3 Credits)

Drawing on multi-disciplinary perspectives and materials from history, arts, humanities, this course focuses on the worldwide migrations, societies, and cultures of African-descended peoples as they have formed communities and interacted with other communities.

## HIS 377 Black Leaders, Then and Now (3 Credits)

Survey of the role of Black leaders in American history from the period of exploration and discovery to the present.

## HIS 380 American Military History (3 Credits)

Study of the development of the American military establishment, policies, and stategies from the American Revolution to the present

## HIS 380H Honors American Military History (3 Credits)

Study of the development of the American military, establishment, policies, and stategies from the, American Revolution to the present
HIS 404 World History for World History Teachers (3 Credits) World History for World History has three specific, learning outcomes: (1) to enhance the content, knowledge of teacher candidates about the major, trends, periods, and themes in world history, (2), to enable teacher candidates and/or future, researchers to understand the purposes and, histories of world history, and (3) to have, teacher candidates to design a course syllabus,, for a standard half of a world history survey - , either ancient or modern, featuring an array of, relevant readings and appropriate activities.

## HIS 410 American Constitutional History (3 Credits)

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.

## HIS 418 Southern History (3 Credits)

Survey of the social, political, and economic, development of the Southern United States.
HIS 439 Black Lives Matter. the Long Civil Right (3 Credits)
This course focuses on the long struggle for, racial justice in America, and on African American, resistance to segregation and discrimination,, which led to the Civil Rights and the Black Power, Movements. It also interrogates the way in which, black American activists engaged in and aligned, themselves with international struggles for human, rights as well as other issues facing black people, across the Diaspora. Lastly, the course will, compare historic and current social justice, movements.

HIS 444 African Diaspora History and Culture (this Course Changed to His 372, See Above) (3 Credits)
Drawing on scholarship rooted in various academic disciplines, including history, anthropology, literature, sociology, art history and performance studies, this course provides an introduction to selected themes in the rapidly expanding field of African Diaspora Studies.

## HIS 446 Colonial Latin American (3 Credits)

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

## HIS 448 Slavery in the Alantic Basin (3 Credits)

Study of the development of slavery in the , Atlantic Basin from its Western African/Islamic/, European origins through the dreaded Middle, Passage to the Carribean, Latin America, and the , American South.
HIS 490 Special Topics (3 Credits)
Opportunities to study and examine historical , problems of special interest

## HIS 490A Special Topics in History (3 Credits)

Opportunities to study and examine historical problems of special interest.

HIS 490E Special Topics in History (3 Credits)
Opportunities to study and examine historical problems of special interest.

## HIS 4901 Haiti and Atlantic World (3 Credits)

This course examines the first documented, Africans in colonial America who came ashore at, Old Point Comfort in 1619 through their dominance, in Virginia's maritime industry. Students will, also learn about the critical role African, Americans had in the Civil War, beginning at Fort, Monroe

## HIS 490K Paths to Freedom (3 Credits)

This course examines the first documented, Africans in colonial America who came ashore at, Old Point Comfort in 1619 through their dominance, in Virginia's maritime industry. Students will, also learn about the critical role African, Americans had in the Civil War, beginning at Fort, Monroe

HIS 490L The Underground Railroad (3 Credits)
This course provides a local perspective of a, secret system that is still steeped in myth and, mystery. The majority of fugitives escaped from, Virginia, with the majority finding freedom, aboard vessels bound for the north.
HIS 490M Special Topics: Black Lives Matter (3 Credits)
Opportunities to study and examine historical problems of special interest.

## HIS 490X 1619 and the Making of America (3 Credits)

This course frames how the events that occurred, beginning in 1619 permanently altered British, America and created a complex culture and, society. We intend to discuss this important, period by gathering a group of eminent scholars, who will use their expertise to summarize how, American society was transformed beginning in, 1619.
HIS 490Y Special Topics: Borders, Bureaucracies, \& Big Brother (3 Credits)
Opportunities to study and examine historical problems of special interest.
HIS 490Z The History of Love and Marriage (3 Credits)
Contact the department for specific course information

HIS 492 Race and Gender in Cuba and Latin America (3 Credits) This upper-level history seminar will examine two themes of the African Diaspora in Latin America: race and gender. It will place Latin America within the border context of Atlantic history, and suggest the ways in which comparative historical study can provide insight into interdisciplinary critical race and gender studies. The course will focus particular attention on the example of Cuba, a society that was profoundly impacted by colonialism, slavery, discrimination and revolution. It will examine contemporary perspectives and controversies currently underway in American, Latin American and Cuban academia regarding the history and present-day situation of African-descended peoples and women.

## HIS 492H Honors Race and Gender in Cuba and Latin America (3 Credits)

This upper-level history seminar will examine two themes of the African Diaspora in Latin America: race and gender. It will place Latin America within the border context of Atlantic history, and suggest the ways in which comparative historical study can provide insight into interdisciplinary critical race and gender studies. The course will focus particular attention on the example of Cuba, a society that was profoundly impacted by colonialism, slavery, discrimination and revolution. It will examine contemporary perspectives and controversies currently underway in American, Latin American and Cuban academia regarding the history and present-day situation of African-descended peoples and women.

## HIS 494 Internship (3 Credits)

Development of knowledge and skills in fields related to history, for example, museum work or digital projects. A minimum number of clock hours in approved placement is required.
HIS 497 Historical Research (3 Credits)
In this capstone course, students formulate and carry out an original historical research project which applies their writing, critical thinking and public speaking skills to a self- directed research project. With the help of the instructor, students develop a historical question, find relevant primary and secondary sources using archives, library holdings and digital resources, write an article-length paper and present their research to the class.

## HIS 497H Honors Historical Research (3 Credits)

In this capstone course, students formulate and carry out an original historical research project which applies their writing, critical thinking and public speaking skills to a self- directed research project. With the help of the instructor, students develop a historical question, find relevant primary and secondary sources using archives, library holdings and digital resources, write an article-length paper and present their research to the class.

## Hotel/Restaurant Management (HRM)

HRM 100 Professional Careers in Hospitality Ind (3 Credits)
Study of career development, professional conduct, portfolio development, interviewing, etiquette and social development, customer service, and proper dress.

## HRM 115 Introd Hosp Indust (3 Credits)

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.

HRM 150 Fundament Tourism (3 Credits)
Study of cultural tourism, sociology of tourism, components of supply, tourism development, economic role of tourism demand, the marketing of tourism, and the international scope of tourism.

## HRM 200 Comptr Hspitlty Ind (3 Credits)

Study of computer applications used in the hospitality industry. Emphasis on the different software packages available and the programs they run.

## HRM 205 Sanitation Principles (3 Credits)

Study of sanitation standards for food and beverage establishments, food-handling practices, and micro-organisms and their control.

## HRM 210 Front Office Mgnt (3 Credits)

Study of principles and procedures used in effective hotel/motel front office management. Emphasis on operation of specific equipment, planning and forecasting hospitality needs.
HRM 212 Fundamentals of Nutrition for Food Servi (3 Credits)
This course introduces the student to the concepts of food composition, nutrition science, and application of nutrition principles by the food service professional. It provides the student with a basic understanding of human nutrition and application of nutrition in the service of commercially prepared meals.

## HRM 220 Intr Com Food Prep (1 Credits)

Introduction to commercial food preparation,, nutrition, standard product indentification, and, storage which includes classroom instruction, , demonstrations, and actual cooking experience., Emphasis on explanations of techniques and, procedures of quality/quantity food production.

## HRM 230 Hsptlty Accntng I (3 Credits)

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.

## HRM 240 Intro to Gaming (3 Credits)

Overview of gaming; topics include the economics , of the gaming industry, its industry with the, hotel, organizations and terminology.
HRM 280 Dng Rm/Bev Mgmt of (3 Credits)
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.
HRM 300 Purchasing for the Hospitality Industry (3 Credits)
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.
HRM 310 Professional Developement (2 Credits)
Introduction to aspects of the hospitality , industry and related areas that are not available, in regularly scheduled courses.

HRM 320 Cases in Hospitality Management (3 Credits)
Introduction to strategic management concepts and applications in the hospitality industry. This course is designed to introduce the student to setting up, starting and running a hospitality or hospitality-related type of business. In addition, the student will receive intensive training in the use of the Case Method for decision making and strategic management in the hospitality industry. This will be accomplished via a combination of cases, simulations, gaming, internships, and/or pragmatic practice exercises.

## HRM 330 Hospitality Accounting II (3 Credits)

Examination of various approaches to managerial, acounting from the perspective of hospitality, operations. Emphasis on the cost-volumeprofit, approach to decision-making, use and source of , working capital, cash-flow analysis, investment, decision-making, and market, as well as financial, feasibility studies.
HRM 331 Food Bv/Lbr Cost Control (3 Credits)
Fundamentals of food, beverage, and labor cost control for hotel and restaurant operations.
HRM 342 The Recreation Industry (3 Credits)
Study of leisure and the recreation industry, , their interrelationships to American lifestyles, , and their implications for the hospitality , industry.

## HRM 359 Commerc Food Prid (3 Credits)

Principles and practices of large quantity food, preparation and service. Topics include, Principles and Practices of Large Quantity Food, Prepation and Services, Production, Efficient , Work Methods, Quality Control, Safety, and, Sanitary Food Handling. Laboratory food, experiences included.

## HRM 381 Hosp Layout/Design (3 Credits)

Study of hospitality facilities, layouts, and designs, exterior and interior; building systems; space allocations; equipment; and budgets.
HRM 391 Intenship in Hospitality (3 Credits)
On-the-job experience at a hospitality industry, employer. Minimum of 250 clock hours required.
HRM 391L Mgmt Internship Lab (3 Credits)
Contact the department for specific course information
HRM 402 Management by Menu (3 Credits)
Principles of menu planning applied to the food services industry, including the menu and financial success, the menu and marketing, measuring menu effectiveness, menu writing procedures, and menu analysis and feasibility. Principles of table service for all types of food services.
HRM 440 Hosp Sales \& Mkt (3 Credits)
Study of hospitality sales and advertising with, emphasis on practical sales and techniques,, proven approaches to selling to targeted markets, , and advertising's role in sales.
HRM 462 Hosp Mgt Hum Rsrcs (3 Credits)
Study of the relationship between individual employees and the hospitality industry. Anaylsis of human behavior, attitudes, motivation strategies, stress management, employee wages, and productivity.
HRM 471 Hospitality Law/Ethics (3 Credits)
Introduction to fundamental laws and regulations, applied to the hospitality industry. The case-, study approach is used to develop awareness and, understanding of the legal problems confronting, the executive in his/her policy and decision , making role.

HRM 490 Sr Project (3 Credits)
Emphasis on providing the student with the , opportunity to engage in a research project, designed to showcase competence and developed, managerial knowledge.

## Humanities (HUM)

## HUM 210 Humanties (3 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.

## HUM 210H Honors Humanties (3 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.

## HUM 211 Humanities (3 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.
HUM 211H Honors Humanities (3 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 Mangagement Technology (IMT)

IMT 170 Introduction to Technology (1 Credits)
Development of an understanding in all aspects of industry and technology springing from the human abilities to reason, solve problems, create, construct, and use materials imaginatively.

## IMT 205 Industrial Safety \& Management (3 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.

IMT 244 Industrial Specification \& Technical Documentation (3 Credits) Development of proficiency in writing technical reports through collecting, organizing, and presenting materials in specialized areas.

## IMT 303 Internship in Technology (3 Credits)

Experience in developing and refining skills that require 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.

## IMT 340 Engineering Economics (3 Credits)

Evaluation of engineering alternatives by, quantitiative methods. Application to problems in, depreciation of assests, their replacement, analysis, break-even points, increment costs, and, production alternatives

IMT 412 Information Systems for Technology (3 Credits)
This course focuses on how managers can apply, knowledge of IT tools to solve technical problems, and find new opportunities to improve their, organizations. Problems relating to security, risk, analysis, telecommunications, human-machine, interaction, database management and artificial, intelligence are addressed.

## IMT 413 Project Management (3 Credits)

A thorough coverage of the all aspects of managing a project. The process covered by the course include: project planning, organizing, creating project organization control and final project completion activities. Participant should gain a concrete understanding and foundation to successfully manage every phase of the project life cycle, work within organizational cost constraints, set goals linked directly to stakeholder needs, and utilize proven project management tools to complete the project on time and within budget.

## IMT 415 Industrial Maintenance Management (3 Credits)

Identification and appraisal of industrial , maintenance management functions, organizational, problems, and practices. Consideration given to , key factors for optimizing maintenance efficiency, and effectiveness.

## IMT 420 Labor \& Industrial Relations (3 Credits)

Discussion of why individual groups and organizations in unions, management, and government act as they do in industrial relations with emphasis on psychological and sociological factors.
IMT 423 Motion/Time Study (3 Credits)
Methods, materials, toosl and equipment of , industry for purposes of improvement and, standardization.

## IMT 425 PInt Layout/Mat Hd (3 Credits)

The fundamental theories, practices, and methods, for design of manufacturing facilities; materials, handling equipment and services.

## IMT 445 Statistical Quality Control (3 Credits)

Introduction to the principles of quality control in business and industrial engineering/technological managerial environments that provide techniques and procedures for determining and maintaing the quality of industrial products. Emphasis on random sampling, probability theories, and statistical methods for practical quality controls to ascertain if products meet industrial specifications.

## Information Technology (ITE)

ITE 111 Information Technology Principles (3 Credits)
An introductory course that exposes students to the academic discipline of Information Technology (IT). Pervasive IT themes; IT history, organizational, social, and ethical issues, and relationship of IT to other computing disciplines will be covered.

## ITE 195 Introduction to Internet Programming (3 Credits)

 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 standalone Java applications for Internet deployment.ITE 211 Information Technology Operating Systems (3 Credits) An introduction to the basics of computer operating systems including file systems, configuration, interprocess communication, security, administration, interfacing, multitasking, and performance analysis.

## ITE 311 Fundamentals of Networking (3 Credits)

This is an introductory course that covers the basics of how networks work, including the topics of OSI model, Internet model, network components, LANs, WANs, routers, switches, wireless communication, network security, TCP/IP Internet protocols, and network applications such as web and email. It also covers the fundamental aspects of configuring and troubleshooting network features on a Windows or Unix workstation.

## Journalism (JRN)

JRN 210 Advertising Principles (3 Credits)

Introduction to the basic principles of advertising and its practice.

## JRN 220 Basic Writing (3 Credits)

Introduction to writing for all mass media, including intensive study of basic journalistic composition elements (grammar, punctuation, spelling) in preparation for professional reporting, writing and editing courses.

## JRN 221 News Writing (3 Credits)

Introduction to the fundamentals of news evaluation, gathering and writing with special emphasis on newspaper style.

## JRN 240 Principles of Public Relations (3 Credits)

Analysis of the history and growth of public relations and its role within organizations including ethical standards, basic principles, and problems of public relations.

## JRN 290 Digital Photography (3 Credits)

Study of the integration of basic photography with computer technology. Emphasis on the digital photography process through in-class discussion, field assignments and hands-on laboratory experience.
JRN 299 Multiculturalism and Mass Media (3 Credits)
Historical survey of participation by people of color in early publications, and the industries of print and broadcast journalism, entertainment television and film, and advertising. Emphasis on case studies and other methods to examine interactions between societal conditions and mediated reality.

## JRN 313 Advertising/ Public Campaigns (3 Credits)

Philosophy and techniques of developing an advertising campaign with emphasis on integrating all creative elements, including market research; developing advertising objectives; plans and strategies; budgeting; scheduling of media; coordination of sales promotion; and measuring effectiveness.

## JRN 323 Writing Special Articles (3 Credits)

Study of advanced writing involving feature articles for newspapers and magazines. Emphasis on an analysis of markets for feature articles.

## JRN 330 Copy Editing (3 Credits)

Study of the fundamentals of copy editing, headline writing, re-writing and general copy deskwork.
JRN 332 Graphics Design (3 Credits)
Study of the basic theories and skills of visual communication, including the selection and editing of photographs, the use of maps, charts, graphs, artwork and other graphic-design elements. Emphasis on common graphic programs such as Quark and Adobe Photoshop.

## JRN 341 Public Relations Practice (3 Credits)

Study of the management and decision-making process in public relations. Emphasis on the case history approach to evaluate strategic planning in a variety of situations and area, including business, government, non-profit and education.
JRN 342 Promotional Writing (3 Credits)
Planning, implementing and measuring the effectiveness of public relations programs including techniques of using controlled and uncontrolled media to reach various target publics. Study of producing materials originating from public relations departments and agencies; publicity; human relations; writing and editing business, industrial, and house publications; and fund raising.

JRN 493 Internship I (3 Credits)
Experience working for a newspaper or magazine, in public relations, or with an advertising department or agency. (Practicum is an on-campus position. Internship is an off-campus position.)

## JRN 495 Practicum I (3 Credits)

Experience working for a newspaper or magazine, in, public relations, or with an advertising, department or agency. (Practicum is an on-campus, position. Internship is an off-campus position.)

JRN 497 Directed Research (3 Credits)
Individual study and/or research in journalism under the guidance of a journalism instructor.

## Mass Communication/Journalism (MCM)

## MCM 111 Media and Society ( 3 Credits)

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.
MCM 210 Society and Mass Communications (3 Credits)
Study of the socio-economic developments related, to the growth and development of American , newspapers, magazines, books, radio, television,, motion pictures, cable and satellite communcations.

## MCM 250 Television Production (3 Credits)

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.

## MCM 261 Introduction to Media Writing (3 Credits)

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.

## MCM 280 Film History (3 Credits)

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.

## MCM 310 History of Mass Communications (3 Credits)

Study of the origin and development of mass media in the United States. Emphasis on the press, radio, television and motion pictures.
MCM 310H Honors History of Mass Communications (3 Credits)
Study of the origin and development of mass media in the United States. Emphasis on the press, radio, television and motion pictures

## MCM 315 Interviewing (3 Credits)

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.

## MCM 315H Honors Interviewing (3 Credits)

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.

MCM 330 Electronic Field Production \& Editing (3 Credits)
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.

## MCM 350 Television Directing (3 Credits)

Development of television program producing and directing with emphasis on leadership skills and advanced audio-visual equipment instruction through specific laboratory exercise.
MCM 350H Honors Tv Directing (3 Credits)
Contact the department for specific course information
MCM 351 Introduction to Broadcast \& Film Criticism (3 Credits)
Analysis of the historical, aesthetic, and critical aspects of broadcast programs and motion pictures. Attendance and viewing of films and evaluations required.

## MCM 362 Broadcast News Writing and Reporting (3 Credits)

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.

## MCM 363 Audio Production (3 Credits)

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.

## MCM 390 Global Media (3 Credits)

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.
MCM 391 Radio and Television Announcing (3 Credits)
Emphasis on the style, manner, characteristics and performance of broadcast/cable news anchoring and reporting including talk show hosting techniques. Primary focus on participation in a TV lab environment with selected projects broadcast over the campus TV system. Secondary focus on radio, internet and new media productions.
MCM 420 Intercultural Communication (3 Credits)
This course introduces the learner to the process of understanding intercultural communication (e.g., communication between people from different cultures). This course will expose the learner to the substantive theoretical issues in cross-cultural, intergroup, and intragroup communication that contribute to effective interactions among those of different cultures.

## MCM 440 Media Law (3 Credits)

Examination of the various laws that affect mass, communication in the United States including, licensing, operation, programming advertising,, defamation, privacy copyright and other related, topics.
MCM 445 Media Ethics (3 Credits)
Development of a strong sense of ethical responsibility as communications professionals including case studies of ethical decisionmaking by news and communications organizations and analysis of ethical codes of various professional groups.
MCM 445H Honors Media Ethics (3 Credits)
Development of a strong sense of ethical responsibility as communications professionals including case studies of ethical decisionmaking by news and communications organizations and analysis of ethical codes of various professional groups.

MCM 450 Media Theory and Research (3 Credits)
Examination of the theory and principles of communications systems and processes, including research methods commonly used by communications professionals and trends in media research.

## MCM 450H Media Theory and Research (3 Credits)

Examination of the theory and principles of communications systems and processes including research methods commonly used by communications professionals and trends in media research.
MCM 460 Contemporary Issues in Media (3 Credits)
Analysis of current issues and problems in mass media including the roles of media, ethics in media, media criticism, the role of the media and the marketing concept.
MCM 460H Contemporary Issues in Media (3 Credits)
Analysis of current issues and problems in mass media including the roles of media, ethics in media, media criticism, the role of the media and the marketing concept.

## MCM 464 Advanced Television Production (3 Credits)

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.
MCM 470 Broadcast/Cable Programming (3 Credits)
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.
MCM 476 Media Sales ( 3 Credits)
Study of principles, structures, 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.

## MCM 485 Media Technologies (3 Credits)

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.

MCM 489 Media Management (3 Credits)
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.

## MCM 490A Special Topics in Media (1-3 Credits)

Opportunities to study and examine media-related and special-interest issues in culture, society, history, economy and politics.

## MCM 490B Special Topics in Media (3 Credits)

Opportunities to study and examine media-related and special-interest issues in culture, society, history, economy and politics.
MCM 491 Introduction to the Internet/Web Page (3 Credits)
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.

## MCM 496 Internship (3 Credits)

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.

MCM 496H Internship (3 Credits)
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)

## MTH 102 Essentials of Algebra (4 Credits)

Topics include operations of real numbers, ratios, proportions, percents, order of operations, linear and quadratic equations, inequalities, graphing, operation of polynomials, roots, radicals, and system of equations. A lab component is used to reinforce the concepts of the topics introduced in class.

## MTH 103 Mathematics in General Education (3 Credits)

Emphasis on global, unifying ideas in mathematics and the connections between contemporary mathematics and modern society. Topics are selected from elementary mathematics, logic, probability and statistics, discrete systems, geometry, measurement, and consumer applications. (Satisfies the minimum general education mathematics requirement).
MTH 103H Honors Mathematics in General Education (3 Credits)
Contact the department for specific course information
MTH 105 Intermediate Algebra (3 Credits)
Preparation for the pre-calculus including linear and quadratic equations, graphing, polynomials, roots, radicals, and systems of equations.
(Satisfies the minimum general education mathematics requirement.)
MTH 131 Pre-Calculus for Business Majors (3 Credits)
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.
MTH 132 Calculus for Business Majors (3 Credits)
Introduction to elementary calculus including limits, continuity, differentiation, integration, and applications in business.
MTH 141 Elements of Mathematics for Teachers I (3 Credits)
Thorough treatment of the modern mathematics curricula for prospective school teachers. Emphasis on sets and logic, number systems, number theory, algebra, geometry and measurement. Computer-based laboratory component with manipulatives included.
MTH 142 Elements of Mathematics for Teachers II (3 Credits) Continued treatment of the modern mathematics curricula for prospective school teachers. Emphasis on geometry and measurement.
MTH 151 College Algebra (3 Credits)
Study of basic algebra stressing fundamental concepts and reasoning used in mathematics and the sciences. Emphasis on skills necessary for the calculus sequences. Topics include algebraic operations, equations and inequalities, graphs and functions, polynomial and rational functions, and system of linear and non-linear equations

## MTH 151B College Algebra for Biology Majors (3 Credits)

This course emphasizes the study of basic algebra and stresses fundamental concepts and reasoning used in mathematics, biology and chemistry. Students are expected to bring to the course knowledge of the essentials of elementary and intermediate algebra.
MTH 151H Honors College Algebra (3 Credits)
Contact the department for specific course information

## MTH 153 College Algebra \& Trigonometry (3 Credits)

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. Topics include exponential and logarithmic functions, trigonometric functions, graphs of trigonometric functions, trigonometric identities and equations, and solving oblique triangles using the laws of sines and cosines.
MTH 153H Honors College Algebra \& Trigonometry (3 Credits) 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. Topics include exponential and logarithmic functions, trigonometric functions, graphs of trigonometric functions, trigonometric identities and equations, and solving oblique triangles using the laws of sines and cosines.
MTH 184 Calculus I (4 Credits)
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, antiderivatives and the Fundamental Theorem of Calculus. Integration of some calculus applications with computer activities included.

## MTH 184H Honors Calclulus I (4 Credits)

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, antiderivatives and the Fundamental Theorem of Calculus. Integration of some calculus applications with computer activities included.

MTH 242 History of Mathematics (3 Credits)
Contact the department for specific course information
MTH 250 Elementary Statistics Concepts (3 Credits)
Introduction to statistics including graphical data representation, basic probability concepts, sampling and expectation, confidence interval and hypothesis testing for sample mean and proportion.

## MTH 250H Honors Elementary Statistics Concepts (3 Credits)

Introduction to statistics including graphical data representation, basic probability concepts, sampling and expectation, confidence interval and hypothesis testing for sample mean and proportion.

## MTH 251 Calculus II (4 Credits)

Applications of definite integrals, the calculus of transcendental functions, infinite series, and integration techniques. Some topics are integrated with computer activities.

## MTH 251H Honors Calculus II (4 Credits)

Applications of definite integrals, the calculus of transcendental functions, infinite series, and integration techniques. Some topics are integrated with computer activities.

MTH 252 Calculus III (4 Credits)
Investigation of calculus concepts at the intermediate level including polar coordinates, vectors, and the calculus of several variables.

## MTH 252H Honors Calculus III (4 Credits)

This course is a continuation of Calculus II, MTH, 251. The course investigates calculus concepts at, the intermediate level designed for mathematics, and science majors. Topics include polar, coordinates, vector analysis, and the calculus of, several variables on an honors level.

MTH 273 Mathematical Foundations (3 Credits)
This course looks at fundamental topics to further study in mathematics. These include: basic concepts of set theory; basic concepts of logic; basic concepts of algebra; methods of mathematical proof; relations and functions; the concept of limit and continuity; study of the real number set, and its topology and some topics from calculus.

## MTH 300 Linear Algebra (3 Credits)

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.

## MTH 300H Honors Linear Algebra (3 Credits)

This course is an introduction to basic concepts,, techniques, and elementary applications of linear, algebra. Topics to be covered are matrices, linear, systems, Gaussian elimination, vector and vector, spaces, linear independence, linear, transformations, eigenvalues and eigenvectors,, finite-dimensional spectrum theory on an honors, level.

## MTH 310 Discrete Mathematics (3 Credits)

Introduction to discrete math including topics in graph theory, management science, the mathematics of social change, and statistics. Use of manipulatives and other learning tools included.

## MTH 311 Modern Geometry I (3 Credits)

Re-examination of Euclidean plane geometry as a postulational system. Emphasis on formulating definitions and constructing valid proofs including mathematical reasoning, postulational method, finite geometries, congruence, similarity, parallelism, and construction with ruler and compass

## MTH 331 Algebraic Structures (3 Credits)

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.

## MTH 351 Probability \& Statistics I (3 Credits)

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.

## MTH 351H Honors Probability \& Statistics I (3 Credits)

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.

## MTH 352 Probability \& Statistics II (3 Credits)

Second of a two-semester sequence of probability and mathematical statistics, primarily for majors. Topics include applications of probability, descriptive statistics, random samples, point estimators and their properties, tests of hypotheses, confidence intervals, and the comparison of two populations.

## MTH 355 Introduction to Regression Analysis (3 Credits)

This course uses regression analysis as a flexible, statistical, problemsolving methodology. Topics include matrix review; variable selection; prediction; multicolinearity; model diagnostics; dummy variables; logistic and non- linear regression. Emphasizes use of computer.
MTH 371 Discrete Mathematical Structures (4Credits)
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.

## MTH 372 Differential Equations (3 Credits)

A first course in ordinary differential equations. Topics include first-order equations, higher order linear differential equations, and the Laplace transform. Applications include growth/decay models, electric circuits, and the vibrational models.

## MTH 373 Advanced Vector Calculus (3 Credits)

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.

## MTH 382 Introduction to Applied Mathematics (3 Credits)

A junior-level introduction to applications of mathematics designed for mathematics, computer science, and engineering majors. Topics include Fourier Series, Laplace transforms, Sturm-Liouville problems, and Bessel functions.

## MTH 384 Mathematical Modeling in the Sciences (3 Credits)

A one-semester interdisciplinary course integrating mathematics and science investigations in a mathematical model 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.

## MTH 401 Numeric Analysis I (3 Credits)

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 and nonlinear systems of equations, iterative techniques in matrix algebra, and approximating eigenvalues.

## MTH 402 Numeric Analysis II (3 Credits)

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.
MTH 431 Abstract Algebra (3 Credits)
Continuation of MTH 331. Topics include a more advanced discussion of groups, rings, fields, homomorphism, isomorphism, and automorphism.

## MTH 451 Statistical Theory I (3 Credits)

Senior level course in applied statistics, designed especially for majors seeking 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.

## MTH 454 Experimental Designs (3 Credits)

Topics to be covered include single factor experiments, residuals, randomized block designs, general factorials, blocking, regression models, unbalanced data, confounding blocks, and Taguchi experiments.
MTH 472 Advanced Calculus II (3 Credits)
Contact the department for specific course information

## MTH 473 Real Analysis (3 Credits)

A rigorous introduction to the analysis of real-valued functions of a real variable. Topics include types of proofs, real numbers, theory of sequences and limits of functions, continuity, differentiability, sequences and series of functions, uniform convergence, and Riemann integrals.

## MTH 474 Complex Variables (3 Credits)

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

## MTH 484 Topics in Applied Mathematics (3 Credits)

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 selected applications in mathematical physics and fluid dynamics
MTH 484H Honors Topics in Applied Mathematics (3 Credits)
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 selected applications in mathematical physics and fluid dynamics
MTH 492 Independent Study (3 Credits)
Contact the department for specific course information
MTH 496 Mathematics Seminar I (2 Credits)
Culminating sequence designed to review and fortify knowledge of essential mathematics concepts and to synthes mathematical knowledge and experience through the completion of an approved research project. Reesults of the research ar presented to peers and otehr interested members of the academic community. Course includes a comprehensive examination used to assess the objectives of the cre mathematics courses.
MTH 497 Mathematics Seminar II (2 Credits)
Culminating 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 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 cre mathematics courses.

## Military Science and Leadership (MSL)

## MSL 101 Fundamentals of Leadership/Management (2 Credits)

MSL 101 introduces cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as goal setting, time management, physical fitness, and stress management relate to leadership, officership, and the Army profession. Focus is placed on developing basic knowledge 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.)

## MSL 101D Basic Drill \& Ceremony Module (1 Credits)

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.)

MSL 102 Basic Leadership (2 Credits)
MSL 102 overviews leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. Cadets explore dimensions of leadership values, attributes, skills, and actions in the context of practical, hands-on, and interactive exercises. Continued emphasis is placed on recruitment and retention of cadets. Cadre role models and the building of stronger relationships among the cadets through common experience and practical interaction are critical aspects of the MSL 102 experience.

MSL 102D Basic Drill \& Ceremony Module (1 Credits)
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.)

## MSL 201 Advanced Leadership/Management (2 Credits)

MSL 201 explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Cadets practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises and participating in leadership labs. Focus is on continued development of the knowledge of leadership values and attributes through an understanding of Army rank, structure, and duties and basic aspects of land navigation and squad tactics. Case studies provide tangible context for learning the Soldier's Creed and Warrior Ethos as they apply in the contemporary operating environment (COE).
MSL 201D Basic Drill \& Ceremony Module (1 Credits)
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.)

## MSL 202 Advanced Leadership/Management (2 Credits)

MSL 202 examines the challenges of leading tactical teams in the COE. The course highlights dimensions of terrain analysis, MSL 101D One Credit BASIC DRILL AND CEREMONY MODULE (FO) PREREQUISITE: MSL 101 and comprehension of Army Leadership Dimensions while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student. MTH 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. MTH 505 Three Credits TOPICS IN CONTEMPORARY MATHEMATICS patrolling, and operation orders. Further study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. MSL 202 provides a smooth transition into MSL 301. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real world scenarios.

## MSL 202D Basic Drill \& Ceremony Module (1 Credits)

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.)

MSL 301 Advanced Leadership/Management (3 Credits)
MSL 301 challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, cadets continue to develop their leadership and critical thinking abilities. The focus is developing cadets' tactical leadership abilities to enable them to succeed at ROTC's summer Leadership Development and Assessment Course (LDAC).

## MSL 301D Advanced Drill \& Ceremony Module (1 Credits)

Practical application of land navigation, physical training, marksmanship, small-arms training, and squad and platoon tactics. (Leadership Laboratory is required for continued advancement in ROTC.)
MSL 302 Advanced Leadership/Management (3 Credits)
MSL 302 uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skills in decisionmaking, persuading and motivating team members when "under fire" are explored, evaluated, and developed. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development and Assessment Course (LDAC). Cadets are expected to apply basic principles of the Law of Land Warfare, Army training, and motivation to troop leading procedures. Emphasis is also placed on conducting military briefings and developing proficiency in Garrison operation orders. MSL 302 cadets are evaluated on what they know and do as leaders.

## MSL 302D Advanced Drill \& Ceremony Module (1 Credits)

Practical application of land navigation, physical training, marksmanship, small-arms training, and squad and platoon tactics prepare cadets for
Army ROTC Advanced Camp at Fort Lewis, WA. (Leadership Laboratory is required for continued advancement in ROTC.)
MSL 313 Advanced Camp (3 Credits)
Desgined to evaluate a cadet's leadership ability, and mastery of military skills. Successful, completion qualifies a cadet for commissioning as, an Army Officer.
MSL 401 Theory and Dynamics of Military Team (3 Credits) MSL 401 develops cadet proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing performance feedback to subordinates. Cadets assess risk, make ethical decisions, and lead fellow ROTC cadets. Lessons on military justice and personnel processes prepare cadets to make the transition to Army officers. MSL IV cadets analyze, evaluate, and instruct cadets at lower levels. Both their classroom and battalion leadership experiences are designed to prepare MSL 401 cadets for their first unit of assignment. They identify responsibilities of key staff, coordinate staff roles, and use situational opportunities to teach, train, and develop subordinates.

## MSL 401D Advanced Drill \& Ceremony Module (1 Credits)

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.

MSL 402 Theory and Dynamics of Military Team (3 Credits)
MSL 402 explores the dynamics of leading in the complex situations of current military operations in the COE. Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. They also explore aspects of interacting with nongovernmental organizations, civilians on the battlefield, and host nation support. The course places significant emphasis on preparing cadets for their first unit of assignment. It uses case studies, scenarios, and "What Now, Lieutenant?" exercises to prepare cadets to face the complex ethical and practical demands of leading as commissioned officers in the United States Army.
MSL 402D Advanced Drill \& Ceremony Module (1 Credits)
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.)
MSL 402H Honor Theory and Dynamics of Military Tm (3 Credits) MSL 402 explores the dynamics of leading in the complex situations of current military operations in the COE. Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. They also explore aspects of interacting with nongovernmental organizations, civilians on the battlefield, and host nation support. The course places significant emphasis on preparing cadets for their first unit of assignment. It uses case studies, scenarios, and "What Now, Lieutenant?" exercises to prepare cadets to face the complex ethical and practical demands of leading as commissioned officers in the United States Army.

## MSL 421 Independent Studies (3 Credits)

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.

## Music (MUS)

MUS 100B Piano (0 Credits)
Course have a (0) credit hour but (1) tuition hourfor billing. This course is no longer offered.

## MUS 1001 Piano Class (0 Credits)

Course has (0) credit hour but one(1) tuition hour, for billing
MUS 103 Recitals Class (0 Credits)
Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.
MUS 104 Recitals Class (0 Credits)
Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.
MUS 110A Band (1 Credits)
Provides enriching musical opportunities to develop instrumental performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 110D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

MUS 110F Jazz Ensemble (1 Credits)
The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 110N Pep Band (1 Credits)

A fun-filled ensemble comprised of instrumentalists who play at athletic events to promote crowd enthusiam as well as provide entertainment.

## MUS 110P Guitar Ensemble (1 Credits)

Guitar Ensemble provides students of any skill level opportunities to enhance music reading and technical abilities on acoustic guitar or bass in a variety of styles.

## MUS 111A Band (1 Credits)

Provides enriching musical opportunities to develop performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 111D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 111F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 111P Guitar Ensemble (1 Credits)

Guitar Ensemble provides students of any skill level opportunities to enhance music reading and technical abilities on acoustic guitar or bass in a variety of styles.

## MUS 121A Voice Minor (1 Credits)

Emphasis on tone producation and vocal technique; exposure to a variety of vocal literature and styles.

## MUS 121B Piano Minor (1 Credits)

The first in a sequence of four piano courses required for all music majors, except piano majors, as a secondary instrument. The purpose of the course is to assist in the development of basic piano skills necessary for application in the broad range of music professions.

## MUS 121C Organ Minor (1 Credits)

Course of study includes basic organ technique and covers approximately half of the material required for MUS 125C (Applied Organ Major).

## MUS 121D Brasswind Minor (1 Credits)

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular woodwind minor instrument.

## MUS 121E Woodwind Minor (1 Credits)

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular woodwind minor instrument.
MUS 121F Strings Minor (1 Credits)
Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

## MUS 121G Percussion Minor (1 Credits)

Emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular percussion minor instrument.

## MUS 122A Voice Minor (1 Credits)

A continuation of MUS 121A with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

## MUS 122B Piano Minor (1 Credits)

The second in a sequence of four piano courses required for all music majors, except piano majors, as a secondary instrument. The course continues the development of basic piano skills necessary for application in the broad range of music professions.
MUS 122F Strings Minor (1 Credits)
A continuation of MUS 121F with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

## MUS 122G Percussion Minor (1 Credits)

A continuation of MUS 121G with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular percussion minor instrument.

## MUS 125A Applied Major/Voice (2 Credits)

Mastery of vocal exercises for the development of breath management, resonance balance, legato singing, correct phonation, articulation, and good vocal health; emphasis on building musicianship, compositions of moderate difficulty, English texts.

## MUS 125B Applied Major/Piano (2 Credits)

Study of major scales (24 octaves), hands together, minor scales, hands separate; selected studies of Czerrny, Hanon, Burgmuller, sonatinas of Clementi, Kuhlau, Beethoven; seventh chords, arpeggios.
MUS 125D Applied Major/Brasswind (2 Credits)
Study of the fundamentals of trumpet playing including: breath control, proper attack, formation of embouchure; elementary exercises from Arban, Complete Conservatory Method, Henna, 40 Progressive Etudes, Clark Technical Studies, and Conn, Lip flexibilities, Book I; major and minor scales and arpeggio, chromatic scale. Solo literature: Haydn, Trumpet Concert in Eb. 2nd Movement; Kennan, Sonata for Trumpet and Piano; Contest Album; etc. Trombone studies: Slama Studies, Rochut Meliodous Studies, Remington Warmups; Arban's Complete Method, Solos on the level of Andante et Allegro by Baret; scales and technical exercises for trumpet. Tuba studies: scales and technical exercises for tuba; 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 Panis Angelicas by Franck.

MUS 125E Applied Major/Woodwind (2 Credits)
Emphasis on basic problems of embouchure, fingering, breathing and tonguing facility, and control; selected studies from Klose Method, Books II and III; Rose, 40 Studies; Perier, Etudes de genres et D'interpretation; Cavallini Caprices; Recital Literature For Clarinet, Stubbins, Vols. I, II, and III; all major, pure minor, harmonic minor, and melodic minor scales, also chromatic; scales in 3rds; dominant seventh arpeggios.

## MUS 125F Applied Major/Strings (2 Credits)

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; Kayser Etudes; Simandl Etudes; solo literature from Vivaldi, Bach, Corelli.

## MUS 125G Applied Major/Percussion (2 Credits)

Rudiment studies from Gardner's Complete Method for Percussion; selected snare drum solos from the Haskell Harr Collection; major scales on marimba with alternating sticks; study of other instruments of the percussion family

MUS 126A Applied Major/Voice (2 Credits)
Mastery of vocal exercises for the development of breath management, resonance balance, legato singing, correct phonation, articulation, and good vocal health; emphasis on building musicianship, compositions of moderate difficulty, English texts. MUS 125B, 126

## MUS 126B Applied Major/Piano (2 Credits)

Applied Major/Recitals

## MUS 126D Applied Major/Brasswind (2 Credits)

Study of the fundamentals of trumpet playing including: breath control, proper attack, formation of embouchure; elementary exercises from Arban, Complete Conservatory Method, Henna, 40 Progressive Etudes, Clark Technical Studies, and Conn, Lip flexibilities, Book I; major and minor scales and arpeggio, chromatic scale. Solo literature: Haydn, Trumpet Concert in Eb. 2nd Movement; Kennan, Sonata for Trumpet and Piano; Contest Album; etc. Trombone studies: Slama Studies, Rochut Meliodous Studies, Remington Warmups; Arban's Complete Method, Solos on the level of Andante et Allegro by Baret; scales and technical exercises for trumpet. Tuba studies: scales and technical exercises for tuba; 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 Panis Angelicas by Franck.

## MUS 126E Applied Major/Woodwind (2 Credits)

Emphasis on basic problems of embouchure, fingering, breathing and tonguing facility, and control; selected studies from Klose Method, Books II and III; Rose, 40 Studies; Perier, Etudes de genres et D'interpretation; Cavallini Caprices; Recital Literature For Clarinet, Stubbins, Vols. I, II, and III; all major, pure minor, harmonic minor, and melodic minor scales, also chromatic; scales in 3rds; dominant seventh arpeggios.

## MUS 126F Applied Major/Strings (2 Credits)

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; Kayser Etudes; Simandl Etudes; solo literature from Vivaldi, Bach, Corelli.

## MUS 126G Applied Major/Percussion (2 Credits)

Rudiment studies from Gardner's Complete Method for Percussion; selected snare drum solos from the Haskell Harr Collection; major scales on marimba with alternating sticks; study of other instruments of the percussion family.

## MUS 131 Music Literature (2 Credits)

Foundation in the materials and history to identify music styles and genres, major composers and their works, and familiarity with historical periods of music.
MUS 132 Music Literature (2 Credits)
Foundation in the materials and history to identify music styles and genres, major composers and their works, and familiarity with historical periods of music.

## MUS 140 Music Fundamentals (3 Credits)

Study of the fundamentals of music and elementary theory. Does not count towards graduation. (For students who do not pass the Theory Placement Test)

## MUS 141 Sight-Singing \& Ear Training (2 Credits)

Study of Theory I, II including sight- singing; melodic and harmonic dictation; scales, intervals and triads; and the analyzation of melodies.
MUS 142 Sight-Singing \& Ear Training (2 Credits)
Study of Theory I, II including sight- singing; melodic and harmonic dictation; scales, intervals and triads; and the analyzation of melodies.

## MUS 145 Harmony and Keyboard (2 Credits)

Study of Theory I, II including part writing, keyboard harmony, and harmonic analysis of 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.)

MUS 146 Harmony and Keyboard (2 Credits)
Study of Theory I, II including part writing, keyboard harmony, and harmonic analysis of 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.)
MUS 151 Elementary Conducting (2 Credits)
Introduction to the art of conducting with emphasis on mastery of fundamental beat patterns

## MUS 161 String Class (1 Credits)

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.)
MUS 203 Recitals Class (0 Credits)
Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.
MUS 204 Recitals Class (0 Credits)
Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.

MUS 210A Band (1 Credits)
Provides enriching musical opportunities to develop instrumental performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 210D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 210F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 210N Pep Band (1 Credits)

A fun-filled ensemble comprised of instrumentalists who play at athletic events to promote crowd enthusiam as well as provide entertainment.

## MUS 211A Band (1 Credits)

Provides enriching musical opportunities to develop instrumental performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 211D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 211F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

MUS 211G Percussion Ensemble (1 Credits)
Provides enriching musical opportunities for percussionists to develop performance skills in a group setting.

MUS 221A Voice Minor (1 Credits)
A continuation of MUS 122A with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

## MUS 221B Piano Minor (1 Credits)

The third in a sequence of four piano courses required for all music majors, except piano majors, as a secondary instrument. The course continues the development of basic piano skills necessary for application in the broad range of music professions.

## MUS 222A Voice Minor (1 Credits)

A continuation of MUS 221A with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

## MUS 222B Piano Minor (1 Credits)

The fourth in a sequence of four piano courses required for all music majors, except piano majors, as a secondary instrument. The course continues the development of basic piano skills necessary for application in the broad range of music professions.

## MUS 225A Applied Major/Voice (2 Credits)

Continuation of technical development; repertoire including English and American songs (Purcell, Handel, Carpenter, Quilter, Head, Rorem, Beach, Copland, Bowles, Barber); songs from the Anthology of Italian Song (Schimer) or Classic Italian Song (Ditson).
MUS 225B Applied Major/Piano (2 Credits)
Study of major scales (4 octaves); minor scales (24 octaves), hands together, studies of the level of Czerny, Hanon, Heller, sonatinas or sonatas of Haydn, Mozart, or Beethoven; studies from Bach, Little Preludes and Fugues or Two-Part Inventions; selected compositions of other periods. Passing of the Piano Facility Examination required.

## MUS 225D Applied Major/Brasswind (2 Credits)

Further development of fundamentals; use of song literature to develop style and phrasing; continued work in Arban, Clarke, Conn and Hering, 32 Progressive Etudes; Introduction to Transposition; whole tone scales; dominant seventh and diminished scales; selected compositions from various periods; easy sight-reading; harmonization using primary triads; melodic transposition.

## MUS 225E Applied Major/Woodwind (2 Credits)

Emphasis on technical development, finger all tone control; Giampieri Caprices; Kroepsch Daily Studies, major scales in thirds.

## MUS 225F Applied Major/Strings (2 Credits)

Bow and finger exercises; twooctave major and melodic minor scales up to and including third position; selected studies from Wohlfahrt's Foundation Studies for the Violin; solo literature using the first three positions.

## MUS 225G Applied Major/Percussion (2 Credits)

Continued study of rudiments; further study of other percussion instruments; major and minor scales in octaves on marimba; major and minor arpeggios and two-stick marimba solos. Selected snare drum solos from Haskell Harr.

## MUS 226A Applied Major/Voice (2 Credits)

Continuation of technical development; repertoire including English and American songs (Purcell, Handel, Carpenter, Quilter, Head, Rorem, Beach, Copland, Bowles, Barber); songs from the Anthology of Italian Song (Schimer) or Classic Italian Song (Ditson).

MUS 226B Applied Major/Piano (2 Credits)
Study of major scales (4 octaves); minor scales (24 octaves), hands together, studies of the level of Czerny, Hanon, Heller, sonatinas or sonatas of Haydn, Mozart, or Beethoven; studies from Bach, Little Preludes and Fugues or Two-Part Inventions; selected compositions of other periods. Passing of the Piano Facility Examination required.

## MUS 226D Applied Major/Brasswind (2 Credits)

Further development of fundamentals; use of song literature to develop style and phrasing; continued work in Arban, Clarke, Conn and Hering, 32 Progressive Etudes; Introduction to Transposition; whole tone scales; dominant seventh and diminished scales; selected compositions from various periods; easy sight-reading; harmonization using primary triads; melodic transposition.

## MUS 226E Applied Major/Woodwind (2 Credits)

Emphasis on basic problems of embouchure, fingering, breathing and tonguing facility, and control; selected studies from Klose Method, Books II and III; Rose, 40 Studies; Perier, Etudes de genres et D'interpretation; Cavallini Caprices; Recital Literature For Clarinet, Stubbins, Vols. I, II, and III; all major, pure minor, harmonic minor, and melodic minor scales, also chromatic; scales in 3rds; dominant seventh arpeggios.

## MUS 226F Applied Major/Strings (2 Credits)

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; Kayser Etudes; Simandl Etudes; solo literature from Vivaldi, Bach, Corelli.

MUS 226G Applied Major/Percussion (2 Credits)
Rudiment studies from Gardner's Complete Method for Percussion; selected snare drum solos from the Haskell Harr Collection; major scales on marimba with alternating sticks; study of other instruments of the percussion family.

## MUS 234 African-American Music (3 Credits)

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 influenced the development of African American Music in the United States and the Americas

## MUS 234H Honors African-American Music (3 Credits)

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. Emphasizes the types and elements of African American folk music

## MUS 240 Progressive Harmony (3 Credits)

Practice in writing and analyzing contemporary chord progressions with emphasis on keyboard skills, ear training and creative writing.
MUS 241 Sight-Singing \& Ear Training (2 Credits)
Study of aural non-diatonic exercises, advanced sight-singing, advanced melodic and harmonic dictation.

MUS 242 Sight-Singing \& Ear Training (1 Credits)
Study of aural non-diatonic exercises, advanced sight-singing, advanced melodic and harmonic dictation.
MUS 243 Melody and Improvisation (3 Credits)
Provides guidelines for the disciplines of jazz improvisation through the use of melodic, harmonic, rhythmic and structured procedures.

MUS 245 Harmony/Keyboard (2 Credits)
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.)

MUS 246 Harmony/Keyboard (2 Credits)
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.)
MUS 247 Introduction to World Music (3 Credits)
Introduces the fundamentals of music through a survey of selected world music traditions. Music-making is examined within specific cultural settings that five context and meaning to performance. Draws on the broad interdisciplinary field of ethnomusicology, which provides insights into music's role as a rich form of human expression.

## MUS 260 Band Instrument Survey (1 Credits)

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.)

## MUS 261 Percussion Class (1 Credits)

Development of the skills necessary for teaching instruments of the percussion family on the elementary and intermediate levels through practical experience. (Meets two hours per week.)
MUS 265 Practical Application in Electronic Music (3 Credits)
Introduction to various computer software used in digital audio music production and digital media, including hands-on instruction using MIDI sequencing and other techniques for producing electroacoustic music for the industry.

## MUS 271 Vocal Diction (1 Credits)

Study of standard pronunciations for texts in English and Italian vocal literature using the International Phonetic Alphabet (IPA). (Meets two hours per week.)

## MUS 272 Vocal Diction (1 Credits)

Study of standard pronunciations for texts in French and German vocal literature using the International Phonetic Alphabet (IPA). (Meets two hours per week.)

## MUS 273 Voice Class (1 Credits)

Study of vocal techniques and survey of solo and choral literature designed to prepare students for training voices in the public schools. (Meets two hours per week.)

## MUS 301 Music Appreciation (3 Credits)

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.

## MUS 301H Honors Music Appreciation (3 Credits)

Honors Music Appreciation is designed to introduce non-music majors to the major elements of music and the primary musical periods of traditional classical music. The course emphasizes active music listening and research.

## MUS 303 Recitals Class (0 Credits)

Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.

## MUS 304 Recitals Class (0 Credits)

Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.

## MUS 310A Band (1 Credits)

Provides enriching musical opportunities to develop instrumental performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 310D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 310F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 311A Band (1 Credits)

Provides enriching musical opportunities for percussionists to develop performance skills in a group setting.

MUS 311D Concert Choir (1 Credits)
The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 311F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 321A Voice Minor (1 Credits)

A continuation of MUS 122A with more advanced emphasis on correct tone production and playing techniques. Exposure to a variety of literature for the particular string minor instrument.

MUS 321B Piano Minor (1 Credits)
The course continues the development of basic piano skills necessary for application in the broad range of music professions.

MUS 322B Piano Minor (1 Credits)
The course continues the development of basic piano skills necessary for application in the broad range of music professions.

MUS 325A Applied Major/Voice (2 Credits)
Advanced study of greater technical difficulty; development of interpretation; repertory to include Italian songs of greater complexity; lieder of Schumann, Schubert, Franz; French songs of Hahn, Godard, Debussy; contemporary songs in English, moderately difficult oratorio, operatic, and musical theater literature; vocal exercises of Panofka; Marchesi, Lamperti, and others

## MUS 325B Applied Major/Piano (2 Credits)

Major and minor scales and arpeggios at increased speeds; scales in thirds; continued technical studies with exercises transposed to various keys; sight-reading of more difficult accompaniments; compositions of the level of Bach Two- and Three-Part Inventions, French and English Suites, WellTempered Clavier, sonatas of Haydn, Mozart, Beethoven; selected compositions from the Romantic, Post-Romantic, and Modern periods.

## MUS 325D Applied Major/Brasswind (2 Credits)

Emphasis on style, techniques, and range, continued work in Arban, Clark, Conn; Brandt, Orchestra Etudes; Bousquet, 36 Celebrated Studies; transposition from Caffarelli, 100 Studi Melodici. Solo literature: Haydn, Trumpet Concerto in Eb; Hummel, Trumpet Concerto; Damase, etc

## MUS 325E Applied Major/Woodwind (2 Credits)

Emphasis on performance repertoire; Recital Literature for Clarinet, Stubbins, Vols. I, II, III, IV; one selection from the standard sonata repertoire; all scales, major, minor and chromatic; diminished arpeggios

## MUS 325F Applied Major/Strings (2 Credits)

Studies from Kreutzer Etudes 1, 2, and 3; extended scales and arpeggios; double stops, study of concertos such as Mozart and Villa- Lobos, and sonatas such as Handel and Vivaldi.

## MUS 325G Applied Major/Percussion (2 Credits)

Study of all scales in thirds and sixths on marimba; selected three- stick marimba solos; timpani solos and difficult snare drum solos BY HaskelL Harr

## MUS 326A Applied Major/Voice (2 Credits)

Advanced study of greater technical difficulty; development of interpretation; repertory to include Italian songs of greater complexity; lieder of Schumann, Schubert, Franz; French songs of Hahn, Godard, Debussy; contemporary songs in English, moderately difficult oratorio, operatic, and musical theater literature; vocal exercises of Panofka; Marchesi, Lamperti, and others

## MUS 326B Applied Major/Piano (2 Credits)

Major and minor scales and arpeggios at increased speeds; scales in thirds; continued technical studies with exercises transposed to various keys; sight-reading of more difficult accompaniments; compositions of the level of Bach Two- and Three-Part Inventions, French and English Suites, WellTempered Clavier, sonatas of Haydn, Mozart, Beethoven; selected compositions from the Romantic, Post-Romantic, and Modern periods.

## MUS 326D Applied Major/Brasswind (2 Credits)

Emphasis on style, techniques, and range, continued work in Arban, Clark, Conn; Brandt, Orchestra Etudes; Bousquet, 36 Celebrated Studies; transposition from Caffarelli, 100 Studi Melodici. Solo literature: Haydn, Trumpet Concerto in Eb; Hummel, Trumpet Concerto; Damase, etc.

## MUS 326E Applied Major/Woodwind (2 Credits)

Emphasis on performance repertoire; Recital Literature for Clarinet, Stubbins, Vols. I, II, III, IV; one selection from the standard sonata repertoire; all scales, major, minor and chromatic; diminished arpeggios.

## MUS 326F Applied Major/Strings (2 Credits)

Studies from Kreutzer Etudes 1, 2, and 3; extended scales and arpeggios; double stops, study of concertos such as Mozart and Villa- Lobos, and sonatas such as Handel and Vivaldi.

## MUS 326G Applied Major/Percussion (2 Credits)

Study of all scales in thirds and sixths on marimba; selected three- stick marimba solos; timpani solos and difficult snare drum solos BY HaskelL Harr.

## MUS 331 Music History (2 Credits)

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)

## MUS 332 Music History (2 Credits)

Continued chronological survey of the development of music in the Western world 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)
MUS 335 Jazz Literature \& Criticism (3 Credits)
Introduction to basic performance of jazz and its derivatives, including popular music, tunes from musical theater, themes from motion pictures and television, as well as jazz classics. Emphasis on a critical analysis of the compositions and artists' performances. Knowledge of structural aspects of musical theory required.

## MUS 336 Jazz History (3 Credits)

Contact the department for specific course information

## MUS 346 Composition (3 Credits)

Presentation of techniques of original music compositions written under the guidance of the instructor. Emphasis on techniques of form, harmony, orchestration, and independence. (Meets three hours per week.)
MUS 351 Advanced Conductng (2 Credits)
Study of conducting technique with particular attention to interpretation, choral and instrumental styles, tempo, diction, articulation, nuance, group seating arrangements, voice categorization and auditioning. Conducting experience with laboratory group required

## MUS 351H Honors Advanced Conductng (2 Credits)

Study of conducting technique with particular attention to interpretation, choral and instrumental styles, tempo, diction, articulation, nuance, group seating arrangements, voice categorization and auditioning. Conducting experience with laboratory group required
MUS 361 Woodwind Class (1 Credits)
Practical development of the skills necessary for teaching instruments of the woodwind family on the elementary and intermediate levels. (Meets two hours per week.)

## MUS 362 Brassswind Class (1 Credits)

Practical development of the skills necessary for teaching instruments of the brasswind family on the elementary and intermediate levels. (Meets two hours per week.)

## MUS 365 Recording \& Music Production (3 Credits)

Learn to operate the digital consoles, microphones, and signal processing equipment that provide in-studio experience recording, mixing, producing, and editing professional quality music projects.
MUS 366 Music Video (3 Credits)
Create high-quality music videos while learning to shoot, edit, and synchronize pre-recorded music to videos. (Meets three hours per week.)
MUS 366H Honors Music Video (3 Credits)
Create high-quality music videos while learning to shoot, edit, and synchronize pre-recorded music to videos. (Meets three hours per week.)

MUS 367 Protools 101 (3 Credits)
Learn to use industry standard software sponsored by Avid to support hands-on digital audio editing. Pro Tools is designed to prepare students for intermediate digital audio editing in home and commercial studios
MUS 369 Protools 110 (3 Credits)
This is the second level user certification course offered by Avid covering advanced techniques of post-production digital audio editing necessary for the music and film industries.
MUS 383 Meth Pub Sch Music (2 Credits)
Contact the department for specific course, information.

MUS 383I Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (instrumental) (2 Credits)
Study of principles and procedures for implementing an elementary school music program, including its organization, administration, supervision, motivation, and techniques of teaching methods and materials. Special emphasis on multicultural content and appreciation; developing competencies in identifying and referring special students.
MUS 383V Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (vocal) (2 Credits)
Study of principles and procedures for implementing an elementary school music program, including its organization, administration, supervision, motivation, and techniques of teaching methods and materials. Special emphasis on multicultural content and appreciation; developing competencies in identifying and referring special students.
MUS 384I Curriculum \& Instructional Procedures in Teaching Music in the Public Schools (instrumental) (2 Credits)
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.)

## MUS 384V Curriculum \& Instructional Procedures in Teaching Music in

 the Public Schools (vocal) (2 Credits)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.)
MUS 403 Recitals Class (0 Credits)
Provides a forum for majors to perform music studied in applied lessons. Occasional workshops on specialized topics in lieu of recital performances. Attendance at on- campus and external concerts/recitals and arts presentations are also required.

## MUS 410A Band (1 Credits)

Provides enriching musical opportunities to develop instrumental performance skills in a group setting. Band ensembles include Spartan Legion Marching Band and Symphonic Wind Ensemble.

## MUS 410D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 410F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

## MUS 411A Band (1 Credits)

Provides enriching musical opportunities for percussionists to develop performance skills in a group setting.

## MUS 411D Concert Choir (1 Credits)

The Concert Choir promotes the mastery of choral music from all periods and styles while enhancing musicianship and an appreciation of choral singing for music majors and non-music majors alike.

## MUS 411F Jazz Ensemble (1 Credits)

The Instrumental Jazz Ensemble and Vocal Jazz Ensemble bring collaborative musical ingenuity together with extraordinary showmanship to create performance groups that highlight the jazz idiom.

MUS 411G Percussion Ensemble (1 Credits)
Provides enriching musical opportunities for percussionists to develop performance skills in a group setting.
MUS 421B Piano (1 Credits)
The course continues the development of basic piano skills necessary for application in the broad range of music professions.

## MUS 422B Piano (1 Credits)

The course continues the development of basic piano skills necessary for application in the broad range of music professions.

## MUS 425A Applied Major/Voice (2 Credits)

Demonstration of sufficient technical mastery to permit the performance of appropriate repertoire of various languages and genres including selections from art song, oratorio, opera, musical theater, jazz, and pop; preparation of senior recital or senior jury.

MUS 425B Applied Major/Piano (2 Credits)
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 jury.

## MUS 425D Applied Major/Brasswind (2 Credits)

Continued emphasis on style, technique, range, transposition, exercises from Arban, Conn, Brandt, Caffarelli, 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 jury.

## MUS 425E Applied Major/Woodwind (2 Credits)

Preparation of senior recital or senior jury; transposition at major 2nd up and minor 2nd down; major and pure minor scales in 3rds; tonic, dominant seventh, and diminished arpeggios; review of previous scales and other technical requirements; transposition at major 2nd up; finished performances of compositions from MUS 325E, 326E and other compositions of different styles in preparation for senior recital, sightreading of advanced literature.

MUS 425F Applied Major/Strings (2 Credits)
Studies from Kreutzer Etudes 24-42; Schradieck's Technical Violin School; preparation for senior recital or senior jury.

MUS 425G Applied Major/Percussion (2 Credits)
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.
MUS 426A Applied Major/Voice (2 Credits)
Demonstration of sufficient technical mastery to permit the performance of appropriate repertoire of various languages and genres including selections from art song, oratorio, opera, musical theater, jazz, and pop; preparation of senior recital or senior jury.

MUS 426B Applied Major/Piano (2 Credits)
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 jury.

MUS 426D Applied Major/Brass (2 Credits)
Continued emphasis on style, technique, range, transposition, exercises from Arban, Conn, Brandt, Caffarelli, 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 jury.

## MUS 426E Applied Major/Woodwind (2 Credits)

Preparation of senior recital or senior jury; transposition at major 2nd up and minor 2nd down; major and pure minor scales in 3rds; tonic, dominant seventh, and diminished arpeggios; review of previous scales and other technical requirements; transposition at major 2nd up; finished performances of compositions from MUS 325E, 326E and other compositions of different styles in preparation for senior recital, sightreading of advanced literature.
MUS 426F Applied Major/Strings (2 Credits)
Studies from Kreutzer Etudes 24-42; Schradieck's Technical Violin School; preparation for senior recital or senior jury.

## MUS 426G Applied Major/Percussion (2 Credits)

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.

## MUS 440 Legal Protection to Music \& Musicians (3 Credits)

Survey of the field of music law including performance and recording royalties, contracts, performing rights organizations, musical copyright procedures, and publication.

## MUS 448 Arranging (2 Credits)

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.
MUS 465 Advanced Practical Application in Electrical Music (3 Credits) A hands-on course in shich each participant takes part in recording and mixing a variety of musical styles in a professional Pro Tools environment. Students learn to critically listen for the relationship between musical elements in order to successfully realize their artistic vision. Lectures cover analysis of musical structure, the nature of the multitrack process, tonalities and their interrelationships, and breakdowns of popular recordings and their musical balances.

## MUS 493 Music Internship (3 Credits)

The professional internship in music is designed to provide practical experience in the student's major area of concentration. For music media juniors and seniors, opportunites for placement include the university's recording studio, and other studio's, radio, cable and production facilities. Additionally, students may select an internship (off campus placement) with music promotion, music production, music entertainment companies, or recording studios. In each case, students spend a semester working with professionals in a music media setting to gain practical experiences. Students are expected to conduct themselves as professionals in a job setting, and observe the policies and procedures governing professional behavior at the internship site.

## Naval Science (NSC)

## NSC 101 Naval Orientation (2 Credits)

Introduction to sea power and the naval service, with emphasis on the mission, 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.

NSC 102 Seapower \& Maritime Affairs (3 Credits)
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 other Navies throughout history.

## NSC 111 Naval Laboratory I (1 Credits)

Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.
NSC 112 Naval Laboratory II (1 Credits)
Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.

## NSC 201 Navalship Systems I (3 Credits)

Introduction to the types, structure, and purpose of naval ships including ship compartmentalization, propulsion systems, auxiliary power systems, interior communications, and ship control. Examination of elements of ship design to achieve safe operations and ship stability.

NSC 202 Navalship Systems II (3 Credits)
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 ordinance. Knowledge of algebra and trigonometry recommended.

## NSC 211 Naval Laboratory III (1 Credits)

Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.

## NSC 212 Naval Laboratory IV (1 Credits)

Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.

## NSC 301 Navigation \& Naval Operations I (3 Credits)

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.
NSC 302 Navigation \& Naval Operations II (3 Credits) 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.

## NSC 310 The Evolution of Warfare (3 Credits)

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).

## NSC 311 Naval Laboratory V (1 Credits)

Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.
NSC 312 Naval Laboratory Vi (1 Credits)
Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects.

## NSC 401 Leadership \& Management I (3 Credits)

Development of effective managerial and leadership competence through functional, behavioral, and situational approaches. Focus on the officermanager as an organizational decision maker and leader.

NSC 402 Leadership \& Ethics (3 Credits)
Capstone course in the NROTC curriculum builds and focuses on managerial and professional competencies developed during prior at-sea training and naval science courses

## NSC 410 Amphibious Warfare (3 Credits)

Historical survey of the sea powerwith emphasis on the evolution of amphibious warfare in the twentieth century including the concept of amphibious warfare, its doctrinal origins, and its evolution and development as an element of national naval policy.

NSC 411 Naval Laboratory Vii (1 Credits)
Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects

## NSC 412 Naval Laboratory Viii (1 Credits)

Study of basic military formations, drill movements, commands, customs, courtesies, honors, and inspections including lectures and discussions on a variety of subjects

## Nursing (NUR)

NUR 300 Foundations of Professional Development (1 Credits)
This course is an introductory course establishing foundational knowledge and the professional standards associated with nursing practice: ANA Scope and Standards, QSEN, Virginia Board of Nursing Regulations and the National Patient Safety Goals. This course also introduces the NSU Program Learning Outcomes and relationship between the professional standards. The basis for the Nursing Students' Portfolio will be introduced.

NUR 301 Foundations of Online Success: Bsn Orientation (3 Credits) This three-credit course will provide information and skills to RN to BSN students in the areas of programmatic pathways, RN to BSN online expectations, advance library, writing, and APA skills needed to be successful in the program. Upon successful completion of this course, the RN to BSN student will be prepared for success in the BSN program

## NUR 302 Nursing Theory (3 Credits)

Contact the department for specific course information
NUR 304 Nursing Informatics (2 Credits)
This course focuses on information technology in current healthcare environments and how nursing informatics tools, principles, and practices are used to make healthcare safer.

## NUR 321 Multicultural/Bioethics (3 Credits)

This course investigates the ethnical, cultural and diverse health care needs of disparate populations. It is universally recognized that minorities are the recipients of lower quality health care and are therefore classified as a vulnerable population group. This course is designed to assist the student to appreciate the intricacies of such populations as well as to clarify personal values and develop an appreciation for the values that underpin health decisions made by consumers of health care. Topics related to age, race, ethnicity, gender, class and disabilities will be emphasized. Concepts related to workforce diversity, health care belief systems, patient rights and management of health care appropriate to the patient population will be explored. This course focuses on the challenges of nurses to provide culturally competent care to members of a diverse society. Students will examine the effects of cultural beliefs and practices that influence health care practices and health care delivery. This course will also explore bioethical concepts that impact upon nursing practice. Students will focus on ethical concepts as they apply to nursing practice.

## NUR 321H Honors: Multicultural/Bioethics (3 Credits)

This course investigates the ethnical, cultural and diverse health care needs of disparate populations. It is universally recognized that minorities are the recipients of lower quality health care and are therefore classified as a vulnerable population group. This course is designed to assist the student to appreciate the intricacies of such populations as well as to clarify personal values and develop an appreciation for the values that underpin health decisions made by consumers of health care. Topics related to age, race, ethnicity, gender, class and disabilities will be emphasized. Concepts related to workforce diversity, health care belief systems, patient rights and management of health care appropriate to the patient population will be explored. This course focuses on the challenges of nurses to provide culturally competent care to members of a diverse society. Students will examine the effects of cultural beliefs and practices that influence health care practices and health care delivery. This course will also explore bioethical concepts that impact upon nursing practice. Students will focus on ethical concepts as they apply to nursing practice.

## NUR 322 Health Assessment (4 Credits)

This course is designed to facilitate the development of expertise in obtaining health histories and performing physical assessments on clients of ages across the life span who are experiencing varying levels of wellness. Content is presented in the classroom arena and the students will have the opportunity for application and refinement of skills in the oncampus laboratory.

## NUR 324 Competencies for Nursing Practice I (2 Credits)

Contact the department for specific course information

## NUR 326 Nursing Pharmacology I (2 Credits)

Contact the department for specific course information
NUR 332 Genetics \& Genomics in Nursing Practice (2 Credits)
This course explains the role of nursing in the therapies, health conditions, and disease risk of conditions having a genetic or genomic element. The course introduces genetic and genomics related research, to include the Human Genome project. An understanding of the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness is examined. Ethical, legal and social implications, along with ethnic, racial and cultural considerations with providing genetic services are emphasized.

## NUR 342 Fundamentals of Nursing (2 Credits)

This course is designed to facilitate development of knowledge and skills that are required for the design and implementation of systems of nursing care for well individuals who may experience actual and potential minor deviations from wellness. Basic or fundamental nursing skills are introduced to establish a foundation for nursing competencies in laboratory and clinical settings. These skills are cultivated so as to enable students to identify disturbances in physiological and psychological functioning and accompanying self-care deficits.

## NUR 342L Fundamentals of Nursing Laboratory (2 Credits)

This course is designed to facilitate development of knowledge and skills that are required for the design and implementation of systems of nursing care for well individuals who may experience actual and potential minor deviations from wellness. Basic or fundamental nursing skills are introduced to establish a foundation for nursing competencies in laboratory and clinical settings. These skills are cultivated so as to enable students to identify disturbances in physiological and psychological functioning and accompanying self-care deficits. Skills demonstrated include, but are not limited to: client hygiene, hand washing, medical asepsis, surgical asepsis, wound care, nutritional assessment, basic and advanced dosage calculation, basic medication administration. Students will develop nursing care plans based on bio-psycho-social-cultural assessments so that homeostatic equilibrium may be maintained and/ or restored. As a result, the role, relationship, and responsibilities of the nurse as a member of the health care team are identified and examined critically.

## NUR 344 Competencies for Nursing Practice II (2 Credits)

Contact the department for specific course information

## NUR 346 Nursing Pharmacology II (2 Credits)

Contact the department for specific course information

## NUR 348 Nursing Pharmacology (3 Credits)

This course provides students with an overview of pharmacology with an emphasis on clinical applications within the context of the nursing process and prioritization of needs; special consideration is given to the physiological, psycho/social, cultural, and spiritual needs of patients. The pharmacological interactions are explained in relation to the disease processes of the body systems: respiratory, cardiovascular, gastrointestinal, genitourinary, endocrine, nervous systems, musculoskeletal, and mental health. Pharmacotherapeutics regarding anti-infective and immunology are presented. Analgesics are also introduced with emphasis on inflammation, pain, and fever. End of life and multisystem medications and physiology are also incorporated. The indications, modes of action, effects, dosages, side effects, nursing implications, contraindications and interactions for selected drugs involved in selected disease processes are emphasized. Specific nursing responsibilities related to drug administration are emphasized.

## NUR 360 Nursing Care of Adults I (3 Credits)

This course emphasizes the design of systems of nursing assistance for individuals experiencing acute and/or chronic alterations in physiologic homeostasis. Specific attention is devoted to analyzing self-care deficits and planning appropriate nursing assistance based on this analysis. Students will be assisted to effectively use the nursing process to design systems of nursing assistance related to selected acute and/ or chronic physiological disease processes. Classroom experiences are designed to assist the student to integrate concepts from previous courses, currently presented information and the use of the nursing process in selected client situations. Specific alterations in physiologic homeostasis, including fluid and electrolytes and acid/base disturbances, serve as the foundation for assessing, planning, and implementing, and evaluating nursing and collaborative care.

NUR 360L Nursing Care of Adults I Laboratory (2 Credits)
This course provides students with laboratory and clinical experiences in the provision of nursing care for clients with common acute and chronic illnesses across the lifespan. Emphasis is on the delivery of competent, safe, and evidence based healthcare for diverse clients in a variety of settings. Focus is on the use of healthcare and information management technologies in the implementation, documentation and evaluation of nursing interventions.

## NUR 362 Essentials Nursing (4 Credits)

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.
NUR 400 Nursing Pathophysiology (3 Credits)
This course is designed for 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. Pre-licensure students will explore pathophysiology through the lens of body function concepts and what happens when function is altered through injury or disease. Utilizing the nursing process, emphasis will be placed on the integration and application of pathophysiological concepts.

## NUR 415 Health Assessment (4Credits)

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 oncampus laboratory.

## NUR 418 Conceptual Models for Nursing (3 Credits)

Introduction to concepts underpinning the practice of professional nursing, including concepts of self-care, nursing process, systems theory, theories of family development and crisis.

## NUR 418H Honors: Conceptual Models for Nursing (3 Credits)

Honors: This course introduces the baccalaureate nursing student to concepts and theories underpinning the practice of professional nursing, including concepts of self-care, nursing process, systems theory and theories of family development and crisis.
NUR 419 Providing Nursing Systems for Individuals and Small Groups (5 Credits)
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.
NUR 429 Providing Nursing Systems for Individuals and Large Groups (3 Credits)
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 having a potential for multiple risk factors.

NUR 435 Providing Nursing Systems for Families, Groups, and Communities ( 3 Credits)
This course focuses on the design and implementation of systems of nursing assistance for families, groups and communities, specifically high-risk populations throughout the life cycle. Students will use 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. The students are expected to continue their head to toe assessment skills.

## NUR 435L Providing Nursing Systems for Families, Groups, and Communities Laboratory (2 Credits)

This course focuses on the implementation of learned skills specific to caring for families, groups, communities and high-risk populations throughout the life cycle. Students will use appropriate skill sets to assess, plan, implement, and evaluate nursing care as well as to analyze the management of care delivery by others in a variety of settings. The clinical settings for this course will be conducted as a Preceptorship within the local community. Selected clinical sites will be designed to focus on the management of care in a community setting.

## NUR 440 Nursing Care of Adults II (3 Credits)

This course focuses on the design and implementation of systems of nursing assistance for individuals and families, in tertiary care settings. These clients, throughout the lifespan and of diverse cultural backgrounds, experience selfcare deficits with multiple etiologic factors and/or have a potential for multiple risk factors

## NUR 440H Honors Nursing Care of Adults II (6 Credits)

This course focuses on the design and implementation of systems of nursing assistance for individuals and families, in tertiary care settings. These clients, throughout the lifespan and of diverse cultural backgrounds, experience selfcare deficits with multiple etiologic factors and/or have a potential for multiple risk factors.

## NUR 440L Nursing Care of Adults II Laboratory (3 Credits)

This course focuses on the design and implementation of systems of nursing assistance for individuals and families, in tertiary care settings. These clients, throughout the lifespan and of diverse cultural backgrounds, experience selfcare deficits with multiple etiologic factors and/or have a potential for multiple risk factors.

## NUR 442 Psychiatric/Mental Health Nursing (2 Credits)

This course focuses on designing systems of nursing assistance for clients experiencing significant life cycle events, which have major impact on self-care management, lifestyles and activities of the individuals and small groups. These life-cycle events result in selected alterations, primarily in psychological homeostasis that range from minor alterations, such as anxiety to major alterations such as psychotic disorders. Students will effectively use therapeutic communication and interventions to assist individuals and small groups to restore psychological and/or physiological homeostasis.

## NUR 442L Psychiatric/Mental Health Nursing Laboratory (2 Credits)

 This course focuses on designing systems of nursing assistance for clients experiencing significant life cycle events, which have major impact on self-care management, lifestyles and activities of the individuals and small groups. These life-cycle events result in selected alterations, primarily in psychological homeostasis that range from minor alterations, such as anxiety to major alterations such as psychotic disorders. Students are taught how to effectively use therapeutic communication and interventions to assist individuals and/or small groups to restore psychological and/or physiological homeostasis.
## NUR 444 Planning Nursing Systems for Adults (3 Credits)

Design of systems nursing assistance for diverse groups of individuals and/or aggregates experiencing acute and/or chronic alterations in 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.
NUR 446 Nursing of Women \& the Childbearing Family (2 Credits) This course focuses on the design and implementation of systems of nursing assistance for individuals and families, in tertiary care settings. These clients, throughout the lifespan and of diverse cultural backgrounds, experience self-care deficits with multiple etiologic factors and/or have a potential for multiple risk factors

## NUR 446L Nursing of Women \& the Childbearing Family Laboratory (2 Credits)

The focus of this course is the nursing care of women, neonates and their families in a variety of settings. Normal pregnancy and childbirth will be addressed, as well as the identification and management of high risk childbearing situations among diverse populations. Selected content related to the health care of women across the lifespan is include
NUR 450 Nursing of Children, Adolescents, \& Families (2 Credits)
This course focuses on the theoretical concepts and clinical application of nursing care of infants, children, and adolescents in varied health care and community settings. Students are expected to use the nursing process and synthesize assessment, pathophysiologic, pharmacologic, and therapeutic concepts. Family-centered care of children within developmental, cultural, ethnic, religious, and social structures.
NUR 450L Nursing of Children, Adolescents, \& Families Lab (2 Credits) This course focuses on the theoretical concepts and clinical application of nursing care of infants, children, and adolescents in varied health care and community settings. Students are expected to use the nursing process and synthesize assessment, patophysiologic, pharmacologic, and therapeutic concepts. Family-centered care of children within developmental, cultural, ethnic, religious, and social structures.

## NUR 461 Nursing Research Dimensions (3 Credits)

This course is designed to introduce the student to the research process and provide a foundation for the utilization of research findings to drive decisions in the provision of nursing care. The course will examine the steps of the research process, guide the student to identify practice questions, review relevant literature, critique research findings and apply evidence to promote patient safety and improve the quality of care.

## NUR 461H Honors: Nursing Research Dimensions (3 Credits)

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.

NUR 462 Nursing Leadership and Management (3 Credits)
This course emphasizes the examination of theory and concepts concerning the functions of management, the leadership process, and organizational structures. The students will have the opportunity to analyze, apply, and evaluate theory in complex health care settings. Further, each student will be encouraged to evaluate self in relation to achievement of stated expectations and objectives and the effectiveness of own leadership behavior. Through individual learning activities, the students will analyze complex health care delivery systems, coordinate efforts for consumer health and nursing service, act as colleagues with other health professionals, evaluate the quality and direction of health and nursing, and encourage change as appropriate. Additional responsibilities and course work will be given to students who desire to earn credit for an honors course.

NUR 462H Honors: Nursing Leadership and Management (3 Credits) Examination of theory and concepts concerning the leadership process, organizational structure, and management strategies. Analyze complex health-care delivery systems, coordinate efforts for consumer health and nursing service, act as colleagues with other health professionals, evaluate the quality and direction of health and nursing, and encourage change as appropriate.

## NUR 463 Capstone Theory (2 Credits)

This course maximizes socialization as a professional nurse through the examination of the role of the nurse in current issues in health care and nursing. Attention is directed to forces which affect health care delivery and the impact of these changes on the scope of nursing practice. This capstone course is designed as a synthesis of theoretical nursing concepts through the use of case studies, application exercises and simulation activities.

## NUR 463L Capstone Theory and Preceptorship (3 Credits)

This course maximizes socialization as a professional nurse through the examination of the role of the nurse in current issues in health care and nursing. Attention is directed to forces which affect health care delivery and the impact of these changes on the scope of nursing practice. This capstone course is designed as a synthesis of theoretical nursing concepts through the use of case studies, application exercises and simulation activities.

## NUR 470 Seminar on Professional Development (3 Credits)

This course maximizes socialization as a professional nurse through the examination of the role of the nurse in current issues in health care and nursing. Attention is directed to forces which affect health care delivery and the impact of these changes on the scope of nursing practice.

## NUR 475 Nursing Process Seminar (3 Credits)

This capstone course promotes the integration of knowledge and concepts obtained in previous nursing, science and general education 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 preceptored clinical experience. Successful completion of the course is dependent upon passing a comprehensive examination.

NUR 485 Contempory Topics in Nursing and Health Care (3 Credits) This course provides an opportunity for the emerging generalist in the practice of professional nursing to apply knowledge and skills in an area of personal interest in nursing. Under the supervision of the instructor, students will identify and conduct a project or participate in work experience. Projects chosen by students may be related to research, leadership or nursing practice. Examples of projects that may be selected include, but are not limited to: (1) creation and presentation of a research poster; (2) planning for and teaching of patient/clients or lay health workers; and (3) development and implementation of educational or service programs. Student projects are designed to address contemporary and emerging issues in nursing.

## NUR 485H Honors: Contempory Topics in Nursing and Health Care (3 Credits)

This course focuses on the study of a variety of contemporary topics in nursing and health care, for which the student may select topics of interest for group presentations, workshops, and/or research projects. Projects and/or presentations may be offered on weekday evenings and/ or Saturdays.

## NUR 490 Community Health Nursing (2 Credits)

This course focuses on the design and implementation of systems of nursing assistance for families, groups and communities, specifically high-risk populations throughout the life cycle. Students will use 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.

## NUR 490L Community Health Nursing Laboratory (2 Credits)

This community clinical course is designed to apply principles of community health nursing. Expanding upon current knowledge and experience base, students will participate in a variety of clinical activities in the community. Students will design, implement and evaluate a project focusing on community health. This project will challenge critical thinking skills as students analyze and synthesize data to develop health promotion and disease prevention strategies for population groups.

## Optical Engineering (OEN)

OEN 200 Geometric \& Instr Optics (3 Credits)
Basic principles of geometric optics, refraction, and reflection will be discussed. Gaussian optics, of axially symmetrical systems and other related, topics as will as simple optical instruments such, as magnifying lenses, compound microscopes, , refracting telescope and other simple optical , systems will be discussed.

## OEN 200L Geometric \& Instr Optics Lab (1 Credits)

This is a course in intermediate geometric optics, that provides students with state-of-the art, laboratory exercises and equipment that will allow, them to do fundamental experiments using lasers, , fiber optic systems and diodes. This course, complements OEN 200 and students are advised to , take these courses concurrently.

## OEN 201 Physical and Instrumental Optics (3 Credits)

This course is the second half of OEN 200 with, more detailed discussion of topics such as, interference and interferometers, Fresnel and, Fraunhofer diffraction, spectroscopic, instrumentation, electro-optic effects and, elements of quantum and nonlinear behavior.
OEN 201L Physical and Instrumental Optics Lab (1 Credits)
This laboratory is designed to complement the , topics discussed in OEN 201 and students, are advised to take these courses concurrently.

## OEN 290 Optical Engineering Seminar I (1 Credits)

This course provides an introduction to, contemporary topics in optical engineering, including contemporary technical topics and, professional topics, and emerging areas for, employment and career advancement.

## OEN 297 Summer Research I (3 Credits)

Undergraduate research supervised by a faculty, member. Development of the skills of research, including preparations, design and execution of, experiments, data analysis.

## OEN 320 Optical Systems Analysis (3 Credits)

Development of tools and techniques for, engineering of optical systems. Study of, specifications, system design and analysis,, tradeoffs and optimization, manufacturing.

## OEN 340 Lasers and Photonics (3 Credits)

Condensed matter physics including issues in solid, state physics, laser physics, laser light, laser, components and systems and measurements are, covered in this course.
OEN 340L Laser and Photonics Lab (1 Credits)
This course is the study of laser and photonics in, a laboratory setting.
OEN 360 Introduction to Optical Materials (3 Credits)
Contact the department for specific course, information.
OEN 360H Introduction to Optical Materials Honors (3 Credits)
Contact the department for specific course, information.
OEN 380 Introduction to Quantum Optics ( 3 Credits)
This course will introduce students to theoretical, concepts and experiemental evidence of quantum, phenomena that allows them to gain a fundamental, understanding of a number of novel semiconduciting, and photonic systems. Students completing this, course will understand fundamental quantum, concepts that are prevalent in many novel systems, including nano-structures and electronic and, optical materials that can be used to design the, next generation optoelectronic and optical devices
OEN 390 Optical Engineering Seminar II (1 Credits)
This course provides an introduction to, contemporary topics in optical engineering,, including contemporary technical topics with, relevance to modern practice. The course is, comprised of three four week modules and one, three week module. The individual modules, willreview a foundational technical area within, optical engineering. The module topics will vary, annually.

## OEN 397 Summer Research II (3 Credits)

Undergraduate research supervised by a faculty, member. Further development of the skills of, research including preparations, design and, execution of experiments, data analysis.
OEN 460 Optical Communications I (3 Credits)
Study of optical communication components and, applications to communications systems, including, fiber attenuation and dispersion and noise and, coherent communications.
OEN 460L Optical Communication I Laboratory (1 Credits)
Study of optical communication components and, applications to communications systems in a, laboratory setting.
OEN 461 Optical Communications II (3 Credits)
Further discussion of coherent communications, as, it relates to distribution networks for, fiber-to-the- premises (FTTP) and optical sensing.
OEN 461L Optical Communications II Laboratory (1 Credits)
This laboratory is designed to complement the, topics discussed in OEN 461. Students are advised, to take these courses concurrently.

## OEN 471 3D Printing \& Laser Processing (3 Credits)

This course introduces students to the basic, principles and theory of 3Dimensional printing, and laser processing for various applications. , The course provides classroom lectures on the, optical engineering principles, computer aided, design (CAD) technology and rapid prototyping, technology using 3D printing and lasers. In, addition to classroom lectures, students will, have a laboratory component for the design and, fabrication of 3D devices for engineering, applications. Students will also conduct team, projects to design, fabricate and analyze, prototyped devices using the rapid prototyping, tools. The method of instruction will include, lectures, demos, and video, as well as class, assignments. Class will also invite industrial, designers working with prototyping technology,, software demos, tutorials and advanced, techniques, as well as an introduction to a, variety of proceses used in 3D prototyping.
OEN 471H Honors 3D Printing/Laser Processing (3 Credits)
This course introduces students to the basic, principles and theory of 3Dimensional printing, and laser processing for various applications. , The course provides classroom lectures on the, optical engineering principles, computer aided, design (CAD) technology and rapid prototyping, technology using 3D printing and lasers. In, addition to classroom lectures, students will, have a laboratory component for the design and, fabrication of 3D devices for engineering, applications. Students will also conduct team, projects to design, fabricate and analyze, prototyped devices using the rapid prototyping, tools. The method of instruction will include, lectures, demos, and video, as well as class, assignments. Class will also invite industrial, designers working with prototyping technology,, software demos, tutorials and advanced, techniques, as well as an introduction to a, variety of proceses used in 3D prototyping.

## OEN 490 Senior Seminar (1 Credits)

This course provides an introduction to various, aspects of engineering practice, engineering, ethics, and career opportunities through invited, lectures.

## OEN 498 Senior Project! (3 Credits)

In this course, students plan and design capstone, engineering projects incorporating realistic and, diverse constraints of technical, budgetary, and, social aspects. Both written reports and oral, presentations are required.

## OEN 499 Senior Project II (3 Credits)

This course is the implementation phase of, capstone projects designed in OEN 498., Demonstration of the final working project is, required along with a written report and oral, presentation.

## Physical Education (PED)

PED 100 Fundametals of Fitness for Life (1 Credits)
Development of knowledge and appreciation for, total fitness as an individualized goal, including, the improvement in current levels of fitness and, the development of positive life-styles.

## PED 101 Modified Physical Education (1 Credits)

Individualized programs of instruction for students with special needs with regard to physiacl activity. Medical excuse required.
PED 102 Modified Physical Education (1 Credits)
Individualized programs of instruction for students with special needs with regard to physiacl activity. Medical excuse required.

PED 107 Aerobics (1 Credits)
Aerobics is an experiential course designed to give students an introductory experience and orientation to basic cardiovascular development using aerobic workout and step training as physical fitness tools. Of particular interest will be the student's individual journey in a quest for healthier living.

## PED 109 Water Aerobics (2 Credits)

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.
PED 133 Beginning Swimming (1 Credits)
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.

## PED 134 Advanced Swimming (1 Credits)

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.

PED 151 Rhythm and Folk Dances (1 Credits)
Rhythm/Folk Dance is an experiential course designed to give students an introductory experience in basic rhythmic development using the folk dance of various cultures. The primary learning experiences for this class will include but are not limited to: rhythmic development including hand clapping and vocalizations, basic music value and notation, cardiovascular warm-up, use of gross motor skills including axial and locomotor skills, and historical and socio-cultural inquiry into various dances in different societies. Of particular interests will be the basic socio-cultural and historical background including the music and movements of each dance.

## PED 152 Rhythm \& Folk Dances (1 Credits)

Rhythm/Folk Dance is an experiential course designed to give students an introductory experience in basic rhythmic development using the folk dance of various cultures. The primary learning experiences for this class will include but are not limited to: rhythmic development including hand clapping and vocalizations, basic music value and notation, cardiovascular warm-up, use of gross motor skills including axial and locomotor skills, and historical and socio-cultural inquiry into various dances in different societies. Of particular interests will be the basic socio-cultural and historical background including the music and movements of each dance.

## PED 158 Fundamentals of Physical Education (1 Credits)

This course focuses on the fundamental movement skills and concepts that are the foundation of a quality physical education and physical activity programs.
PED 159 Fundamentals of Physical Education (1 Credits)
Orientation to selected seasonal team sports (soccer, speed ball hockey, basketball, volleyball, 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.

PED 170 Introduction to Physical Education (3 Credits)
Introduction to historical, philosophical, educational, psychological, biological, sociological, and career emphasis related to the field of physical education.

PED 170H Introduction to Physical Education - Honors (3 Credits) Introduction to historical, philosophical, educational, psychological, biological, sociological, and career emphasis related to the field of physical education.

## PED 179 First Aid, Cpr \& AED (2 Credits)

Study of the proper techniques and procedures for, administering First Aid, CPR and AED. This course, prepares participants to recognize and respond, appropriately to cardiac, breathing and first aid, emergencies

PED 200 Beginning Fitness Though Weight Training (2 Credits) Near individualized personal fitness program utilizing the following apparatus and equipment: the variable resistance machines, Olympic free weights, and the pull- up trainer.

## PED 200H Honors Beginning Fitness Through Weight Training (2 Credits)

Near individualized personal fitness program utilizing the following apparatus and equipment: the variable resistance machines, Olympic free weights, and the pull- up trainer.
PED 204 Tennis I (1 Credits)
Development of basic skills in the game of tennis, including techniques, rules, and strategies.

## PED 206 Tennis II (1 Credits)

Development of performance skills at the beginning level, the knowledge of rules, terminology, equipment, and safety techniques in tennis.

## PED 209 Bowling (1 Credits)

Development of skills and appreciation for bowling, both as a fitness and leisure time activity.

## PED 210 Golf (1 Credits)

Development of performance skills at the beginning level, the knowledge of rules, terminology, equipment, and safety techniques in golf.

## PED 212 Introduction to Net \& Wall Games (1 Credits)

The purpose of this course is to provide the student with basic level of knowledge and skills in a variety of net and wall games such as racquetball, table tennis, pickleball, volleyball, tennis, badminton, volleyball, etc. to be able to successfully participate in recreational lifelong activities

## PED 213 Introduction to Net \& Wall Games (1 Credits)

The purpose of this course is to provide the, student with basic level of a knowledge and skills, in a variety of net and wall games such as, raquetball, table tennis, pickleball, volleyball,, tennis, badminton, etc. to be able to successfully, participate in recreational lifelong activities.

## PED 220 Eval in Phys Educ (3 Credits)

The student will be introduced to the quantitative, and qualitative tests, measurements, and, evaluation tools utilized in evaluating the, cognitive, affective, and psychomotor aspects of, physical activity.
PED 220H Evaluation in Physical Education - Honors (3 Credits)
The student will be introduced to the quantitative and qualitative tests, measurements, and evaluation tools utilized in evaluating the cognitive, affective, and psychomotor aspects of physical activity.

## PED 235 Aquatic Sports and Activities (1 Credits)

This course introduces the student to a variety of, aquatic sports and activities. Primary focus is, on swimming, water polo and aquatic based board, sports.

## PED 251 Modern Dance I (1 Credits)

Modern Dance I is an experiential course designed to give students an introductory experience and orientation to techniques and principles of modern dance. The primary learning experiences for this class will include but are not limited to: rhythmic development, stretch and strength warmup, use of gross motor skills including axial and locomotor skills, and cursory historical and socio-cultural inquiry. Of particular interests will be the basic socio-cultural and historical background of Modern dance specifically as it relates to the development of African American concert dance traditions.

## PED 252 Modern Dance II (1 Credits)

Modern Dance Technique II is geared toward the student with previous modern dance training and/or substantive training in another genre of dance. The primary aim of this course is to encourage you to continue the guided exploration and development of an artistic and creative movement practice, via the synthesis of your physical, cognitive, emotional and spiritual capacities. Throughout this class, you will study principles, movement activities and language common to a variety of modern dance styles.

## PED 253 Gymnastics (1 Credits)

Development of performance skills and the knowledge of rules, terminology, equipment, safety techniques, and the learning procedures for apparatus work

## PED 254 Jazz Dance (1 Credits)

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.

## PED 261 Team Sports I: Invasion Games (1 Credits)

The purpose of this course is to develop the tactical knowledge, skills and movements for the invasion game category of games. The course will consist of teaching techniques, cues, progressions, skill transfer, error analysis, correction, personal skill development, activity planning, and peer teaching experiences.
PED 262 Team Sports li: Net/Wall \& Striking/Fielding Games (1 Credits) The purpose of this course is develop the tactical knowledge, skills and movements for Net/Wall and Striking/Fielding category of games. The course will consist of teaching techniques, cues, progressions, skill transfer, error analysis, error correction, personal skill development, activity planning, and peer teaching experiences.

PED 271 Individual Sports (1 Credits)
Development of skills in archery, golf, tennis, badminton, bowling, racquetball, pickle ball; fitness testing.

## PED 272 Cooperative and Target Games (1 Credits)

The purpose of this course is develop interpersonal and intrapersonal skills through participation in and planning of cooperative games skills. Additionally, tactical knowledge, skills and movements for Target games. The course will consist of teaching techniques and cues, progressions, skill transfer, error analysis and correction, activity planning and peer teaching experiences. Understanding how to develop interpersonal and intrapersonal skills in individuals is an important skill in each of these settings

## PED 287 Human Anatomy (3 Credits)

Part I of a two-part course dealing with the anatomical and functional relationships of the human body. In lecture setting, the course is designed to acquaint students with the general organization of the body, the skeletal, muscular, integumentary and nervous systems, special senses..

## PED 287L Human Anatomy Laboratory (1 Credits)

Part I of a two-part course dealing with the anatomical and functional relationships of the human body. In laboratory setting, the course is designed to acquaint students with the general organization of the body, the skeletal, muscular, integumentary and nervous systems, special senses..

## PED 288 Human Physiology (3 Credits)

Part II of a two-part course dealing with the anatomical and functional relationships of the human body. In lecture setting, the course is designed to acquaint students with the structure, function, regulation, and integration of organs and organ systems of humans.

## PED 288L Human Physiology Laboratory (1 Credits)

Part II of a two-part course dealing with the anatomical and functional relationships of the human body. In laboratory setting, the course is designed to acquaint students with the structure, function, regulation, and integration of organs and organ systems of humans.
PED 300 Advanced Fitness Through Weight Training (2 Credits)
Students will gain advanced experiences working with Olympic free weights, variable resistance machines, resistance bands and stability balls. Preparation for Personal Training Certification is also included.
PED 300H Advanced Fitness Through Weight Training -Honors (2 Credits)
Students will gain advanced experiences working with Olympic free weights, variable resistance machines, resistance bands and stability balls. Preparation for Personal Training Certification is also included.

PED 325 Lifeguard Training (3 Credits)
Learn how to effectively prevent and respond to water emergencies with American Red Cross lifeguard training. This course is designed to examine the skills and knowledge for a variety of scenarios in and around the water. With lifeguard training, you will learn how quick response times and effective preparation are vital to being a lifeguard while also understanding the crucial elements in helping to prevent drownings and injuries.

## PED 335 Skill Analysis (2 Credits)

The purpose of this course is to develop the knowledge and skills required to assessing movement skills and performance techniques. Integrations of theory, technology and assessment trends are included in assignments.

## PED 335H Skill Analysis- Honors (2 Credits)

The purpose of this course is to develop the knowledge and skills required to assessing movement skills and performance techniques. Integrations of theory, technology and assessment trends are included in assignments.

## PED 356 Kinesiology (3 Credits)

The 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.

## PED 357 Oranization \& Administration (3 Credits)

Focus on organization and administration of physical activity, athletic, and intramural programs. Administrative responsibilities including program development, facility management, budgeting, public relations, personnel management, program and staff evaluation, and legal liability issues will be addressed.

## PED 362 Athletic Coaching and Officiating (2 Credits)

This course is designed to develop a general understanding of coaching and officiating as it relates to ethics, values, behavior, organization and management. It is further designed to assist in the development of a philosophy of coaching and officiating.

## PED 365 Adapted Physical Education (3 Credits)

This course is designed to provide students with current knowledge and applications of learning for people with disabilities. Class activities will include text discussions, speakers, adapted physical activities and handson experience working with individuals with disabilities in a physical activity setting.

## PED 365H Adapted Physical Education- Honors (3 Credits)

This course is designed to provide students with current knowledge and applications of learning for people with disabilities. Class activities will include text discussions, speakers, adapted physical activities and handson experience working with individuals with disabilities in a physical activity setting.

## PED 369H Honors Measurement and Evaluation (3 Credits)

Analysis of test and measurements commonly used in, physical education. Introduction to basic, statistical procedures for test selection,, construction, and administration.

## PED 370 Secondary Physical Education Methods (3 Credits)

Study of methods and procedures for designing and implementing unit plans and lesson plans for physical education theory and activity classes in a secondary physical education program.

## PED 380 Elementary Physical Education Methods (3 Credits)

Student will examine current issues in elementary physical education, construct and teach developmentally appropriate units, establish a sound understanding of organizational techniques and methodology focusing on effective use of academic learning time, and critique teaching methods through systematic observation of practice. Additionally, students will construct and apply on-going authentic assessments appropriate for the content, context and grade level as well as analyze physical education curriculum models.
PED 380H Elementary Physical Education Methods - Honors (3 Credits) Student will examine current issues in elementary physical education, construct and teach developmentally appropriate units, establish a sound understanding of organizational techniques and methodology focusing on effective use of academic learning time, and critique teaching methods through systematic observation of practice. Additionally, students will construct and apply on-going authentic assessments appropriate for the content, context and grade level as well as analyze physical education curriculum models.
PED 440 Driver Education (3 Credits)
Study of Methods used for teaching driver education in ublic schools.
PED 441 Driver Task Analysis (3 Credits)
This is the first of two courses required to obtain certification in Driver Education. Introduces the "driver task" as related to the highway transportation system and factors that influences performance ability. Prepares students to become eligible to take the certification exams for driving school instructors in both public and private schools.
PED 442 Gen Safety Educat (3 Credits)
Contact the department for specific course information

## PED 443 Drivers Rehabilitation (3 Credits)

This course provides the methods to plan, develop, coordinate and implement driver rehabilitation services for individuals with disabilities. Specifically, the course specializes in preparing professionals to help train individuals become safe and capable independent drivers following injury or illness, as well as those experiencing a change in abilities as a result of the natural aging process. Completion of the course prepares students to take the driver rehabilitation certification exam.
PED 444 Principles and Methods of Classroom and In-Car Instruction (3 Credits)
This is the second of two courses required to obtain certification in driver education. This course provides methods of teaching the required in-car segment of driver education.

## PED 450 Motor Learning (3 Credits)

Study of motor learning theories and the application of planning physical activity throughout the lifespan. The content will address the physiological, cognitive, social and physical aspects which affect skill acquisition, motor performance, and the teaching-learning process.

## PED 450H Motor Learning- Honors (3 Credits)

Study of motor learning theories and the application of planning physical activity throughout the lifespan. The content will address the physiological, cognitive, social and physical aspects which affect skill acquisition, motor performance, and the teaching-learning process.

## PED 451 Psychological Aspects of Sports (3 Credits)

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.
PED 477 Physiology of Muscular Exercise (3 Credits)
Study of physiological responses, adjustments, and adaptations to the acute stress of exercise, physical activity, and the chronic stress of physical training.
PED 477H Physiology of Muscular Exercise - Honors (3 Credits) Study of physiological responses, adjustments, and adaptations to the acute stress of exercise, physical activity, and the chronic stress of physical training.
PED 480 Principles of Physical Education (3 Credits)
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 sports, women in sports, and physical activity promotion for girls and minority populations. Emphasis on resume building and interviewing skills for careers in physical education

## PED 495 Internship Experience I (3 Credits)

This course provides students with the opportunity to integrate academic preparation with practical "hands-on" experience in an approved supervised health and fitness work setting. This internship is also designed to provide students the opportunity for career exploration to discover the type of preferred work environment, and skill development, especially networking, in the field. Students must complete 100 documented hours..

## PED 496 Exercise Science Internship (12 Credits)

The Exercise Science Internship provides students with the opportunity to apply his or her knowledge and gain practical experience working with patients and/or clients referred for medically prescribed exercise to general health and wellness. The supervised internship may occur through university and private rehabilitation clinics, hospitals, mental health, nursing, and wellness centers as well as special schools. Students in the Health Fitness Instructor (HFI) and Health Wellness Rehabilitation (HWR) Curriculum must complete 600 documented hours.

## Physics (PHY)

## PHY 100 Physical Science (3 Credits)

Contact the department for specific course information

## PHY 100L Physical Science Laboratory (1 Credits)

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.
PHY 152 General Physics (3 Credits)
Study of mechancs, heat, sound, electricity,, magnetism, light, and modern physics.

## PHY 152L General Physics Laboratory I (1 Credits)

Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analyses.

PHY 153 General Physics (3 Credits)
Study of mechancs, heat, sound, electricity,, magnetism, light, and modern physics.
PHY 153L General Physics Laboratory II (1 Credits)
Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analyses.

PHY 154 Physics of Music (3 Credits)
Contact the department for specific course, information.
PHY 160 University Physics I (4 Credits)
This lecture and recitation course deals with , mechanics, heat, sound, light, electricity and, magnetism, and modern physics. The course, emphasizes analytical methods with application of , calculus and problem solving., Accompanying laboratories: PHY 250L, 251L
PHY 160L University Physics Laboratory I (1 Credits)
Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analysis.
PHY 161 University Physics II (4 Credits)
This lecture and recitation course deals with , mechanics, heat, sound, light, electricity and, magnetism, and modern physics. The course, emphasizes analytical methods with application of, Calculus and problem solving. , Accompanying laboratories: PHY 250L, 251L.

PHY 161L University Physics Laboratory II (1 Credits)
Opportunity to investigate the laws and principles of physics and to make conclusions based on observations and analysis.

PHY 241 Physics Seminar (1 Credits)
Presentation and discussion of current topics in all areas of physics.
Required of sophomore physics majors
PHY 250 University Physics (4 Credits)
Contact the department for specific course information

## PHY 260 University Physics III (4 Credits)

Study of basic concepts and principles oscillatory motion, mechanical waves, electro-magnetic waves, geometrical optics, physical optics, and special relativity. Calculus and vector methods used throughout the course.

## PHY 330 University Physics III (4 Credits)

Basic concepts and principles of oscillations, , mechanical waves, optics and special relativity, for students majoring in physics, engineering, chemistry, science, or mathematics. Topics, include: oscillatory motion, mechanical waves, , electro-magnetic waves, geometrical optics, , physical optics, and special relativity. Calculus, and vector methods are used throughout the course.
PHY 345 Mathematical Methods Physical Sciences I (3 Credits) Introductory study of advanced mathematical topics including complex numbers vectors, matrices, series, and differential equations with special emphasis on applications to physics topics.

## PHY 350 Modern Physics (3 Credits)

Introduction to modern physics including relativity, atomic structure, nuclear structure, radioactivity, nuclear reactions, and elementary particles.

## PHY 351 Modern Physics (2 Credits)

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. (Two hours laboratory per week).
PHY 356 Heat and Thermodynamics (3 Credits)
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.
PHY 365 Physical Mechanics ( 3 Credits)
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.
PHY 366 Physical Mechanics (3 Credits)
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.
PHY 366H Honors Physical Mechanics (3 Credits)
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.

## PHY 375 Electricity and Magnetism I (3 Credits)

Introduction to classical electromagnetic 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.

PHY 380 Quantum Mechanics I (3 Credits)
Introduction to Schrodinger's equation and topics, including free particle wave functions, square well and simple harmonic oscillator potentials, the hydrogen atom, and identical particles.

## PHY 397 Introduction to Research (3 Credits)

Development in the skills of research, including preparations, fabrication, design and execution of experiments, data analysis. Undergraduate research supervised by a faculty member.

PHY 399 Advanced Laboratory (2 Credits)
Introduction to techniques of advanced experimentation and to development of research and in technical writing skills. Experiments in mechanics, heat, electronics, optical spectroscopy, and atomic and nuclear physics.
PHY 445 Mathematical Methods for Physical Sciences II (3 Credits) Study of advanced mathematical topics including fourier series, calculus of variations, series solutions of differential equations, and partial differential equations, with special emphasis on applications to physics topics.

## PHY 468 Optics (3 Credits)

Focus on topics from geometrical and physical optics, including circular and elliptical polarization, thick-lens equations, Fresnel and Fraunhofer diffraction, interference and dispersion of electromagnetic waves, fiber optics, and optical pumping.

## PHY 475 Electricity and Magnetism II (3 Credits)

Advanced treatment of classical electromagnetic theory, including electrostatic and magnetostatic fields, electric and magnetic properties of matter, Maxwell's equations and timedependent electric and magnetic fields, electromagnetic waves, and radiation.

## PHY 480 Quantum Mechanics II (3 Credits)

Advanced treatment of Schrodinger 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.

## PHY 498 Sr Project I (2 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 where needed.

## PHY 499 Sr Project II (2 Credits)

Supervised investigation of a research problem, including planning, execution, and analysis. Preparation of report, oral presentation, and completion of senior assessment examination required.

## Political Science (POS)

## POS 100 American National Government (3 Credits)

Coordinated study of the development of the American government including the historical development of the United States and the organization and functions of government.
POS 180 Introduction to Political Science (3 Credits)
Introduction to the basic concepts and fundamental substantive divisions of the field of political science.
POS 230 American Public Policy (3 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. The course also seeks to assess the impact of policy decisions on various groups in American society.

POS 231 American State and Local Government (3 Credits)
Intensive study of the legal and political processes of the sub- systems of state and local government. There is a detailed emphasis on federal state, interstate, and state local relations.

## POS 250 Introduction to Public Administration (3 Credits)

Focus on the organization, responsibility, personnel management, fiscal processes, functions and problems of public administration.
POS 250H Honors Introd to Public Administration (3 Credits)
Focus on the organization, responsibility, personnel management, fiscal processes, functions and problems of public administration.

## POS 315 African American Politics (3 Credits)

Systematic examination of the African-American in the American political system, covering various periods of the African-American political experience.

POS 315H Honors African American Politics (3 Credits)
Designed for honor's classes. Systematic examination of the AfricanAmerican in the American political system, covering various periods of the African-American political experience.
POS 320 The American Party System (3 Credits)
Study of the nature, function, evolution, and organization of political parties in the United States, with particular emphasis on the relationship of special interest groups with the party system.
POS 323 Compartative Government (3 Credits)
Study of the organization, structure, and politics of the major European governments, with special emphasis on the political systems of Great Britain, France, West Germany, and the Former Soviet Union.

## POS 325 American Foreign Policy (3 Credits)

Study of the background, responsibilities, and consequences of United States foreign policy from World War I through the Cold War years to the present. Special emphasis is based on the diplomatic origins of the major wars, the peacemaking efforts, and assessment of American foreign policy toward major regions of the world and international organizations.

POS 332 Introduction to Jurisprudence (3 Credits)
Intensive examination of the schools and theories of jurisprudence, historical development of legal systems, legal reasoning, and juristic processes

## POS 333 Research Methods (3 Credits)

Focus on the problems of methodology in empirical research, emphasizing hypothesis testing and the quantification of data. This course provides experience in the use of public documents, aggregate data, and survey data in research designs and policy evaluation.
POS 333H Honors Methods of Research (3 Credits)
Designed for honor's classes. Focus on the problems of methodology in empirical research, emphasizing hypothesis testing and the quantification of data. This course provides experience in the use of public documents, aggregate data, and survey data in research designs and policy evaluation.
POS 337 American Constitutional Development (3 Credits)
Study of the basic principles of the American constitutional system. Emphasis is placed on the judicial interpretation and application of these principles in construing the powers of the government and the rights of individuals.

POS 337H Honors American Constitutional Law I (3 Credits)
Study of the basic principles of the American constitutional system. Emphasis is placed on the judicial interpretation and application of these principles in construing the powers of the government and the rights of individuals. These courses examine the historical background of major federal court decisions.

## POS 338 American Constitutional Law (3 Credits)

Study of the basic principles of the American constitutional system with emphasis on the historical background of major federal court decisions.

## POS 338H Honors American Constitutional Law II (3 Credits)

Study of the basic principles of the American constitutional system. Emphasis is placed on the judicial interpretation and application of these principles in construing the powers of the government and the rights of individuals. These courses examine the historical background of major federal court decisions.

## POS 345 Statistics and Data Processing (3 Credits)

Examination of the systemic exploration and analysis of data, developing competencies in interpreting and creating statistical analyses including but not limited to summary statistics, cross-tabulations, regressions, and predictive analyses; develop an understanding of open-source tools for reading and managing data.

## POS 350 Organization Theory and Behavior (3 Credits)

Examination of the structure and function of public organizations, with emphasis on theories of administrative hierarchies and evaluation of bureaucracies

## POS 360 International Politics (3 Credits)

This course examines relationships among nations relative to conflicts, alliances, political economy, etc. It also deals with the ever evolving nature of the global system particularly the impact of high-speed information on globalization.

## POS 360H Honors International Relations (3 Credits)

Focus on humans as a part of nature, acting in their political environment over time. This course examines relationships among nations relative to conflicts, treaties, economic integration, etc.

## POS 430 Political Theory (3 Credits)

Study of the political theories of Plato, Aristotle, selected Greek, Roman and medieval writers, to Machiavelli. Critical analyses of enduring political problems.

## POS 431 Modern Theory (3 Credits)

Critical analyses of enduring political problems in the writings of European theorists from Machiavelli to the present.
POS 431H Honors Modern Theory (3 Credits)
Critical analyses of enduring political problems in the writings of European theorists from Machiavelli to the present.
POS 442 International Law (3 Credits)
Intensive study of the substantive content of the law of international relations. Special emphasis is placed on problems of enforcement of laws, etc.

## POS 443 Administrative Law (3 Credits)

Introduction to the American legal system using a case study approach.
POS 451 Public Personnel Administration (3 Credits)
Focus is placed on the recruitment, examination, placement, remuneration, morale, retirement, training, and other related issues which impact public service.

POS 463 Politics of African Nations (3 Credits)
Examination of the political evolution of African nations south of the Sahara through comparison of political ideologies and case studies of selected individual nations. This also includes an analysis the various colonial systems as well as African struggle for independence.

## POS 464 African Crises (3 Credits)

Study of conflicts in Africa and their causes and attempts at resolution with emphasis on the role of peace-keeping efforts of the African Union, international organizations and foreign powers.

POS 466 Readings in Government A\& Problems in Government (3 Credits)
Independent reading and analytical reporting on works outside the immediate scope of formal courses. Special emphasis is placed on the depth of various perspectives.

## POS 468 A Survey of Contemporary Governments of Asia (3 Credits)

Survey of the governments and the politics of the countries of Asia; with attention to geographic, economic, and cultural conditions, out of which present governments evolve.
POS 493 Internship (9 Credits)
Internship in a private or governmental agency. See faculty Public Administration Internship Coordinator for specific requirements.
POS 493A Public Administration Internship (3 Credits)
Internship in a private or governmental agency. See faculty Public Administration Internship Coordinator for specific requirements.

## POS 499 Sr Project (4 Credits)

Selected research topic includes collection, analysis, and presentation of an organized research effort. The research topic chosen must be approved by instructor.

## Psychology (PSY)

## PSY 210 Introduction to Psychology (3 Credits)

Introduction to the scientific study of human behavior and mental processes. Emphasis on theoretical approaches, concepts, principles, and research findings. Overview of selected areas in psychology that provide the foundation for futher study in psychology. Topics include critical thinking, neuroscience, nature/nurture, consciousness, motivation, work, stress and health, and psychological disorders.
PSY 210H Honors Introduction to Psychology (3 Credits) Introduction to the scientific study of human behavior and mental processes. Emphasis on theoretical approaches, concepts, principles, and research findings. Overview of selected areas in psychology that provide the foundation for futher study in psychology. Topics include critical thinking, neuroscience, nature/nurture, consciousness, motivation, work, stress and health, and psychological disorders.
PSY 211 Basic Principles of Psychology (3 Credits)
Overview of selected topics in psychology as a continued introduction to psychology begun in PSY210. Emphasizes theoretical approaches, concepts, principles, and research findings. Topics include sensation, perception, learning, memory, thinking, language, intelligence, personality, therapy, and social psychology.
PSY 211H Honors Baisc Principles of Psychology (3 Credits) Overview of selected topics in psychology as a continued introduction to psychology begun in PSY210. Emphasizes theoretical approaches, concepts, principles, and research findings. Topics include sensation, perception, learning, memory, thinking, language, intelligence, personality, therapy, and social psychology.

PSY 220 Child Psychology (3 Credits)
Study of the physical growth and the psychological development of the child, emphasis on the significance of physical, social, cognitive, personality, and language development in the early years.

## PSY 225 Adolescent Psycholgy (3 Credits)

Study of adolescents' physical growth, psychological development, and behavior. Emphasis on the major determinants of adolescent development and behavior, the theoretical approaches, concepts, principles, and research findings about adolescence and their applications in real-life situations.
PSY 228 Developmental Psychology (3 Credits)
Comprehensive study of he psychological development of the individual, induding linguistic, social personality, and cognitive aspects of development from conception through late adulthood.

## PSY 228H Honors Developmental Psychology (3 Credits)

Comprehensive study of he psychological development of the individual, induding linguistic, social personality, and cognitive aspects of development from conception through late adulthood.

## PSY 230 Educational Psychology (3 Credits)

Introduction to the psychological principles relevant to the processes of education and the theory of educational institutions.

## PSY 250 Social Psychology (3 Credits)

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.

## PSY 270 Psychological Statistics (3 Credits)

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.

## PSY 280 Abnormal Psychology (3 Credits)

Introduction to the various descriptions and classifications of psychopathology and theories of the origin of mental disorders, including different approaches to the treatment of abnormal behavior.

PSY 311 Educational Tests and Measurements* (3 Credits)
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.

## PSY 312 Behavior Analysis (3 Credits)

Introduction to the concepts involved in behavioral change and in the planning of effective intervention strategies. Focuses on various methods of observing and measuring behavior with emphasis on behavioral task analysis.

## PSY 313 Behavior Management (3 Credits)

Study of learning and behavioral programs. Emphasis on learning theory applications including contingency contracting, token economies, modeling, and similar techniques.
PSY 322 Psychology of Exceptional Children (3 Credits)
Study of the unique and typically abnormal psychosocial 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.

PSY 322H Honors Psychology of Exceptional Children (3 Credits)
Study of the unique and typically abnormal psychosocial 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.

## PSY 331 Personality (3 Credits)

Introduction to the nature of personality, its development, and its functioning. Examination of classical and contemporary theories and data.

## PSY 340 Psychology of the African-American (3 Credits)

Examination of the African-American person with a focus on the unique historical and current social influences on AfricanAmerican personality development and functioning.
PSY 340H Honors Psychology of African Americans (3 Credits)
Examination of the African-American person with a focus on the unique historical and current social influences on AfricanAmerican personality development and functioning.

## PSY 360 Experimental Psychology (3-4 Credits)

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.)
PSY 360H Honors Experimental Psychology (3 Credits)
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.)

PSY 370 Principles of Cyberpsychology (3 Credits)
This course provides a broad overview of the, emerging field of cyberpsychology. Topics surveyed, are related to the fundamental areas of, introductory psychology but applied from the, perspective of their application to the current, digital landscape of the globally connected world., Specifically, examination of how current, technologies influence human behavior, decision, making, communication, mental health, and, expression of personality will be considered.

## PSY 373 History \& Systems of Cyberpsychology (3 Credits)

This course will survey the history of, cyberpsychology through present day with a focus, on the various applications of the discipline over, time. Students will examine the changing role of, technology over time, the influence of culture on, the trends and usage of technology, as well as the, various ways digital technologies have evolved to, become pervasive fixtures in the everyday lives of, most people around the world.

## PSY 380 Physiological Psychology* (3 Credits)

Study of the physiological processes underlyng behavior, with emphasis on the role that the major systems of the body, in particualr the nervous system, playin behavior.
PSY 381 Topics in Psychology (3 Credits)
Supervised projects selected to suit the needs of the individual student.

## PSY 381A Writing in Psychology (3 Credits)

Writing in Psychology, provides the basic tenants of effective writing in Psychology to include effective implementation of APA style, as well as the development of sound general writing skills.

## PSY 381C Human Sexuality (3 Credits)

This course examines the physical, intrapsychic, and interpersonal aspects of sexuality.

PSY 381D Psychology of the Leader (3 Credits)
Psychology and the Leader explores various, leadership theories, styles, models, topics, and, best practices. This course provides an, opportunity for students to learn and discuss, leadership theories, and to develop a personal, understanding of leadership. The essential, knowledge, skills, and abilities of effective, leaders are examined, such as managing conflict,, facilitating communication, and leading groups, and teams. Students will be encouraged to, examine their own leadership potential as they, complete self-assessments and participate in, leadership exercises.

## PSY 381E Cyberpsychology (3 Credits)

Cyberpsychology provides an overiew of the applied field of Cyberpsychology, emphasizing the relationship between humans and technology. In this course, we will explore behavior, psychological processes and social issues as they apply in the ever-changin

## PSY 381F Careers in Psychology (3 Credits)

This course will provide psychology majors with information and skills that will help students select and pursue a career in psychology or a related field. This course will focus on the critical skills and experiences required for entry into the workforce.

## PSY 381G Psychology of Groups* (3 Credits)

The World English Dictionary defines Group Dynamics as [.] a field of social psychology concerned with the nature of human groups, their development, and their interactions." As a consequence, Group Dynamics is a sub-discipline of Social Psychology, Human behavior in groups and dynamic interactions within and between groups are obviously extremely important and continue to generate a vast social impact. Therefore, some of the questions that will be elaborated on during the course are: "What is a group?" "How are groups formed?" "What makes a well-structured cohesive group?" and "What makes a good leader?

## PSY 381M Mindfulness (3 Credits)

Contact the department for specific course information
PSY 381P Positive Psychology (3 Credits)
Positive psychology focuses on the science of happiness and human strengths. It provides an overview of the major theories and research in this area.

## PSY 381Q Conflict Analysis and Intervention* (3 Credits)

Introduction to the general field of conflict analysis, management, and resolution, with additional application to crisis intervention. Interdisciplinary emphasis on conflict theory and psychological conceptualization to determine the root causes of intra- and interpersonal conflict.

## PSY 381R Psychology of Religion (3 Credits)

This course is an introduction to the scientific, study of psychological processes involved in, seeing something as special, set apart, and, sacred. There will be emphasis on how religion, can be studied as an explanation for certain, events, such as why people think, behave, or feel, the way they do. This course will provide an, overview of selected areas in psychology of, religion, cognitive science of religion,, neuroscience of religion, conceptualizations of, the soul, moral psychology, and cultural, cognition. Topics include critical thinking,, neuroscience, nature/nurture, consciousness,, motivation, work, stress and health, and physical, and psychological disorders in the context of the, experience of religion.
PSY 390 Fundamentals of Learning (3 Credits)
Survey of basic processes and principles of learning, as well as theoretical accounts of these processes. Examination of research findings from both human and animal subjects.

PSY 391 Readings in Psychology (3 Credits)
Directed readings and supervised independent study of contemporary issues. Comprehensive coverage of a subject from assigned materials required.

## PSY 391A The Psychology of Women (3 Credits)

The purpose of this course is to examine the, lives of girls and women. We will include topics, such as gender stereotypes, the development of, gender roles, gender comparisons, women and work,, love relationships, sexuality, women's physical, and mental health, violence against women, and, women in later adulthood. Students who take this, course should acquire a better understanding, about girls, women, and gender in North America.

## PSY 391B Health Psychology (3 Credits)

Examination of selected topics in the area of health psychology. Health, illness and medicine are studied from psychological and cultural perspectives emphasizing theoretical approaches,concepts, and research findings within the field of health psychology
PSY 391D The Psychology of Racism (3 Credits)
This course is designed to provide students with an understanding of the psychological impact of racism in the United States. Through the use of writing and discussion, students will explore the impact of racism for Whites and people of color.

## PSY 391G The Psychology of Marriage (3 Credits)

This course is a review of theory and research pertaining to the psychological processes of intimate relationships and marriage. The course addresses interpersonal attraction, sexual behavior, love, ways of dating, cohabitation and divorce.

## PSY 391M Topics: Masculinity (3 Credits)

This course examines the diverse psychological-cultural-relationalspiritual experiences of males that identify as, "Black, African, AfricanAmerican, and/or Caribbean (i.e. of the African Diaspora) with the North American/United States context.

PSY 392 Seminar in Community Resources (1 Credits)
Orientation to the activity of the mental health facility and other workplaces in Psychology. Agency representatives will serve as guest lecturers, and students will also gather information about potential practicum placements. Lectures, presentations, readings and discussions are formats for this seminar.

## PSY 397 Research in Psychology (1-3 Credits)

Supervised independent research projects aimed at answering empirical questions. Also, intimately involves the student in the conceptualization, design, implementation, and analysis and interpretation of empirical questions and research findings.
PSY 410 Psychology of Adjustment (3 Credits)
Study of the multiple aspects of adjustment and mental health, emphasizing the promotion of good adjustment and the prevention and treatment of maladjustment. Analysis of reactions to stress and effective means of coping with stress, emotional control, and positive striving.

PSY 420 Introduction to Psychological Testing (3 Credits)
Introduction to the theory and practice of psychological testing. Examination of intelligence, perceptual motor, and personality tests, along with their use in clinical, educational, and occupational testing settings.

## PSY 430 Clinical Methods in Psychology (3 Credits)

Examination of clinical procedures in psychological evaluation and treatment. Introduction to the uses of psychological tests in making clinical judgments, and an overview of the various theoretical treatment methods such as individual, group, family, and community approaches.

PSY 430H Honors Clinical Methods in Psychology (3 Credits)
Examination of clinical procedures in psychological evaluation and treatment. Introduction to the uses of psychological tests in making clinical judgments, and an overview of the various theoretical treatment methods such as individual, group, family, and community approaches.

## PSY 440 Drugs and Behavior* (3 Credits)

Survey of major principles and mechanisms of drug action including basic pharmacological principles, basic nervous system function and neurochemistry, behavioral analysis techniques, non-pharmacological variables, and a survey of specific classes of psychoactive drugs.
PSY 450 Systems in Psychology (3 Credits)
Critical survey of systems and theories in psychology, along with a broad overview of the historical and contemporary issues relevant to the study of psychology.

## PSY 480 Motivation and Emotions* (3 Credits)

Study of processes which activate behavior and provide major emphasis on the physiological origin of needs, drives, motives and emtoions. Exploration of critical behavior data from human and animal studies, along with historical and contemporary theories.
PSY 492 Psychology Seminar (3 Credits)
Presentation of recent experimental and theoretical advances in selected areas of psychology Class projects prepared and presented in a seminar format.

## PSY 492H Honors Psychology Seminar (3 Credits)

Presentation of recent experimental and theoretical advances in selected areas of psychology Class projects prepared and presented in a seminar format

## PSY 495 Practicum in Psychology (3-6 Credits)

Supervised field experience in an applied setting, i.e., a mental health agency or other appropriate institution.

## PSY 495H Honors Practicum in Psychology (3 Credits)

Supervised field experience in an applied setting, i.e., a mental health agency or other appropriate institution.

## PSY 496 Practicum in Psychol (3 Credits)

Supervised field experience in an applied setting, i.e., a mental health agency or other appropriate institution.

## PSY 497 Research in Psychology (3 Credits)

Supervised independent research projects aimed at answering empirical questions. Also, intimately involves the student in the conceptualization, design, implementation, and analysis and interpretation of empirical questions and research findings.

## Religion (REL)

## REL 110 Introduction to the Bible: Old Testament (3 Credits)

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.

## REL 111 Introduction to the Bible: New Testament (3 Credits)

 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.
## REL 200 Major World Religions (3 Credits)

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.

## REL 210 Major World Religions (3 Credits)

Intensive research pertaining to a selected area of religious thought and expression, either contemporary or ancient.
REL 330 History and Theology of the Black Church (3 Credits) Analysis of African-American religious thought through critical student of the historical legacy of events, personalities, and institutions which helped shape black religion from Africa to the present.

## REL 420 Sociology of Religion (3 Credits)

Study of the treatment of religions as a social institution. Examination of the influence of society on religion and the influences of religious ideas and organizations, on other social institutions and cultures.

## REL 440 Basic Issues of Religious Thoughts (3 Credits)

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.

## Sciences (SCI)

SCI 101 Physical Science for Non-Science Majors (3 Credits)
This course is designed to give general knowledge of physical science. The course emphasizes knowledge of selected facts, principles, methods of science and the place of science in our modern world. Topics include astronomy, physics, chemistry, and earth science.
SCI 101H Physical Science for Non Science Majors (3 Credits)
This course is designed to give general knowledge, of physical science. The course emphasizes, knowledge of selected facts, principles, methods, of science and the place of science in our modern, world. Topics include astronomy, physics,, chemistry, and earth science.
SCI 101L Physical Science Laboratory (1 Credits)
An introductory science course for undergraduate nonscience majors designed for students to gain knowledge of selected facts, principles and the scientific method. Survey of the unity of physical science (chemistry, physics, and earth science) and the place of science in our modern world.
SCI 381 Science for Teachers ( 3 Credits)
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.
SCI 381L Science for Teachers Laboratory (1 Credits)
Laboratory course designed to acompany SCI 381 (Science for Teachers). Provide laboratory experiences to extend fundamental concepts of biological and physical sciences, specially as it relates to the selection of appropriate methods and content for the
SCI 401 Geological Material and Processes (3 Credits)
Contact the department for specific course information

## SCI 415 Astrobiology (3 Credits)

The main goal is to study the origin and evolution, of life in the Universe. Elements od Astronomy, , biochemistry, biology, geology and atmospheric, sciences that are included in this study will be, addressed.

SCI 416 Introduction to Astrophysics (3 Credits)
This course will cover the study of stellar , structure, evolution and nucleosynthesis. It , reviews several topics covered by undergraduate, level physics courses from a viewpoint of , astrophysical applications. By the end of the, course, students will be able to write a simple, numerical simulation (computer program) of a star.

## Secondary Education/School Leadership (SED)

## SED 233 Seminar in Assessment and Evaluation (3 Credits)

Study and application of theories, methods, and materials used in acquiring critical thinking skills. Emphasis on developing critical thinking in specific contexts such as the Core Battery Tests of the National Teacher Examinations. and assessing and evaluating thinking skills and knowledge.
SED 380 Foundations of Secondary School Methods and Management Instruction (3 Credits)
Study of concepts related to teaching and learning, classroom management, student-teacher relationships, presentation of subject matter, and testing and evaluation.
SED 384 Curriculum \& Instructional Procedures in Mathematics (3 Credits)
Study of methods and practices designed to assist prospective secondary teachers in defining and implementing the knowledge and skills necessary to effectively teach Mathematics in the classroom.
SED 385 Curriculum and Instructional Procedures in Science (3 Credits) Study of methods and practices designed to assist prospective secondary teachers in defining and implementing the knowledge and skills necessary to effectively teach Science in the classroom.
SED 386 Curriculum \& Instructional Procedures in Fine Arts (3 Credits) Study of methods and practices designed to assist prospective secondary teachers in defining and implementing the knowledge and skills necessary to effectively teach Fine Arts in the classroom.
SED 387 Curriculum \& Instructional Procedures in English (3 Credits) Study of materials and methods for teaching, integrating, and assessing English language, literature, grammar, and composition with attention to current research and theories that inform best practices in language instruction.
SED 388F Curriculum and Instructional Procedures in Teaching French in Secondary Schools (3 Credits)
Study of materials and methods for teaching, integrating, and assessing French language, literature, grammar, and composition with attention to current research and theories that Inform best practices in foreign language instruction.
SED 388S Curriculum and Instructional Procedures in Teaching Spanish in Secondary Schools (3 Credits)
Study of materials and methods for teaching, integrating, and assessing Spanish language, literature, grammar, and composition with attention to current research and theories that inform best practices in language instruction.
SED 390 Curriculum \& Instructional Procedures in History \& Social Studies (3 Credits)
Introduces the modeling and making of the best curriculum and instructional practices by future secondary social studies teachers. Introduces future secondary social studies teachers to both the content standards of national accrediting bodies and those $p$

## SED 405 Reading in the Content Area (3 Credits)

Skills in this area are designed to impart an understanding of comprehension skills in all content areas, including a repertoire of questioning strategies, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension, as well as, the ability to foster appreciation of a variety of literature and independent reading.
SED 420 Educational Technology (3 Credits)
Focus on incorporating multimedia skills needed for competence in K12 settings. Introduction to Power Point and Microsoft Excel as tools for grading, alongside the innovation of online teacher management applications.

## SED 486 Human Growth and Development (3 Credits)

In this course students will be able to contribute, and gain an understanding of the physical, social, emotional, speech and language, and intellectual, development of children and the ability to use, this understanding in guiding learning, experiences. The interaction of children with, individual difference - economic, social, racial,, ethnic, religious, physical, and mental - should, be incorporated to include skills contributing to, an understanding of developmental disabilities and, developmental issues related to but not limited to, attention deficit disorders, gifted education, including the use of multiple criteria to identify, gifted students, substance abuse, child abuse, and, family disruptions.

## SED 488 School Community Relations (3 Credits)

Study of the relationships between the local school and the local community, examining the impact of social classes and systems on education, providing opportunity for community field experience, and exploring means by which to involve various proponents of the community in the educative process.

## SED 498 Curriculum and Instructional Procedures for Business \& Information Technology (3 Credits)

This course focuses on curriculum and instructional procedures for business, office technology, and computer-related subjects. Other topics integrated into this course include communications, assessment techniques, school and family interactions, child abuse awareness, and the Virginia Standards of Learning (SOLS). Each student will be required to complete an observation and participation experience in a public school setting for 20 clock hours. Also, students will be required to complete a job shadowing or work experience for 10 hours in an approved business environment.
SED 499 Directed Teaching (internship) ( 12 Credits)
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 orientation 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.

## Social Work (SWK)

SWK 199 Profesional Development: Ldship \& SW Eth (2 Credits)
This course will introduce students to the BSW, curriculum and begin to prepare them for the, professional track of the BSW program. The course, will orient students to the generalist social work, practice and deliver a definitive message of, characteristics, skills, and acceptable workplace, professional behaviors essential to be a social, work and global leader. Students will be expected, to understand and abide by the National, Association of Social Workers code of ethics,, fine-tune their critical thinking skills and, epitomize ethical and professional standards in, all courses and activities at Norfolk State, University and in the field practicum. Lastly, it, will focus on self-awareness and the importance of, being a life-long learner.

## SWK 200 Introduction to Social Work (3 Credits)

Introduction to the profession of social work which exposes students 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.

## SWK 207 Social Welfare Policies \& Services I (3 Credits)

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.

SWK 207H Honors Social Welfare Policies \& Services I (3 Credits) 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.

## SWK 220 Human Behavior \& Social Environment (3 Credits)

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

SWK 220H Honors Human Behavior \& Social Environment (3 Credits) 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

## SWK 300 Social Welfare Policies \& Services II (3 Credits)

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.
SWK $\mathbf{3 0 0 H}$ Honors Social Welfare Policies \& Services II (3 Credits) 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.

SWK 309 Human Behavior \& Social Environment II (3 Credits) Examination of the dynamics of multi-level/social systems, as they have an impact on the development of individuals from adolescence thorough 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.

## SWK 312 Inroduction to Generalist Practice (3 Credits)

This course is the first of three required courses in the General Practice Sequence. This first course provides students the foundation knowledge, values and skills that form the holistic conceptual framework of generalist social work practice.

## SWK 313 Generalist Practice: Individuals/Families (3 Credits)

 This course is the second in the Generalist Practice Sequence. The course covers the application of the generalist intervention model or planned change process with individuals and families from diverse populations. Emphasis is on professionalism, self awareness, human diversity, systems theory, ecological perspective, and strengths perspective.
## SWK 314 Nature \& Meaning of Child Welfare (3 Credits)

This course is designed to present a broad knowledge of the principle child welfare services, programs, and policies that are aimed at strengthening and preserving the institution of the family and fostering the development and well being of children.
SWK 314H Honors Nature \& Meaning of Child Welfare (3 Credits)
This course is designed to present a broad knowledge of the principle child welfare services, programs, and policies that are aimed at strengthening and preserving the institution of the family and fostering the development and well being of children.
SWK 315 Social Work Practice With Families: Trauma Informed Practice With Children and Families (3 Credits)
This course is an undergraduate elective that provides an overview of special topics of treatment, specifically trauma informed generalist practice with children and families. This is a practice elective.
SWK 315H Honors Social Work Practice With Families: Trauma Informed Practice With Children and Families (3 Credits)
This course is an undergraduate elective that provides an overview of special topics of treatment, specifically trauma informed generalist practice with children and families. This is a practice elective.

## SWK 318 Generalist Practice: Groups, Organizations \& Communities (3

 Credits)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.

## SWK 318H Honors Generalist Practice: Groups, Organizations \& Communities (3 Credits)

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.
SWK 319 Human Behavior \& the Social Environment III (3 Credits) 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.

SWK 320 Human Diversity and Social Justice in SW (3 Credits)
This undergraduate social work course examines the, impact of discrimination and oppression of members, of particular groups, i.e., ethnic minorities,, women, elderly, disabled, gay, lesbian, and, transgender, while considering the effects of, diversity on human behavior and attitudes. It, will review how historical and contemporary, policies and events affect how these populations, exist and how social workers attend to systemic, issues. The course examines the psychosocial and, cultural dynamics within the context of the social, work profession's mission and values, to, understand the experiences and needs of oppressed, groups to implement strategies to empower and, engage in effective change. Lastly, students will, look at the role, function, and intersections of, oppression in society as it relates to social,, racial, and economic justice.

## SWK 326 Techniques of Counseling (3 Credits)

This course presents an overview of the major theories of counseling . It provides in-depth study of the basic theoretical assumptions and concepts of counseling individuals and families.
SWK 327 Interviewing Techniques (3 Credits)
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.

## SWK 329 Community \& Neighborhood Development: Social Entrepreneurship (3 Credits)

This is a three (3) credit hour elective course designed for second year and above Bachelor of Social Work students, but available to students from various disciplines to take as a credit-awarding elective. An individual completing this course will have a beginning level ability to conceptualize community and neighborhood empowerment from a social work, community practice, community development, and a business and economic development perspective.

## SWK 333 Methods of Social Work Research (3 Credits)

This course introduces social work students to the fundamental concepts of research principles, statistical analysis, and methodologies used in the Social Work profession

## SWK 411 Contemporary Social Policy Issues (3 Credits)

Contemporary Social Policy issues is an advanced elective policy course for the baccalaureate social work student who is trained as a generalist. This course, generally taken in the junior/senior year, builds on students' liberal arts perspective, foundation policy classes, as well as the knowledge, values, and skills gained in the Generalist Practice, Human Behavior, and Research sequences.
SWK 411H Honors Contemporary Social Policy Issues (3 Credits) Contemporary Social Policy issues is an advanced elective policy course for the baccalaureate social work student who is trained as a generalist. This course, generally taken in the junior/senior year, builds on students' liberal arts perspective, foundation policy classes, as well as the knowledge, values, and skills gained in the Generalist Practice, Human Behavior, and Research sequences.

## SWK 416 Generalist Practice: Evaluation (3 Credits)

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 are addressed relative to oppressed populations.

SWK 416H Honors Generalist Practice: Evaluation (3 Credits)
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 are addressed relative to oppressed populations.

## SWK 490 Practicum Seminar I (1 Credits)

Opportunity to integrate theory with field practice. Also assists in evaluating practice performance while exploring personal and professional values and ethics.

## SWK 491 Practicum Seminar II (1 Credits)

Opportunity to integrate theory with field practice. Also assists in evaluating practice performance while exploring personal and professional values and ethics.
SWK 492 Independent Study in Social Work (3 Credits)
Opportunities to engage in student and/or faculty-initiated special projects which explore some dimension of social work practice and/or theory.
SWK 495 Practicum in Social Work I (5 Credits)
Internship in a social welfare agency. 225 hours per semester while engaged in a supervised practice experience where generalist skills are utilized/required.
SWK 496 Practicum in Social Work II (5 Credits)
Internship in a social welfare agency. 225 hours per semester while engaged in a supervised practice experience where generalist skills are utilized/required.
SWK 497 MacRo \& Micro Perspectives on International Social Welfare (3 Credits)
This course is an advanced level social policy course designed primarily for the baccalaureate student interested in exploring the interplay among macro social systems in selected western and non-western societies as they relate to general social welfare.

## SWK 497H Honors MacRo \& Micro Perspectives on International Social Welfare (3 Credits)

This course is an advanced level social policy course designed primarily for the baccalaureate student interested in exploring the interplay among macro social systems in selected western and non-western societies as they relate to general social welfare.

## SWK 498A Bsw Field Practicum Orientation I (0 Credits)

This is an orientation course designed to provide the undergraduate social work field practicum student with the knowledge, values and skills necessary to prepare and navigate a successful and advanced field education experience. The purpose of this course is to help students understand their role, function and responsibilities as practicum students. In addition, this course will outline the relationship of the practicum agency to the field experience and explore the importance of ethical and professional behavior.

## SWK 498B Bsw Field Practicum Orientation II (0 Credits)

This is an orientation course designed to provide the undergraduate social work field practicum student with the knowledge, values and skills necessary to prepare and navigate a successful and advanced field education experience. The purpose of this course is to help students understand their role, function and responsibilities as practicum students. In addition, this course will outline the relationship of the practicum agency to the field experience and explore the importance of ethical and professional behavior.

## Sociology (SOC)

## SOC 101 Introduction to the Social Sciences (3 Credits)

Introduction to common and divergent perspectives of the social sciences, including the general methods and special techniques used by social scientists to acquire an understanding of how human beings behave. Emphasis on the United States and on a global context.

## SOC 110 Introduction to Sociology (3 Credits)

Introduction to the basic perspectives, 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 everyday life.

SOC 137 Social Problems (3 Credits)
Study of current social issues such as poverty, race, and ethnic relations, unemployment, crime, drug use, the elderly, population and environmental problems. Examination of various explanations, consequences, and suggested solutions for each problem.
SOC 205 Human Sexuality (3 Credits)
Examination of the sociocultural, psychological and physiological factors related to human sexual behavior. A forum for a scientific examination of the various processes by which humans develop and manifest their sexual identity and sexual behavior.

SOC 225 Social Science Research Skills (3 Credits)
Development of knowledge of using a large number, of library resources to enhance skills in choosing, a research topic, making a bibliography, taking, notes, writing and outlining, collecting primary, data, interpreting tables and graphs, and, writing research papers and abstracts.
SOC 228 Demographic Principles (3 Credits)
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.

## SOC 228H Honors Demographic Principles (3 Credits)

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.

## SOC 230 Social Problems (3 Credits)

Study of current social issues such as poverty, race and ethnic relations, unemployment, crime, drug use, the elderly, population and environmental problems. Examination of various explanations, consequences, and suggested solutions for each problem.

## SOC 230H Honors Social Problems (3 Credits)

Study of current social issues such as poverty, race and ethnic relations, unemployment, crime, drug use, the elderly, population and environmental problems. Examination of various explanations, consequences, and suggested solutions for each problem.
SOC 234 Urban Sociology (3 Credits)
Study of orign and development of urban life with emphasis on the family, housing, health, education, poverty and dependency, crime and the treatment of the criminal.

SOC 237 Racial \& Ethnic Minorities (3 Credits)
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, housing and instability, and 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.

## SOC 242 Introduction to Anthropology (3 Credits)

Study of human evolution, racial origins, prehistoric cultures, modern races and their classifications, problems of race, nationality, language, mixture, and mental differences; growth and spread of religion and culture. Special emphasis on the nature and diversity of culture.

## SOC 250 Societal Uses of Natural Resources (3 Credits)

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.

## SOC 301 Demographic Methods I (3 Credits)

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.

## SOC 302 Migration (3 Credits)

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.

## SOC 303 Fertility and Family Planning (3 Credits)

Survey of fertility concepts, measurements, trends, levels, and explanations. Evaluation of the biological and social components of fertility. Fertility control is discussed with emphasis on intercourse, conception, and gestation variables. Social issues related to fertility are highlighted.

## SOC 304 Mortality (3 Credits)

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. Emphasis on infant mortality in developing societies and among the urban poor of industrialized societies.

SOC 325 Sociology of Business \& Internationalism (3 Credits)
Study of the relationship between businesses and society, which involves multicultural and international approaches 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 business, societies and economic processes. Examination of the effect of business practices on environmental problems and possible solutions. Discussion on the ethical issues and business practices that contribute to the development of societies and people's lives.

## SOC 326 Native American Societies (3 Credits)

A sociological survey of Native American societies, across what is now the United States of America. , In this landmass, from pre-Columbian times through, the present. Cultures of nations and important, events will be examined in order to illustrate, broad social and historical dynamics and how these, dynamics inform the contemporary position and, treatment of Native Americans. This course will, also explore the impact of Native Americans on, U.S. politics, law, and culture, as well as the, impact of the U.S. on Indigenous nations.

## SOC 331 Social Psychology (3 Credits)

Examination of human social behavior at the individual and interpersonal level. Discussion of socialization, power, attitude 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 on basic social science, emphasizing major theoretical ideas and research findings. Applications to everyday life are also considered.

## SOC 331H Honors Social Psychology (3 Credits)

Examination of human social behavior at the individual and interpersonal level. Discussion of socialization, power, attitude 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

## SOC 338 Sociology of Families (3 Credits)

Study of the family and its functions 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.

SOC 338H Honors Sociology of Families (3 Credits)
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.
SOC 344 Methods of Social Research (3 Credits)
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, conceptulization, 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.

## SOC 355 Elementary Social Statistics (3 Credits)

This course introduces students to the basic tools, of statistics and shows how these statistical, tools are used in the social science research. It, covers both descriptive statistics and inferential, statistics. In addition, this course will, introduce students to data analyses and data, visualization methods in Excel, SPSS, SAS, R, and, other statistical packages.
SOC 356 Intermediate Social Statistics (3 Credits)
Study of solid statistical foundations necessary, to develop competence in teh analysis and, interpretation of sociological data. It assumes, knowledge of basic statistical principles, , including measures of central tendency, measures, of dispersion and normal curve probabilty, distribution. Emphasis on hypothesis testing, logic, application, and interpretation of test, statistics. Graphic and tabular presentation of, data are highlighted. Parametric and, nonparametric tests of significance and tests of , association 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.

## SOC 393 Internship (6-12 Credits)

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.

## SOC 393H Honors Internship (6-12 Credits)

Various duties in agencies and organizations, active in the fields of gerontology, urban affairs, and criminal justice. An agency supervisor and, the insternship supervisor direct each student in, mastering relevant skills to complete the tasks, associated with a significant position in the, internship agency.
SOC 394 Internship Seminar (3 Credits)
Opportunity to relate intern experiences to a systematic, theoretical body of knowledge. Identifies and discusses common problems and possible solutions.

## SOC 395 Extended Internship (6 Credits)

The course is restricted to students who enroll, concurrently in additional SOC-393 - Internship., It is designed to provide students an additional, 240 hours of intensive agency experience, coupled, with systematically relating theoretical knowledge, to social application and reseach inquires. The , major aim is to allow students to become, proficient in the social agency experience. It , can be used as free elective hours.

## SOC 401 Socio-Cybersecurity (3 Credits)

This course examines the socio-culture aspects of cybersecurity and its accompanying social problems. Cybersecurity is as situated in social deviance theory framework in order to explain the role of policing and the judicial system. Cybersecurity position in pivotal social institutions will also be examined. Students will also apply sociological research to cybersecurity and for managerial best-practices for handling big data.

## SOC 402 Family Demography (3 Credits)

Examination of demographic views on nuptial patterns, fertility, marital formation, marital dissolution, family planning, and household formation. Emphasis on demographic factors facilitating male domination of women in the family. Related social issues of pertinence include female labor force participation, teenage motherhood, illegitimacy, femaleheaded households, and cohabitation. Focus on life-cycle changes.

SOC 403 Population Growth, Food and Environment (3 Credits)
Survey of the interrelationships within the environment, which examines the pattern of food production in the world, starting from the Agricultural Revolution to the Green Revolution, and looks closely at the relationship growth. Answers are sought to the often-asked question: Will there be enough food to feed the world's growing population? Emphasis on the harmful effects on the environment of attempting to increase agricultural yield.

## SOC 404 Population and Socioeconmic Development (3 Credits)

Study of the relationship between population growth and socieconomic change, especially in regard to the developing societies of Africa, Latin America, and South-East Asia. Examination of the debate as to whether population growth is stimulative or retardative to economic development. Assessment of cross-cultural data on population growth and development indicators. Utilization of country case studies.

## SOC 405 Readings in Urban/Demography (3 Credits)

Intensive directed reading course for exceptionally able.
SOC 406 Topics in Urban/Demography (3 Credits)
Examination of trends and emerging issues in the, field of urban/ demography

## SOC 410 Seminar for Aged (3 Credits)

This course is designed to provide understanding and insight regarding the nature of many of the social problems of aging. Including prespectives on defining aging and the aged. Also examine the impact of race and class on aging life cycle.
SOC 411 Computer Crime (3 Credits)
This course introduces students to the topics and, issues related to computer crimes. Students will, investigate the development of computer crimes and, review laws and sanctions designed to stem these, crimes. Despite the digital divide reflected in, unequal group access to computer resources in, America, access to computer resources has, increased for all social groups. The increased, use of computers, especially Internet, has been, accompanied by various actsof illegal computers, use, abuse, and crimes. The proliferation of , various computer"worms" and "viruses," and the, escalating trends in identity theft are a few of, the computer crimes that seem to pose a serious, social problem for society., This course will acquaint students with the, theoretical and methodological tools needed to, understand computer crimes, laws, investigation, techniques, and prevention methods.

## SOC 415 Sociology of Health \& Health Care (3 Credits)

This course examines the social production of, health, illness, mortality, and health care. It, offers a sociological, perspective on health, illness, and health care, and highlights the connection between social, justice, social, transformation, health, illness, mortality, and, health care. While this course focuses on the, health and health, care within the U.S., it also examines the global, challenges in health and health care

## SOC 446 Sociological Theory (3 Credits)

Survey and analysis of the main types of sociological theories and of the major theoretical concepts in Sociology. Special emphasis on outstanding theorists, past and present, and their works.

## SOC 458 Social Stratification (3 Credits)

Evaluation of the pervasive phenonemon of social inequality in society. Discussion of the various theoretical explanations offered by Karl Marx and other social scientists. Exploration of some of the current and classic research findings. Description of the different kinds of inequality and social structural forms that occur. Examination of the international and American stratification systems is included.

SOC 462 Complex Organizations (3 Credits)
Survey of the evolution and dynamics of bureaucratic organization and adminstration. Analysis of classical writings and findings from empirical research to provide students with broad perspectives of the structure and functions of organizations in a complex industrial-urban society. Special emphasis on unique characteristics of different kinds of organizations. Study of alternative techniques for the assessment of the effectiveness of complex organizations.

## SOC 485 Seminar in Sociology (3 Credits)

Review and evaluation of major concepts, , literature, and methodology of social research.

## SOC 491 Readings in Sociology (1-3 Credits)

Intensive directed reading course for exceptionally able students.
SOC 495 Topics in Sociology ( 3 Credits)
Examination of trends and emerging issues in a dynamic social world.
SOC 499 Applied Sociology (3 Credits)
Empirical investigation of a research problem under direction of the chair of the Department

## Spanish (SPN)

## SPN 111 Elementary Spanish (3 Credits)

Introduction to the fundamentals of pronunciation,, grammar, structure, vocabulary, conversation, and, reading.
SPN 111H Honors Elementary Spanish I (3 Credits)
Introduction to the fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

## SPN 112 Elementary Spanish II (3 Credits)

Continuation of the fundamentals of pronunciation, grammar, structure, vocabulary, conversation, and reading.

## SPN 112H Honors Elementary Spanish II (3 Credits)

This content and skills course is a continuation of Elementary Spanish. Spanish 112 builds on the fundamentals of pronunciation, grammar, structure, vocabulary, and conversation. Listening, speaking, reading and writing in Spanish are essential parts of this course. Knowledge of Hispanic cultures will be broadened. The use of the Spanish language is expected.

## SPN 113 Basic Conversation (3 Credits)

Emphasis on acquiring conversational skill with , minimal involvement with formal study of grammar, for thsoe students who have had no previous, training in Spanish.
SPN 114 Basic Converstion II (3 Credits)
Emphasis on acquiring conversational skill with , minimal involvement with formal study of grammar, for those students who have no previous training, in Spanish.

## SPN 211 Intermediate Spanish I (3 Credits)

Review of grammar, reading of moderately difficult prose, oral practice, and written composition.
SPN 212 Intermediate Spanish II (3 Credits)
Intensive and extensive study and reading of modern prose, oral practice, and composition.
SPN 214 Entreprenurial Spanish (3 Credits)
Study of the concepts of Spanish business, language and culture to prepare students to be , competitive in an increasingly global, marketplace.

SPN 215 Intermediate Conversation (3 Credits)
Study of oral practice in everyday situations. Special stress on idiomatic expressions and on fluency. Conducted largely in Spanish
SPN 216 Explicacion de Textos (3 Credits)
Transitional course designed to prepare students, for the study of advanced texts from the literary, and linguistic points of view.
SPN 220 Spanish Civilization (3 Credits)
Survey of the most important elements of Spanish-civilization, geography, economy, political history, arts, sciences, and institutions. Conducted in Spanish.

## SPN 221 Latin-American Civiliation I (3 Credits)

Similar in scope and content to SPN-220. Aims to, acquaint the student with the essential aspects of, the geography, history and culture of Latin, America. Conducted in Spanish.
SPN 315 Advanced Conversation (3 Credits)
Intensive and extensive practices in the oral use of Spanish. Conducted in Spanish.
SPN 320 Latin-American Civilization II (3 Credits)
Survey of the most important elements of, contemporary Latin-Amerian culture. Conducted, in Spanish.
SPN 321 Survey of Spanish Literature I (3 Credits)
Study of representative works of Spanish literature from the beginning of the 17th century. Conducted in Spanish.

## SPN 322 Survey of Spanish Literature II (3 Credits)

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.

## SPN 324 Spanish American Literature (3 Credits)

Comprehensive study of the main currents of, Spanish-American literature from its origins to, the contemporary period. Lectures, discussions,, and assigned reports are required.

SPN 326 Non-Dramatic Literature of the Golden Age (3 Credits) Critical study of the poetic, novelistic, and , didactic styles of the period 1550-1650, exclusive of the works of Cervantes.
SPN 332 Lit Nineteenth Cen (3 Credits)
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.
SPN 333 Literature of the Twentieth Century (3 Credits)
Studies the works of significant writers in Spain and Spanish America of the Contemporary period. Discussions, reports and lectures in Spanish and English.

## SPN 340 Drama of the Golden Age (3 Credits)

Investigation of the rise of drama and intensive, study of representative drama of Lope De Vega,, Tirso de Molina, Alarcon, Moreto, and Calderon.

## SPN 350 Cervantes (3 Credits)

Study of Cervantes as dramatist and novelist., Includes study of Don Quixote and of Cervantes', purpose and plans in the presentation.
SPN 413 Individualized Language for Professionals (3 Credits) Intensive practice in the language of technical, vocational or professional area.

SPN 450 Phonetics (3 Credits)
Analysis of teh phonetic features of Spanish. , Systematic exercises in pronunciation, intonation,, and reading of prose and poetry.

SPN 454 Advanced Grammar and Composition (3 Credits)
Intensive review and application of Spanish grammar. Intensive practice in writing and study of vocabulary and idioms
SPN 485 Contrast Linguistics (3 Credits)
Introduction to the study of the principal, phonological, morphological, syntactical, and, lexical contrasts between Spanish and English., No previous work in linguistics is required.

## SPN 490 Sr Seminar (3 Credits)

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, departmental and advisor, and completed under the, guidance of that advisor.

## Special Education (SPE)

## SPE 103 Collegiate Quantitative Literacy Skill (3 Credits)

This course reinforces basic skills in , quantitative literacy and general mathematics. It, is design to teach essential skill for everyday, life including numerical concepts, algebra, etc..., As well as internet essentials to aid in solving, real work problems. Additionally students gain, study tips and math anxiety reducing strategies.
SPE 105 Overview of Inclusion Education Services (3 Credits) This course provides an overview of the planning, and delivery of education in inclusive classrooms., It includes and update on relevant legislation, , the functions of the multidisciplinary team, as , well as the role and responsibilities of the, paraprofessional in the classroom.

## SPE 107 Human Relations Skills and Ethics (3 Credits)

This course is designed to increase the, effectiveness of students in human relations, skills associated with personal and career success,, ethical principles to guide performance in the, work place will also be examined.

## SPE 109 Guiding Classroom Behaviors of Learners (3 Credits)

 This course provides a cursory overview of , approaches to promoting positive behaviors and, challenging behaviors in the classroom. Focus, will be on application of practical strategies.
## SPE 111 Learning Through Literature (3 Credits)

This course introduces the learner to the use of , literature for instruction. Varied genres are, explored and storytelling is described as, mechanisms to increase literacy.

## SPE 113 Facilitating Reading Instruction (3 Credits)

This course is designed to provide the, paraprofessional with some basic understanding of , the dynamic involved in the complex activity of, reading. In addition tips, hints, and strategies, for supporting students with reading instruction, will be provided.
SPE 198 Practicum for Paraprofessionals (3 Credits)
This course is designed to provide a period of, supervised off-site observation and participation, educational experiences. All placements will , provide the paraprofessional with opportunities to, interact with individuals from diverse populations
SPE 210 American School and the Teaching Profession (3 Credits) 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.
SPE 213 Critical Thnkng/Assess Skills (3 Credits)
Development of test taking skills on standardized, examinations of education majors. Emphasis on, reading, writing, mathematics, and critical , thinking skills.

SPE 299 Internship for Paraprofessional (3 Credits)
This course is designed to provide a period of, supervised off-site educational experiences during, which the paraprofessional takes increasing, responsibility for a given group of individuals, with disabilities for a definite period of time. , It is organized on a semester basis with emphasis, on elementary, middle, or secondary school, experiences to be supplemented with a seminar. , All placements will provide students with, opportunities to interact with individuals from, diverse populations.
SPE 311 Principles and Practices in Multicultural Education (1 Credits) 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 competencie, required for a teacher to function successfully in today's pluralistic society.
SPE 312 Educational Psychology \& Behavior Management (3 Credits) 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 twentyhour clinical experience required).

## SPE 321 Characteristics, Medical \& Legal Aspects in Special Education (3 Credits)

Study of the medical/biological 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 twentyhour clinical experience required).
SPE 332 Curriculum \& Instructional Procedures in Teaching Students With Mild Disabilities (3 Credits)
Skills in this area shall contribute to an understanding of the principles of learning; selection and use of materials, evaluating pupil performance, and teaching methods appropriate for exceptional students, including gifted and talented and those with disabling conditions.
SPE 332H Honors Curriculum \& Instructional Procedures in Teaching Students With Mild Disabilities (3 Credits)
Skills in this area shall contribute to an understanding of the principles of learning; selection and use of materials, evaluating pupil performance, and teaching methods appropriate for exceptional students, including gifted and talented and those with disabling conditions.

## SPE 334 Understanding \& Teaching Learners With Emotional Disturbance ( 3 Credits)

Experience in the field of emotional disturbance, including historical and theoretical perspectives, definitions and characteristics, legal and ethical considerations, assessment procedures, 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).

## SPE 336 Understanding \& Teaching Learners With Learning Disabilities (3 Credits)

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 literacy and subject area performance. Learning experiences focus on teaching linguistically and culturally diverse individuals with learning disabilities

SPE 344 Teaching Reading to Exceptional Learners (3 Credits)
Study of comprehensive active learning designed to provide a foundation in literacy instruction and content area reading. Emphases 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.
SPE 345 Teaching Math to Execpt Learners (3 Credits)
This comprehensive active learning course is, designed to provide service teacher candidates, with a foundation in mathematics instruction for, students with diverse learning needs. Emphasis, will be placed on developing understandings and, applications of the curriculum in mathematics for, students with disabilities.

SPE 345H Honors Teaching Math to Execpt Learners (3 Credits) This comprehensive active learning course is, designed to provide service teacher candidates, with a foundation in mathematics instruction for, students with diverse learning needs. Emphasis, will be placed on developing understandings and, applications of the curriculum in mathematics for, students with disabilities.

SPE 371 Med Asp Hndcp Cond (2 Credits)
Contact the department for specific course, information.
SPE 395H Honors Prct Vol Comm Serv (3 Credits)
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.
SPE 410 Introduction to Exceptional Individuals (3 Credits)
This course provides an overview of the foundation, for educating individuals with disabilities and, special gifts. It includes philosophical, perspectives, developmental differences, and, cultural influences as they relate to individuals, in their home, school, and community. A, twenty-hour clinical experience is required.

## SPE 440 Collaboration Procedures (3 Credits)

Study of curricular development and adjustment. Procedures for exceptional learners, utilizing curriculum materials, assessment techniques, and instructional approaches to remedial learning and behavioral problems (twenty hour clinical experience required).

## SPE 445 Transition Procedures (3 Credits)

This course is designed to provide pre-service, special educators with skills and competencies in, the planning and implementation of transition, services for students with disabilities. The, course will focus on strength-based approaches for, planning and implementation of transition services, in accordance with the Individuals with, Disabilities Education Act, the Virginia Licensure, Regulations for School Personnel and the Council, for the Accreditation of Education Preparation, (CAEP) Standards and Assessments.
SPE 451 Psychoeducational Diagnostic Procedures (3 Credits) 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 comptence, and vocational assessment. Educational experiences focus on teaching linguistically and culturally diverse learners. (Twenty-hour clinical experience required).

SPE 461 Teaching Sign Language (3 Credits)
Introduction to American Sign Language (ASL) and its application within the deaf community. Emphasis on developing receptive and expressive skills for everyday interaction, or effective communication, with deaf/ hard of hearing individuals and other nonverbal persons with severe disabilities.

SPE 490 Assessments of Exceptional Students (3 Credits)
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. (Twenty-hour clinical experience required).

SPE 492 Assessments of Exceptional Students (3 Credits)
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. (Twenty-hour clinical experience required).

## SPE 492H Honors Assessment of Exceptional Students (3 Credits)

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.
SPE 497H Practicum in Volunteer Community Service (3 Credits) Contact the department for specific course information
SPE 499 Directed Teaching (6-12 Credits)
This course is designed to provide a period of supervised teaching during which the candidate takes increasing responsibility for a given group of individuals with mild disabilities for a definite period of time. It is organized on a semester basis with emphasis on elementary, middle, or secondary school experiences to be supplemented with a professional seminar, and other ancillary educational opportunities. The candidate will assess students, plan and write instructional interventions, deliver instruction, monitor and document progress, and assume all other classroom duties of the cooperating teacher. Placements will provide candidates with opportunities to interact with individuals from diverse populations.

## Techology Design (TMD)

## TMD 145 Engineering Materials Technology (3 Credits)

Introduction to the basics 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.

## TMD 150 Engineering Graphics (3 Credits)

Introduction to theories of projection and the concepts of engineering drawing, including geometric construction, multi view drawing, auxiliary views as well as techniques of lettering and sketching. Hands-on sessions provide practice to reinforce the co

TMD 151 Introduction to Cad (3 Credits)
Awareness of computers in engineering design and problem solving, with emphasis on AutoCAD program on microcomputers for engineering graphics at a beginning level of design. Hands-on sessions using personal computers will provide practice to reinforce the concepts and to provide practical experience.

TMD 225 Mechanics I: Statics (3 Credits)
Develops analytic abilities of various types of force acting on a rigid body at rest with emphasis on systems using algebra and trigonometry, including vectors, couples, equilibrium, centroids, moments, friction and moments of inertia.
TMD 227 Dynamics (3 Credits)
Introduction to a vector treatment of the, kinematics and laws of motion of particles and , rigid bodies, including accleration, momentum, work, energy and power.

## TMD 251 Advanced Cad (3 Credits)

Advanced aspects of CAD using AutoCAD, to produce engineering drawing 2D architecture and mechanical drawings. Special emphasis is placed on 3-D techniques, solid modeling, and rendering. Hands-on sessions using personal computers will provide practice to reinforce the concepts and to provide practice to reinforce the concepts and to provide practical experience.

## TMD 252 Tool Design (3 Credits)

Study of function of a manufacturing environment to design production tools such as fixtures, gauges, dies, and clamping devices. Use of microcomputer provides experience in computer-aided design and other types of software for engineering problem solving.

## TMD 345 Mechanics Ii: Strength of Materials (3 Credits)

Analysis of structures, utilizing principles of Hook's Law; Passions Ration; shear and moment diagrams, including statically determinate and some statically indeterminate structures.

TMD 345L Mechanics II Laboratory: Properties of Materials (1 Credits) Experimentation with properties of materials, fabrication characteristics, testing, and inspection. (Meets 2 hrs. per week.) It will acquaint students with techniques of testing materials, making accurate observations of phenomena and correct interpretations of results

## TMD 348 Fluid Mechanics (3 Credits)

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 priniciples for compressible flows, ideal gas,, real gas. nozzle design and kinetic theory.

## TMD 355 Machine Design (3 Credits)

Study of designing screws, fasteners, joints,, springs, bearings, and rigid machine components.
TMD 380 Material Science ( 3 Credits)
Investigation of physics and chemistry of materials as related to their properties and process ability. Incorporates the study of metallurgy, polymers, composities, ceramics and materials evaluation. Basic comptencies developed in use of laboratory equipment used to evaluate structure, properties, and processing of , engineering materials.

TMD 448 Thermodynamics (3 Credits)
Study of working ability with first and second laws of thermodynamics, including working fluids and heat engines' cycles
TMD 450 Instrumentation (3 Credits)
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.
TMD 455 Mechanical Design (3 Credits)
Study of design and slection of beams, gears, , clutches, brakes, couplings, flexible mechanical, elements, includig utilization of basic concepts, of kinematics.

# Tourism \& Hospitality Management (THM) 

THM 100 Professional Careers in Hospitality Industry (3 Credits) This first course in professional development will provide indepth discussion and experience in professional development within the hospitality industry. It will prepare students with the knowledge of professionalism, business etiquette, selfawareness skills and career planning of goals and objectives. It will provide information for their career, for their resumes, interviewing skills, and networking communications. Basic restaurant math and financial operations information will be demonstrated.
THM 115 Introduction to Tourism \& Hospitality (3 Credits)
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.

## THM 200 Computers in Hospitality (3 Credits)

Study of computer applications used in the hospitality industry. Emphasis on the different software packages available and the programs they run.
THM 205 Sanitation Principles (3 Credits)
Study of sanitation standards for food and beverage establishments, food-handling practices, and micro-organisms and their control.

## THM 210 Front Office Management (3 Credits)

Study of principles and procedures used in effective hotel/motel front office management. Emphasis on operation of specific equipment, planning and forecasting hospitality needs.

## THM 212 Fundamentals of Nutrition for Food Service (3 Credits)

This course introduces the student to the concepts of food composition, nutrition science, and application of nutrition principles by the food service professional. It provides the student with a basic understanding of human nutrition and application of nutrition in the service of commercially prepared meals.

## THM 250 Hotel Operations Management ( 3 Credits)

This course presents best practices and future, directions in the hotel industry. Students will, gain an intuitive understanding based on the flow, of the guest's experience, from reservation,, arrival, and registration, to service purchasing,, departure, billing, and recordkeeping. The entire, rooms division is covered thoroughly, and linked, to other hospitality functions, related, industries, and the broader community. Coverage, includes internalization; green operations;, financing sources; boutique and urban collections;, and reservations strategies.
THM 280 Dining Rm \& Beverage Management Operations (3 Credits) 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.

THM 290 Introduction to Gaming Management (3 Credits) Overview of the gaming industry, including scope,, staffing, security, control, taxation, government, regulations, its interface with the hotel, and the, social, economic, and cultural impacts of gaming, on host community.

THM 300 Purchasing for the Hospitality Industry (3 Credits) Exploration of the procedures and practices utilized in purchasing iteExploration 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. ms and services for the hospitality industry. Emphasis on the procurement cycle, legal aspects of purchasing, standards and specifications of items, sources ofsupplies, and distributio

## THM 320 Cases in Hospitality Management (3 Credits)

 Introduction to strategic management concepts and applications in the hospitality industry. This course is designed to introduce the student to setting up, starting, and running a hospitality or hospitality-related type of business. In addition, the student receives intensive training in the use of the Case Method for decision-making and strategic management in the hospitality industry. This will be accomplished via a combination of cases, simulations, gaming, internships, and/or other pragmatic exercises.THM 320H Honors Cases in Hospitality Management (3 Credits) Introduction to strategic management concepts and applications in the hospitality industry. This course is designed to introduce the student to setting up, starting, and running a hospitality or hospitality-related type of business. In addition, the student receives intensive training in the use of the Case Method for decision-making and strategic management in the hospitality industry. This will be accomplished via a combination of cases, simulations, gaming, internships, and/or other pragmatic exercises.

## THM 331 Food, Beverage \& Labor Cost Control (3 Credits)

Fundamentals of food, beverage, and labor cost control for hotel and restaurant operations.

THM 350 International Tourism (3 Credits)
Contact the department for specific course information
THM 351 Event Planning and Management (3 Credits)
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.

THM 381 Facilities Layout \& Design (3 Credits)
Study of hospitality facilities, layouts, and designs, exterior and interior; building systems; space allocations; equipment; and budgets.

THM 391 Intenship in Hospitality (3 Credits)
On-the-job experience at a hospitality industry employer. Minimum of 250 clock hours required.

## THM 401 Club and Resort Management (3 Credits)

Survey of the organization and management of member-owned and proprietary private clubs and resorts. Study of relationship between board of directors, management, employees, club committees, and club members. Emphasis on budget preparation, including applicable tax laws. Field trips required.

THM 402 Management by Menu (3 Credits)
Principles of menu planning applied to the food services industry, including the menu and financial success, the menu and marketing, measuring menu effectiveness, menu writing procedures, and menu analysis and feasibility. Principles of table service for all types of food services.

## THM 403 Catering Management (3 Credits)

This course will offer an overview of food service catering in an on and off premise environment.

THM 440 Hospitality Sales and Advertising (3 Credits)
Study of hospitality sales and marketing with emphasis on practical sales techniques, proven approaches to selling to targeting markets, and marketing role in sales.
THM 441 Restaurant Ownership and Operation (3 Credits)
Exploration of the factors necessary for the successful startup or take- over of a restaurant. Procedures are set forth for determining the entrepreneur's suitability (personal characteristics) as well as the market and financial feasibility of the project. Emphasis on concept development, seating, construction, menu, design, equipment, staffing and management necessary to maximize the chances for success.

THM 462 Hospitality Human Resource Management (3 Credits)
Study of the relationship between individual employees and the hospitality industry. Anaylsis of human behavior, attitudes, motivation strategies, stress management, employee wages, and productivity.

## THM 481 Hospitality Property Management (3 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 space, with emphasis on equipment, personnel, and modern innovations.

## THM 490 Sr Project (3 Credits)

Emphasis on providing the student with the opportunity to engage in a research project designed to showcase competence and developed managerial knowledge.

## THM 490H Honors Sr Project (3 Credits)

Emphasis on providing the student with the opportunity to engage in a research project designed to showcase competence and developed managerial knowledge.

THM 494 Restaurant Franchising (3 Credits)
Emphasis on the unique difference between franchise and companyowned properties and the application of special techniques required to manage these differences.

## Urban Professionals (URP)

## URP 192 Introduction Urban Planning (3 Credits)

Study of the role of planning in the development, management, and organization of metropolitan environments. Comprehensive anaylysis of the overall planning process and how master plans can guide the growth and development of cities and their hinterland.

## URP 285 Urban Land Use Planning (3 Credits)

Study of the 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 is placed on the evaluation and discussion of various development projects and the public's role in influencing land use development decisions.
URP 292 Urban Planning Law (3 Credits)
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

URP 292H Honors Urban Planning Law (3 Credits)
Survey, debate and critical thinking relative to , cases, legislation and terminology relative, to planning law.

URP 355 Urban Economic Development Planning (3 Credits)
Study of the economic vitality of established central cities in conjunction with regions within metropolitan areas. Primary emphasis is placed on the internal structure of urban areas, including the dynamics of central city economics. There is an analysis of the dependence of residents upon unstable private capital decisions 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.
URP 380 Housing and Community Development (3 Credits)
Introduction to both the rationale and techniques for providing assistance in the community development and city development process. There is an examination of the myriad of institutional and market forces, as well as socioeconomic and demographic factors which affect the supply and the demand for housing. Emphasis is placed on the concepts of citizen participation, self-direction, and self-help in real and simulated neighborhood revitalization efforts.
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## W

Welcome to Norfolk State University


[^0]:    Substitutions approved by College Dean and Department Chair may apply.

[^1]:    Substitutions approved by College Dean and Department Chair may apply.

[^2]:    - Chemistry (https://www.nsu.edu/chemistry/bs-chemistry/) The B.S. Chemistry degree prepares you for a career in industry and graduate school in chemistry or related disciplines.
    - Chemistry Minor Core (https://www.nsu.edu/chemistry/chemistryminor/)
    The American Chemical Society (ACS) requires that a minor in chemistry consist of a minimum of 20 credit hours and 200 laboratory contact hours in two different areas of chemistry beyond the first year general chemistry.
    - DNIMAS (https://www.nsu.edu/dnimas/ chemistry/)(BS.CHM.DNIMAS)

