2016–2017

UNDERGRADUATE STUDENT CATALOG

NSU
NOVA SOUTHEASTERN UNIVERSITY

Nova Southeastern University Undergraduate Student Catalog

2016–2017

Abraham S. Fischler College of Education

College of Arts, Humanities, and Social Sciences

College of Engineering and Computing

College of Health Care Sciences

College of Nursing

College of Psychology

Farquhar Honors College

H. Wayne Huizenga College of Business and Entrepreneurship

Halmos College of Natural Sciences and Oceanography

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The Nova Southeastern University Undergraduate Student Catalog is a resource for information about academic program and curriculum requirements, academic policies, procedures for resolving academic and administrative grievances, course descriptions, and other information relevant to an undergraduate career at Nova Southeastern University (NSU).

The Undergraduate Student Catalog is published once each year. This catalog is comprised of information pertaining to undergraduate students of the Abraham S. Fischler College of Education; College of Arts, Humanities, and Social Sciences; College of Engineering and Computing; College of Health Care Sciences; College of Nursing; College of Psychology; Farquhar Honors College; H. Wayne Huizenga College of Business and Entrepreneurship; and Halmos College of Natural Sciences and Oceanography. Students are bound by the curricula published in the catalog in effect the semester they enter the university. Students are bound by the policies in the most recently published version of the catalog. If there is an interruption in studies of more than one calendar year from the end of the last semester enrolled, the student must abide by the NSU Undergraduate Student Catalog in effect upon return, or to requirements approved by the student's department chair. Policies and requirements, including fees, are subject to change without notice at any time at the discretion of the NSU administration. NSU reserves the right to change curriculum, course structure, calendar, graduation requirements, and costs during the life of this publication. However, adequate notice of anticipated changes will be given to the student, whenever possible. The failure to read this catalog does not excuse students from the rules, policies, and procedures contained in it.

The NSU Undergraduate Student Catalog is published by the College of Undergraduate Studies. For questions and comments about the catalog, contact:

College of Undergraduate Studies
Nova Southeastern University
3301 College Avenue
Fort Lauderdale, Florida 33314-7796
Phone: (954) 262-7015
Email: *cous@nova.edu*

Nondiscrimination Statement

Consistent with all federal and state laws, rules, regulations, and/or local ordinances (e.g., Title VII, Title VI, Title III, Title II, Rehab Act, ADA, and Title IX), it is the policy of Nova Southeastern University not to engage in any discrimination or harassment against any individuals because of race, color, religion or creed, sex, pregnancy status, national or ethnic origin, nondisqualifying disability, age, ancestry, marital status, sexual orientation, unfavorable discharge from the military, veteran status, or political beliefs or affiliations, and to comply with all federal and state nondiscrimination, equal opportunity, and affirmative action laws, orders, and regulations.

This nondiscrimination policy applies to admissions; enrollment; scholarships; loan programs; athletics; employment; and access to, participation in, and treatment in all university centers, programs, and activities. NSU admits students of any race, color, religion or creed, sex, pregnancy status, national or ethnic origin, nondisqualifying disability, age, ancestry, marital status, sexual orientation, unfavorable discharge from the military, veteran status, or political beliefs or affiliations, to all the rights, privileges, programs, and activities generally accorded or made available to students at NSU, and does not discriminate in the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs.

The university's nondiscrimination statement is taken from the *NSU Student Handbook*, which is the official source of this policy.

NSU Accreditations

Nova Southeastern University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate's, baccalaureate, master's, educational specialist, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Nova Southeastern University.

The Cardiovascular Sonography program at NSU Tampa is accredited by the Commission on Accreditation of Allied Health Education Programs (*caahep.org*). CAAHEP 25400 U.S. Highway 19, North, Suite 158, Clearwater, Florida 33376. Phone: (727) 210-2350/ Fax: (727) 210-2354.

Both Vascular and General tracks of the Medical Sonography program are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). CAAHEP 25400 U.S. Highway 19, North, Suite 158, Clearwater, Florida 33376. Phone: (727) 210-2350/ Fax: (727) 210-2354.

The NSU Bachelor of Science in Nursing Program is accredited as of October 11, 2010, for a period of 10 years by the Commission on Collegiate Nursing Education (CCNE), (One Dupont Circle, NW, Suite 530, Washington, D.C. 20036-1120, Phone number: (202) 887-6791).

The Athletic Training Education Program (ATEP) in the College of Health Care Sciences is accredited from the Commission of Athletic Training Education (CAATE), (6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3184, Phone number: (512) 733-9700). The CAATE accredits athletic training programs upon the recommendation of the Commission on Accreditation of Athletic Training Education. The CAATE provides peer review of the program's educational content based on educational standards adopted by national medical and allied health professional organizations.

The Bachelor of Science in Paralegal Studies Program in the College of Arts, Humanities, and Social Sciences is approved by the American Bar Association, (321 North Clark Street, Chicago, IL 60654, Phone number: 800-285-2221).

The Bachelor of Science in Respiratory Therapy is accredited by the Commission on Accreditation for Respiratory Care (CoARC), (1248 Harwood Road, Bedford, TX 76021-4244, Phone number: 817-283-2835; Fax: (817) 354-8519, *coarc.com*).

The Abraham S. Fischler College of Education at Nova Southeastern University is accredited by the National Council for Accreditation of Teacher Education (NCATE), *ncate.org* (1140 19th Street, Suite 406, Washington, D.C. 20036, Phone number: (202) 223-0077, Fax: (913) 631-9154). This accreditation covers initial teacher preparation programs and advanced educator preparation programs at all university locations and online. However, the accreditation does not include individual education courses that the institution offers to P-12 educators for professional development, relicensure, or other purposes. Through a cooperative agreement with the Abraham S. Fischler College of Education and multiple undergraduate colleges, NSU offers the following initial teacher preparation programs at the bachelor's level: Elementary Education, Exceptional Student Education, Prekindergarten and Primary Education, Secondary English Education, and Secondary Mathematics Education.

Bachelor's degree programs offered in a variety of fields of business and administration by the H. Wayne Huizenga College of Business and Entrepreneurship are accredited by the International Assembly for Collegiate Business Education (IACBE), (11374 Strang Line Road, Lenexa, Kansas 66215, Phone number: (913) 631-3009, Fax number: (913) 631-9154).

NSU Memberships

Nova Southeastern University is a member of the following organizations:

American Association for Higher Education (AAHE)
American Association of Colleges for Teacher Education (AACTE)
American Association of Collegiate Registrars and Admissions Officers (AACRAO)
American Council on Education (ACE)
Association for Institutional Research (AIR)
Association of American Colleges & Universities (AAC&U)
Association of Governing Boards of Universities & Colleges (AGB)
Association of Independent Schools of Florida (AISF)
Coalition for Baccalaureate & Graduate Respiratory Therapy Education (CoBRTE)
College Board
Conference of Southern Graduate Schools (CSGS)
Council of Graduate Schools (CGS)
Council of Independent Colleges (CIC)
Educational Records Bureau (ERB)
Florida Association of Colleges and Universities (FACU)
Florida Association of Collegiate Registrars and Admissions Officers (FACRAO)
Florida Collegiate Honors Council (FCHC)
Florida Council of Independent Schools (FCIS)
Hispanic Association of Colleges and Universities (HACU)
Independent Colleges and Universities of Florida (ICUF)
NAFSA: Association of International Educators
National Association of College and University Attorneys (NACUA)
National Association of College and University Business Officers (NACUBO)
National Association of Independent Colleges & Universities (NAICU)
National Association of Independent Schools (NAIS)
National Association of Schools of Public Affairs and Administration (NASPAA)
National Collegiate Honors Council (NCHC)
Society for College and University Planning (SCUP)
Southern Association of College and University Business Officers (SACUBO)
Southern Association of Colleges and Schools (SACS)
Southern Association of Collegiate Registrars and Admissions Officers (SACRAO)
Southern Regional Education Board's Electronic Campus (SREB)
Southern Regional Honors Council (SRHC)
The Foundation for Independent Higher Education (FIHE)
University Continuing Education Association (UCEA)
University Professional and Continuing Education Association

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2016–2017

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Letter from the President

Welcome to Nova Southeastern University.

Our faculty, administration, and support staff are dedicated to assisting you in accomplishing your academic goals and aspirations. Along this journey, we are also committed to engage you so that your health, wellness, and the concept of "service to others" are enhanced. In other words, by the time you graduate, we not only want you to expand your mind with knowledge and wisdom, but we want to prepare you to be leaders in any area you choose and to make the world a better place to live. Like the ancient Greeks, we truly believe in providing an environment that builds an individual's mind and body, while developing a spirit of community. In fact, community is one of NSU's core values, and we strongly encourage you to get involved in community-wide causes that interest you.

With more than 150 academic programs, I urge you to exercise "passionate curiosity" in exploring many academic options during your time studying at NSU. Our faculty members pride themselves on sharing the most contemporary knowledge. Whether you take courses in classrooms, laboratories, clinics, or online, the faculty, clinicians, counselors, and staff are available to provide individual attention to you. Tap into the minds of these gifted individuals and take advantage of each and every opportunity available to you.

NSU also offers you the complete college experience through diverse athletic programs, NCAA Division II sports teams, activities, clubs, and organizations within modern facilities and beautiful surroundings. Explore some of these activities and support your favorite Shark team, whose athletes are also your classmates. But remember, your primary mission at NSU is to pursue your academic goals and aspirations. Your experience will be a direct result of what you put into it.

Have a wonderful year! If you should ever have any questions for me or my colleagues, please don't hesitate to ask. If you need an appointment, I will make time to meet with you, or you may communicate with me through email, or through the "Ask the President" tab on my Web page, or on Facebook. I look forward to hearing from you and seeing you around campus.

Sincerely yours,

George L. Hanbury II, Ph.D.
President/CEO, Nova Southeastern University

NSU Mission Statement

The mission of Nova Southeastern University, a private, not-for-profit institution, is to offer a diverse array of innovative academic programs that complement on-campus educational opportunities and resources with accessible, distance learning programs to foster academic excellence, intellectual inquiry, leadership, research, and commitment to community through engagement of students and faculty members in a dynamic, lifelong learning environment.

NSU Vision 2020 Statement

By 2020, through excellence and innovations in teaching, research, service, and learning, Nova Southeastern University will be recognized by accrediting agencies, the academic community, and the general public as a premier, private, not-for-profit university of quality and distinction that engages all students and produces alumni who serve with integrity in their lives, fields of study, and resulting careers.

NSU Core Values

Academic Excellence
Student Centered
Integrity
Innovation
Opportunity
Scholarship/Research
Diversity
Community

NSU Board of Trustees

Board Chairs

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Board Members

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Michael Zager—Partner, Z Wealth Solutions Weston, FL

Trustee Emeritus 2000–2013

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Ovid Lewis, S.J.D., President
Stephen Feldman, Ph.D., President
Abraham S. Fischler, Ed.D, President Emeritus
Alexander Schure, Ph.D., Chancellor and CEO
Warren Winstead, Ed.D, President

University History

Nova University of Advanced Technology was chartered in 1964 as a graduate institution specializing in the physical and social sciences. The board of trustees changed the university's name to Nova University in 1974. Over time, Nova added programs in law, education, business, psychology, computer science, oceanography, social and systemic studies, and hospitality. In 1972, Nova introduced its first off-campus course of study, a major in education. Soon, Nova became nationally recognized for its innovative distance learning programs.

While Nova continued to expand its educational reach, Southeastern University of the Health Sciences also took an expansion course. Southeastern was created by osteopathic physicians committed to establishing a college of osteopathic medicine in the Southeast. As a result, Southeastern College of Osteopathic Medicine, as it was first known, opened in 1981. From 1987 to 1997, the institution added Colleges of Pharmacy, Optometry, Allied Health, Medical Sciences, and the College of Dental Medicine, which admitted 88 students in 1997.

The merger of Nova University and Southeastern University of the Health Sciences in 1994 brought on new possibilities and increased resources, making possible a more multi-disciplinary education, providing students with the opportunity to integrate across the disciplines and understand how their future professions relate to society as a whole.

Today, Nova Southeastern University (NSU) is an accredited, coeducational institution providing educational programs from preschool through the professional and doctoral levels. The institution awards associate's, bachelor's, master's, specialist, and first-professional degrees in a wide range of fields, including arts, business, counseling, conflict resolution, criminal justice, cross-disciplinary studies, engineering, computer and information sciences, education, humanities, medicine (D.O. program), optometry, pharmacy, dental medicine, nursing, various health professions, law, marine sciences, early childhood, psychology, and other social sciences. In 2018, NSU will admit the first class in its new College of Allopathic Medicine (M.D. program). The university's educational programs are conducted through colleges and schools at the main campus in Davie, Florida, as well as locations throughout Florida and in Puerto Rico, across the nation, and in several countries. NSU is accredited by the Southern Association of Colleges and Schools Commission on Colleges.

NSU is classified as a research university with "high research activity" by the Carnegie Foundation for the Advancement of Teaching, and it's one of only 37 universities nationwide to also be awarded Carnegie's Community Engagement Classification. NSU is the largest private, not-for-profit university in Florida with nearly 25,000 students, and is the largest in the United States that meets the U.S. Department of Education's criteria as an Hispanic-serving Institution.

Campus Facilities

Nova Southeastern University (NSU) maintains four campuses in the Miami to Fort Lauderdale area—the Fort Lauderdale-Davie Campus, the East Campus in Fort Lauderdale, the North Miami Beach Campus, and the Oceanographic Campus in Hollywood, FL. The university also has campuses in the Florida cities of Miami (Kendall), Jacksonville, Orlando, Tampa, Fort Myers, Miramar, and Palm Beach, and its newest campus in San Juan, Puerto Rico. The university's Fort Lauderdale-Davie campus is located on a lush 314-acre site 10 miles inland from the Atlantic Ocean and readily accessible via several highways and Florida's Turnpike. NSU's Fort Lauderdale-Davie Campus provides a central location for most of the university's diverse colleges with state of-the-art classrooms, laboratories, patient simulation facilities, auditoriums, and computer centers.

NSU has benefited from campus expansion, with new educational facilities, athletic venues, residence halls, and performing arts theatres. In 2003, the university dedicated both the 110,000-square-foot Jim & Jan Moran Family Center Village, a model for early education programs across the country, and the Carl DeSantis Building, the 261,000-square-foot home of the H. Wayne Huizenga College of Business and Entrepreneurship, the Huizenga Sales Institute, and the College of Engineering and Computing. NSU's Guy Harvey Oceanographic Center building was opened in 2012, one of the largest facilities of its kind in the U.S., dedicated to research and the conservation of marine life. A new Westside Regional Medical Center emergency facility was dedicated on NSU's Fort Lauderdale-Davie Campus in summer 2015. The NSU Art Museum Fort Lauderdale (formerly known as the Museum of Art | Fort Lauderdale) is a true work of art. With a permanent collection of more than 6,000 works, the museum provides the best in visual arts exhibits, arts curriculum, and educational programs to South Florida.

The university library system composed of the Alvin Sherman Library, Research, and Information Technology Center; Health Professions Division Library; Panza Maurer Law Library; the William S. Richardson Ocean Sciences Library; and four junior K-grade 12 school libraries also facilitate NSU's strong academic research environment. The five-story, high-tech Alvin Sherman Library and the Rose and Alfred Miniaci Performing Arts Center, a 500-seat performing arts center housed within the facility, serve both the university academic community and the residents of Broward County in a unique private-public partnership.

In 2006, the university opened the Don Taft University Center, a 366,000-square-foot recreation, athletic, and arts complex in the center of main campus. The Don Taft University Center is home to a highly flexible 4,500-seat arena, multipurpose studios, the Flight Deck Pub (our popular student lounge), state-of-the-art workout facilities, food court, and a performing and visual arts wing housing the College of Arts, Humanities, and Social Sciences' Department of Performing and Visual Arts, including an intimate Black Box Theatre, art gallery, performance theatre, and additional facilities that support the development of theatre, music, art, dance, and other creative activities.

In addition, seven residence halls on the main campus serve undergraduate and graduate student living needs, including The Commons, a new ultra-modern 501-bed residence hall.

With a scheduled completion of September 2016, the 59,000-square-foot Noel P. Brown Sports Center II will boast a state-of-the-art fitness center, two full-sized basketball courts, a volleyball court, and a variety of areas for physical fitness activities and programming.

Set to open in September 2016, NSU's Center for Collaborative Research (CCR) will be one of the largest and most advanced research facilities in Florida at 215,000 square feet. The CCR will provide wet and dry labs for many of NSU's innovative researchers, a General Clinical Research Center, an outpatient facility that will provide a centralized clinical research infrastructure to benefit investigators in multiple disciplines, a technology incubator offering partnerships with innovative companies, and the NSU Cell Therapy Institute. The CCR will also house NSU's Institute for Neuro-Immune Medicine; NSU's Rumbaugh-Goodwin Institute for Cancer Research; the Emil Buehler Research Center for Engineering, Science and Mathematics; and the U.S. Geological Survey (USGS), which partners with NSU on collaborative interdisciplinary research involving greater Everglades restoration efforts, hydrology and water resources, and more.

For a full overview of NSU's campuses and facilities, refer to the *Fact Book* at *nova.edu/ie/reports/2015/forms/15-01-fact-book.pdf.*

NSU Campus Locations

Fort Lauderdale-Davie Campus
3301 College Avenue
Fort Lauderdale, Florida 33314-7796
Phone: 800-541-NOVA (6682)
Email: *nsuinfo@nova.edu*

Oceanographic Campus
8000 North Ocean Drive
Dania Beach, Florida 33004-3078
Phone: 800-39-OCEAN
Email: *ocadmissions@nova.edu*

North Miami Beach Campus
1750 NE 167th Street
North Miami Beach, Florida 33162-3097
Phone: 800-986-3223
Email: *fgseinfo@nova.edu*

East Campus
3100 SW 9th Avenue
Fort Lauderdale, Florida 33315-3025

NSU Regional Campuses/Instructional Sites

Fort Myers, Florida
3650 Colonial Court
Fort Myers, Florida 33913
Phone: (239) 274-6070
Email: *nsu-fortmyers@nova.edu*

Jacksonville, Florida
6675 Corporate Center Parkway,
Suite 115
Jacksonville, Florida 32216
Phone: (904) 245-8910
Email: *nsu-jacksonville@nova.edu*

Miami, Florida
8585 SW 124th Avenue
Miami, Florida 33183
Phone: (305) 275-2601
Email: *nsu-miami@nova.edu*

Miramar, Florida
2050 Civic Center Place, Third Floor
Miramar, Florida 33025
Phone: (954) 262-9498
Email: *nsu-miramar@nova.edu*

Orlando, Florida
4850 Millenia Blvd.
Orlando, Florida 32839
Phone: (407) 264-5601
Email: *nsu-orlando@nova.edu*

Palm Beach, Florida
11501 North Military Trail
Palm Beach Gardens, Florida 33410
Phone: (561) 805-2100
Email: *nsu-palmbeach@nova.edu*

San Juan, Puerto Rico
997 San Roberto Street
San Juan, PR 00926
Phone: (787) 773-6501
Email: *nsu-sanjuan@nova.edu*

Tampa, Florida
3632 Queen Palm Drive
Tampa, FL 33619
Phone: (813) 574-5200
Email: *nsu-tampa@nova.edu*

NSU Health Care Clinics

The Health Professions Division Health Care Centers serve as integral parts of the training programs. They also provide a vital community function by bringing health care service to areas whose medical needs traditionally have gone unmet.

NSU Health Care Center at North Miami Beach
1750 N.E. 167th Street
North Miami Beach, FL 33162
Phone: (954) 262-4200

This facility houses a full-service primary care family medicine practice as well as a state-of-the-art dental center, a comprehensive optometric clinic and optical dispensary to serve the community.

Sanford L. Ziff Health Care Center
3200 S. University Drive
Fort Lauderdale, FL 33328
Phone: (954) 262-1262

A primary care facility with state-of-the-art full service X-ray diagnostic capabilities. Housed here are; family medicine, pediatrics, internal medicine, geriatrics, student health, obstetrics/gynecology, dermatology, osteopathic manipulative medicine, occupational therapy, pharmacy. Physical therapy, sports medicine and rehabilitation, optometric clinic, optical dispensary.

Audiology Clinic

3200 S. University Drive
Davie, Florida 33328
Phone: (954) 262-7750

The Audiology Clinic provides comprehensive hearing and vestibular services to patients of all ages. As a faculty practice and community-care facility, we are dedicated to offering quality, comprehensive audiology care within a teaching environment. Doctor of Audiology (Au.D.) students work alongside faculty in the provision of service to patients. Whether you are seeking care or seeking to care, you can count on developing a comfortable patient-provider relationship in a professional atmosphere revolving around advanced technology and contemporary treatment programs.

College of Dental Medicine

3200 S. University Drive
Davie, Florida 33328
Phone: (954) 262-7500

Services are available to adults, children, adolescents, and elderly clients. All dental treatment will meet or exceed technical and ethical standards of care that have been established by the dental profession. We offer patients both comprehensive and specialty care within a university setting. You can choose from one of four affordable treatment options providing standard dental care as well as care in orthodontics (braces), pediatric dentistry (children's dentistry), endodontics (root canal therapy), periodontics (gum disease, implants), oral surgery (extractions), prosthetics (complete and removable partial dentures, crowns, bridges).

Kids In Distress

819 N.E. 26th Street, Bldg. C
Wilton Manors, FL 33305
Phone: (954) 567-5640

Family Therapy Clinic

Brief Therapy Institute
3301 College Avenue
Fort Lauderdale, FL 33314
Phone: (954) 262-3030

The clinic provide family, couples, and individual brief therapy services on a sliding fee scale.

Health Care Centers

Sanford L. Ziff Health Care Center
3200 S. University Drive
Davie, FL 33162
Phone: (954) 262-4200

NSU Health Care Center
1750 N.E. 167th Street
North Miami Beach, FL 33162
Phone: (954) 262-4200

NBHD Specialty Care Center
1111 West Broward Blvd.
Fort Lauderdale, FL 33312
Phone: (954) 525-4200

Lighthouse of Broward County
650 North Andrews Ave.
Fort Lauderdale, FL 33311
Phone: (954) 463-4217

Developmental Assessment Clinic:

- **Diagnostic Services:** Psycho-developmental evaluations are provided for those who are suspected of having an autism spectrum disorder (ASD), exhibiting developmental delays, or experiencing early childhood behavioral difficulties. Additionally, the clinic serves adolescents with a prior diagnosis of ASD and/or developmental disabilities for reassessment purposes.
- **Autism Education Program:** The information provided to families for ASD intervention is both overwhelming and often times inaccurate. Caregivers struggle to discern quality programs that are evidence-based from those that have little to no success. To address this need, a series of community-based, ongoing seminars and one-on-one caregiver follow-up sessions assist in determining the next steps after diagnosis.

Feeding Disorders Clinic:

For children who refuse to eat an adequate volume of food or for those who limit the variety of food they willingly accept, the Feeding Disorders Clinic works with an inter-professional team to support healthy eating habits and transform mealtimes into successful experiences. With the help of behavioral psychology, nutrition, and speech pathology focusing on oral-motor concerns, the clinic provides comprehensive evaluation and intervention services to support the child and the family with feeding difficulties.

Challenging Behavior Clinic:

Engaging in significant problem behaviors can isolate children from peers, decrease ability to learn in school, and lead to elevated levels of stress in the home setting. The Challenging Behavior Clinic addresses these concerns through direct support for caregivers via parent training sessions or individual sessions during which the therapist initially works directly with the child prior to integrating caregivers. Both of these treatments teach the child adaptive methods to replace problem behaviors with more functional skills.

Physical Therapy

3301 College Avenue Suite 1441b
Davie, FL 33314
Phone: (954) 262-4149

Physical Therapy deals with treatment and preventive care of athletes, amateur and professional as well as the community. We help all aspects of pain management of sports and alternative therapies.

Occupational Therapy

3301 College Avenue, Suite 1441b
Davie, FL 33314
Phone: (954) 262-4149

Occupational therapy helps people of all ages help themselves participate in meaningful activities (occupations), to take care of themselves, be productive, learn, play and interact with others to the best of their abilities.

Speech-Pathology Clinic

6100 Griffin Road
Davie, FL 33314
Phone: (954) 262-7726

The Speech-Language Pathology Clinic provides evaluation and treatment services for both children and adults with a variety of speech, language, and communication delays and disorders. Faculty members have expertise in areas such as developmental issues, autism, language & learning disabilities, stroke and disease, early intervention, stuttering, augmentative communication and cleft palate. Bilingual services are provided.

Sports Medicine

Don Taft University Center
3301 College Avenue Suite 1433
Davie, FL 33314
Phone: (954) 262-5590

The Sports Medicine Clinic is an interdisciplinary subspecialty of osteopathic medicine which deals with the treatment and preventive care of athletes, both amateur and professional. Our team includes primary care physicians, specialty physicians and surgeons, athletic trainers, physical therapists, coaches, nutritionists, psychologists, strength and conditioning trainers, and of course the athlete.

The Eye Institute

3200 S. University Drive
Davie, Florida 33328
Phone: (954) 262-4200

The Eye Institute provides primary eye care and pediatric/binocular vision services to the urban community in the downtown area as well as the hospital district patients. Along with routine and emergency eye care, services for early detection and monitoring and treatment of glaucoma and other eye diseases are provided by student's supervised by experienced faculty members in the state-of-the-art facility. Specialty care, including vision training for children up to 12 years of age, is offered by the Eye Institute's pediatric sections. A wide selection of frames for both children and adults are available at reasonable cost on-site.

Henderson Student Counseling Services

3538 S. University Drive
Davie, FL 33328
Phone: (954) 424-6911
Fax: (954) 424-6915

Henderson Student Counseling Center offers services that cover a wide variety of issues, including anxiety, depression, suicidal thoughts, assault, social struggles, substance abuse, break-ups, divorce or any relationship challenges, goal setting, academic concerns and career development, and any other problems a student may face. Our office is staffed with

licensed mental health professionals, including a psychologist and psychiatrist. Henderson is accredited at the highest level to provide Student Counseling Services by the Commission on the Accreditation of Rehabilitation Facilities (CARF).

Services Offered

- individual counseling
- couples counseling
- family counseling
- psychiatric services

Payment

Part-time and full-time students can participate in up to 10 sessions per year, from the date of the first appointment, and counseling sessions are available at no cost. If seeing the psychiatrist, students are charged a nominal fee. Aetna and various other insurance companies are accepted.

Hours of Operation

Monday	9:00 a.m. – 5:00 p.m.
Tuesday	9:00 a.m. – 8:00 p.m.
Wednesday	9:00 a.m. – 8:00 p.m.
Thursday	9:00 a.m. – 5:00 p.m
Friday	9:00 a.m. – 5:00 p.m

AFTERHOURS ON-CALL COUNSELOR: (954) 424-6911, available 24/7 (365 days per year): select #3 to connect to counselor

Overview of Undergraduate Studies at NSU

Undergraduate courses at NSU emphasize high-quality instruction, small class size, and personal attention from an accomplished faculty of noted researchers, published authors, practitioners, and consultants. In addition to close faculty-student relationships, the university provides resources outside the classroom to help NSU undergraduates achieve their academic goals.

All undergraduate students at NSU undertake comprehensive general education coursework within the realms of composition, mathematics, humanities, social and behavioral sciences, and biological and physical sciences.

Majors are offered in a variety of formats, including day, evening, online, or off-campus programs. Students should check the appropriate college section of this catalog for details about program formats, program requirements, major and minor descriptions, learning outcomes, and curricula. While students are housed within a specific NSU college based on their major, they may take classes or minor in subjects from any of the other undergraduate colleges.

Academic Programs

These programs are on-site classes, except where noted *(*revised: see *Addendum A)*.

Major Fields of Study	Degrees	Offered by:
Accounting	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Applied Professional Studies	B.S.	College of Arts, Humanities, and Social Sciences
Art and Design	B.A.	College of Arts, Humanities, and Social Sciences
Arts Administration	B.A.	College of Arts, Humanities, and Social Sciences
Athletic Training	B.S.	College of Health Care Sciences
Behavioral Neuroscience	B.S.	College of Psychology
Biology	B.S.	Halmos College of Natural Sciences and Oceanography
Business	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Cardiovascular Sonography	B.S.	College of Health Care Sciences
Chemistry	B.S.	Halmos College of Natural Sciences and Oceanography
Communication	B.A.	College of Arts, Humanities, and Social Sciences
Computer Engineering	B.S.	College of Engineering and Computing
Computer Science	B.S.	College of Engineering and Computing
Criminal Justice	B.S.	College of Arts, Humanities, and Social Sciences
Dance	B.A.	College of Arts, Humanities, and Social Sciences
Early Child Development	B.S.	Abraham S. Fischler College of Education
Early Childhood Education	A.A.	Abraham S. Fischler College of Education
Elementary Education with ESOL/Reading Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Elementary Education (Nevada)	B.S.	Abraham S. Fischler College of Education

Major Fields of Study	Degrees	Offered by:
English	B.A.	College of Arts, Humanities, and Social Sciences
Environmental Sciences/Studies	B.S.	Halmos College of Natural Sciences and Oceanography
Exceptional Student Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Exceptional Student Education (Nevada)	B.S.	Abraham S. Fischler College of Education
Exercise and Sport Science	B.S.	College of Health Care Sciences
Finance	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
General Engineering (pending approval by the Southern Association of Colleges and Schools Commission on Colleges, will begin fall 2016)	B.S.	College of Engineering and Computing
General Studies	B.S.	College of Arts, Humanities, and Social Sciences
Health Science—Online	B.H.Sc.	College of Health Care Sciences
History	B.A.	College of Arts, Humanities, and Social Sciences
Human Development and Family Studies	B.S.	College of Arts, Humanities, and Social Sciences
Human Services Administration	B.S.	College of Arts, Humanities, and Social Sciences
Information Technology	B.S.	College of Engineering and Computing
International Studies	B.A.	College of Arts, Humanities, and Social Sciences
Legal Studies	B.S.	College of Arts, Humanities, and Social Sciences
Management	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Marine Biology	B.S.	Halmos College of Natural Sciences and Oceanography
Marketing	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Mathematics	B.S.	Halmos College of Natural Sciences and Oceanography
Medical Sonography	B.S.	College of Health Care Sciences
Music	B.A.	College of Arts, Humanities, and Social Sciences
Nursing	B.S.N.	College of Nursing
Paralegal Studies	B.S.	College of Arts, Humanities, and Social Sciences
Philosophy	B.A.	College of Arts, Humanities, and Social Sciences
Political Science	B.A.	College of Arts, Humanities, and Social Sciences
Prekindergarten/Primary Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Psychology	B.S.	College of Psychology
Public Administration	B.S.	H. Wayne Huizenga College of Business and Entrepreneurship
Recreational Therapy	B.S.	College of Arts, Humanities, and Social Sciences
Respiratory Therapy First Professional	B.S.R.T.	College of Health Care Sciences
Respiratory Therapy Post-Professional Program—online	B.S.R.T.	College of Health Care Sciences

Major Fields of Study	Degrees	Offered by:
Secondary English Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Secondary Mathematics Education (Florida)	B.S.	Abraham S. Fischler College of Education
Sociology	B.S.	College of Arts, Humanities, and Social Sciences
Software Engineering	B.S.	College of Engineering and Computing
Speech-Language and Communication Disorders	B.S.	College of Health Care Sciences
Sport and Recreation Management	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Theatre	B.A.	College of Arts, Humanities, and Social Sciences

Minors

Minor Fields of Study	Offered by:
Accounting	H. Wayne Huizenga College of Business and Entrepreneurship
African Diaspora Studies	College of Arts, Humanities, and Social Sciences
Anthropology	College of Arts, Humanities, and Social Sciences
Applied Behavior Analysis	College of Psychology
Applied Statistics	Halmos College of Natural Sciences and Oceanography
Arts Administration	College of Arts, Humanities, and Social Sciences
Behavioral Neuroscience	College of Psychology
Bioinformatics	Halmos College of Natural Sciences and Oceanography
Business (for non-business majors)	H. Wayne Huizenga College of Business and Entrepreneurship
Chemistry	Halmos College of Natural Sciences and Oceanography
Computer Information Systems	College of Engineering and Computing
Communication	College of Arts, Humanities, and Social Sciences
Criminal Justice	College of Arts, Humanities, and Social Sciences
Dance	College of Arts, Humanities, and Social Sciences
Digital Media Production	College of Arts, Humanities, and Social Sciences
Economics	H. Wayne Huizenga College of Business and Entrepreneurship
Education Professional Training Option	Abraham S. Fischler College of Education
English	College of Arts, Humanities, and Social Sciences
Entrepreneurship	H. Wayne Huizenga College of Business and Entrepreneurship
Exercise Science	College of Health Care Sciences
Film Studies	College of Arts, Humanities, and Social Sciences
Finance	H. Wayne Huizenga College of Business and Entrepreneurship
Folklore and Mythology	College of Arts, Humanities, and Social Sciences
Forensic Studies	
Gender Studies	College of Arts, Humanities, and Social Sciences

Minor Fields of Study	Offered by:
Geographic Information Science	Halmos College of Natural Sciences and Oceanography
Graphic Design	College of Arts, Humanities, and Social Sciences
History	College of Arts, Humanities, and Social Sciences
Human Resource Management	H. Wayne Huizenga College of Business and Entrepreneurship
Humanities	College of Arts, Humanities, and Social Sciences
Information Assurance/Security	College of Engineering and Computing
Information Technology	College of Engineering and Computing
International Business	H. Wayne Huizenga College of Business and Entrepreneurship
International Law	College of Arts, Humanities, and Social Sciences
International Studies	College of Arts, Humanities, and Social Sciences
Irish Studies	College of Arts, Humanities, and Social Sciences
Journalism	College of Arts, Humanities, and Social Sciences
Latin American and Caribbean Studies	College of Arts, Humanities, and Social Sciences
Leadership	H. Wayne Huizenga College of Business and Entrepreneurship
Legal Studies	College of Arts, Humanities, and Social Sciences
Management	H. Wayne Huizenga College of Business and Entrepreneurship
Marine Biology	Halmos College of Natural Sciences and Oceanography
Marine Ecology	Halmos College of Natural Sciences and Oceanography
Marketing	H. Wayne Huizenga College of Business and Entrepreneurship
Mathematics	Halmos College of Natural Sciences and Oceanography
Medical Humanities	College of Arts, Humanities, and Social Sciences
Music	College of Arts, Humanities, and Social Sciences
Paralegal Studies	College of Arts, Humanities, and Social Sciences
Philosophy	College of Arts, Humanities, and Social Sciences
Physical Education	Abraham S. Fischler College of Education
Physics	Halmos College of Natural Sciences and Oceanography
Property Management	H. Wayne Huizenga College of Business and Entrepreneurship
Psychology	College of Psychology
Public Administration	H. Wayne Huizenga College of Business and Entrepreneurship
Sales	H. Wayne Huizenga College of Business and Entrepreneurship
Sociology	College of Arts, Humanities, and Social Sciences
Spanish	College of Arts, Humanities, and Social Sciences
Speech-Language Pathology	College of Health Care Sciences
Sport and Recreation Management	H. Wayne Huizenga College of Business and Entrepreneurship
Strategic Communication	College of Arts, Humanities, and Social Sciences

Minor Fields of Study	Offered by:
Studio Art	College of Arts, Humanities, and Social Sciences
Theatre	College of Arts, Humanities, and Social Sciences
Writing	College of Arts, Humanities, and Social Sciences

Certificate Programs

Field of Study	Offered by:
Post-Baccalaureate Certificate in Paralegal Studies	College of Arts, Humanities, and Social Sciences
Web Programming and Design	College of Engineering and Computing

Razor's Edge Scholars Programs

Field of Study	Offered by:
Razor's Edge Global	Abraham S. Fischler College of Education
Razor's Edge Leadership	Abraham S. Fischler College of Education
Razor's Edge Research	Abraham S. Fischler College of Education
Razor's Edge Shark Cage	H. Wayne Huizenga College of Business and Entrepreneurship
Razor's Edge Shark Talent	College of Arts, Humanities, and Social Sciences

Other Program Offerings and Initiatives

	Offered by:
Distinguished Speakers Series	Farquhar Honors College
Honors in Major	Farquhar Honors College
Multi-disciplinary Honor Societies	Farquhar Honors College
Scholars Program	Farquhar Honors College
Undergraduate Honors Program	Farquhar Honors College
Undergraduate Student Symposium	Farquhar Honors College

Academic Calendars

The following dates apply to all undergraduate programs ***EXCEPT*** for Bachelor of Health Science; Bachelor of Science in Respiratory Therapy (online); Bachelor of Science in Cardiovascular Sonography; Bachelor of Science in Medical Sonography; and Bachelor of Science in Respiratory Therapy (on-campus). Please see College of Health Care Sciences table under this section (Academic Calendars) for different dates.

In addition, there may be variation regarding individual class dates within a semester. Students should check with their program office to confirm the start and end dates of their classes.

Fall 2016

FALL 2016	**Monday, Aug. 22 – Sunday, Dec. 11, 2016**
Registration	
Honors, Online Students, and Continuing Athletes	Monday, Mar. 14 – Sunday, Aug. 21, 2016
Continuing Students	Monday, Mar. 21 – Sunday, Aug. 21, 2016
Last day for initial registration	Friday, Aug. 5, 2016
Last day SharkLink is open for adjustments to initial registration	Sunday, Aug. 28, 2016
Last day to pay fall tuition or make payment arrangements to avoid a late fee	Thursday, Sept. 22, 2016
Drop/Withdraw Policy	
Fall Term I and Semester Classes	Term I: Monday, Aug. 22 – Sunday, Oct.16, 2016
Drop/Add starts	Monday, Aug. 22, 2016
Drop/Add ends	Sunday, Aug. 28, 2016
Drop during first week of term (100% refund)	Monday, Aug. 22, 2016 – Sunday, Aug. 28, 2016
Drop during second week of term (75% refund)	Monday, Aug. 29 – Sunday, Sept. 4, 2016
Drop during third week of term (50% refund)	Monday, Sept. 5 – Sunday, Sept. 11, 2016
Last day to withdraw Term I (no refund)	Sunday, Sept. 25, 2016
Last day to withdraw semester classes (no refund)	Sunday, Nov. 20, 2016
Fall Term II	Term II: Monday, Oct. 17 – Monday, Dec. 11, 2016
Last day for initial registration	Monday, Oct. 3, 2016
Last day SharkLink is open for adjustments to initial registration	Sunday, Oct. 23, 2016
Drop/Add starts	Monday, Oct. 17, 2016
Drop/Add ends	Sunday, Oct. 23, 2016
Drop during first week of term (100% refund)	Monday, Oct. 17 – Sunday, Oct. 23, 2016
Drop during second week of term (75% refund)	Monday, Oct. 24 – Sunday, Oct. 30, 2016
Drop during third week of term (50% refund)	Monday, Oct. 31 – Sunday, Nov. 6, 2016
Last day to withdraw Term II (no refund)	Sunday, Nov. 20, 2016
Exams	
Fall Term I Class Dates	Monday, Aug. 22 – Sunday, Oct. 16, 2016
Final Exam Dates	Monday, Oct. 10 – Saturday, Oct. 15, 2016
Fall Semester Class Dates	Monday, Aug. 22 – Sunday, Dec. 11, 2016
Mid-Term Exam Dates	Monday, Oct. 10 – Saturday, Oct. 15, 2016
Final Exam Dates	Monday, Dec. 5 – Saturday, Dec. 10, 2016
Fall Term II Class Dates	Monday, Oct. 17 – Sunday, Dec. 11, 2016
Final Exam Dates	Monday, Dec. 5 – Saturday, Dec. 10, 2016

Fall 2016 (continued)

University Holidays and Special Events	
Labor Day (University Closed)	Monday, Sept. 5, 2016
Convocation	Friday, Aug. 19, 2016
No Classes	Wednesday, Nov. 23, 2016
Thanksgiving (University Closed)	Thursday, Nov. 24 – Friday, Nov. 25, 2016
Winter Break (No Classes)	Monday, Dec. 12, 2016 – Sunday, Jan. 8, 2017

Winter 2017

WINTER 2017	**Monday, Jan. 9 – Sunday, May 7, 2017**
Registration	
Honors, Online Students, Veterans, Active Duty Military, and Athletes	Monday, Oct. 3, 2016 – Sunday, Jan. 8, 2017
Continuing Students	Monday, Oct. 10, 2016 – Sunday, Jan. 8, 2017
Last day for initial registration	Friday, Dec. 16, 2016
Last day SharkLink is open for adjustments to initial registration	Sunday, Jan. 15, 2017
Last day to pay winter tuition to avoid late fee	Thursday, Feb. 2, 2017
Drop/Withdraw Policy	
Winter Term I and Semester Classes	Term I: Monday, Jan. 9 – Sunday, Mar. 5, 2017
Drop/Add starts	Monday, Jan. 9, 2017
Drop/Add ends	Sunday, Jan. 15, 2017
Drop during first week of term (100% refund)	Monday, Jan. 9 – Sunday, Jan. 15, 2017
Drop during second week of term (75% refund)	Monday, Jan. 16 – Sunday, Jan. 22, 2017
Drop during third week of term (50% refund)	Monday, Jan. 23 – Sunday, Jan. 29, 2017
Last day to withdraw Term I (no refund)	Sunday, Feb. 12, 2017
Last day to withdraw semester classes (no refund)	Sunday, Apr. 16, 2017
Winter Term II	Term II: Monday, Mar. 13 – Sunday, May 7, 2017
Last day for initial registration	Monday, Feb. 24, 2017
Last day SharkLink is open for adjustments to initial registration	Sunday, Mar. 19, 2017
Drop/Add starts	Monday, Mar. 13, 2017
Drop/Add ends	Sunday, Mar. 19, 2017
Drop during first week of term (100% refund)	Monday, Mar. 13 – Sunday, Mar. 19, 2017
Drop during second week of term (75% refund)	Monday, Mar. 20 – Sunday, Mar. 26, 2017
Drop during third week of term (50% refund)	Monday, Mar. 27 – Sunday, Apr. 2, 2017
Last day to withdraw Term II (no refund)	Sunday, Apr. 9, 2017
Exams	
Winter Term I Class Dates	Monday, Jan. 9 – Sunday, Mar. 5, 2017
Final Exam Dates	Monday, Feb. 27 – Saturday, Mar. 4, 2017
Winter Semester Class Dates	Monday, Jan. 9 – Sunday, May 7, 2017
Mid-Term Exam Dates	Monday, Feb. 27 – Saturday, Mar. 4, 2017
Final Exam Dates	Monday, May 1 – Saturday, May 6, 2017
Winter Term II Class Dates	Monday, Mar. 13 – Sunday, May 7, 2017
Final Exam Dates	Monday, May 1 – Saturday, May 6, 2017

University Holidays and Special Events	
Martin Luther King Day (University Closed)	Monday, Jan. 16, 2017
Spring Break (No Classes)	Monday, Mar. 6 – Sunday, Mar. 12, 2017
Commencement	Friday, May 12, 2017

Summer 2017

SUMMER 2017	**Monday, May 8 – Sunday, Aug. 13, 2017**
Registration	
Honors, Online Students, Veterans, Active Duty Military, and Athletes	Monday, Feb. 27 – Sunday, May 7, 2017
Continuing Students	Monday, Mar. 6 – Sunday, May 7, 2017
Last day for initial registration	Friday, Apr. 17, 2017
Last day SharkLink is open for adjustments to initial registration	Sunday, May 14, 2017
Last day to pay summer tuition to avoid late fee	Thursday, Jun. 8, 2017
Drop/Withdraw Policy	
Term I (First 7-Week Classes)	Monday, May 8 – Sunday, Jun. 25, 2017
Semester (12-Week Classes)	Monday, May 8 – Sunday, Jul. 25, 2017
Semester (14-Week Classes)	Monday, May 8 – Sunday, Aug. 13, 2017
Drop/Add starts	Monday, May 8, 2017
Drop/Add ends	Sunday, May 14, 2017
Drop during first week of term I and semester (100% refund)	Monday, May 8, 2017 – Sunday, May 14, 2017
Drop during second week of term I and semester (75% refund)	Monday, May 15 – Sunday, May 21, 2017
Drop during third week of term I and semester (50% refund)	Monday, May 22 – Sunday, May 28, 2017
Last Day to withdraw term I (no refund)	Sunday, Jun. 4, 2017
Last Day to withdraw 12-Week Classes (no refund)	Sunday, Jul. 9, 2017
Last Day to withdraw 14-Week Classes (no refund)	Sunday, Jul. 23, 2017
For College of Nursing only:	
Term II (Second 7-week Classes) and Semester (14-Week Classes)	Monday, Jun. 26, 2017 – Sunday, Aug. 13, 2017
Drop/Add starts	Monday, Jun. 26, 2017
Drop/Add ends	Sunday, Jul. 2, 2017
Last Day to withdraw term II (no refund)	Sunday, Jul. 23, 2017
Exams	
Summer 7-Week Classes	Monday, May 8 – Sunday, Jun. 25, 2017
Final Exam Dates for Night Classes	Monday, Jun. 19 – Saturday, Jun. 24, 2017
Final Exam Dates for day Classes	Wednesday, Jun. 21 – Saturday, Jun. 24, 2017
Summer 12-Week Classes	Monday, May 8 – Sunday, Jul. 30, 2017
Final Exam Dates for Night Classes	Monday, Jul. 24 – Saturday, Jul. 29, 2017
Final Exam Dates for Day Classes	Wednesday, Jul. 26 – Saturday, Jul. 29, 2017
University Holidays and Special Events	
Memorial Day (University Closed)	Monday, May 29, 2017
Independence Day Observance (University Closed)	Tuesday, Jul. 4, 2017

College of Health Care Sciences—Academic Calendars

The following dates apply to Bachelor of Health Science (B.H.Sc.), Bachelor of Science in Respiratory Therapy (B.S.R.T.)—online, Bachelor of Sciences in Cardiovascular Sonography, in Medical Sonography, and in Respiratory Therapy (on-campus).

Students in the College of Health Care Sciences should contact their program advisor for questions about the start and end dates of their classes.

Summer II 2016

SUMMER II 2016	B.H.Sc. and B.S.R.T.—Online Programs
Term Dates	Monday, Jun. 27 – Sunday, Sept. 18, 2016
Initial Registration	Monday, Apr. 25 – Sunday, Jun. 26, 2016
Last Day to Register	Monday, Jun. 13, 2016
Last Day to Pay Fall Tuition to Avoid Late Fee	Wednesday, Jul. 27, 2016
Drop and Withdrawal Dates	
Last Day to Drop or Add a Class (100% refund)	Sunday, Jul. 3, 2016
Last Day to Withdraw (75% refund)	Sunday, Jul. 10, 2016
Last Day to Withdraw (no refund)	Sunday, Aug. 28, 2016

Fall 2016

FALL 2016	B.H.Sc. and B.S.R.T.—Online Programs	B.S.R.T.—First Professional Program	B.S.—Cardiovascular Sonography, Medical Sonography Programs
Term Dates	Monday, Sept. 26 – Sunday, Dec. 18, 2016	Monday, Aug. 22 – Sunday, Dec. 18, 2016	Monday, Aug. 22 – Sunday, Dec. 18, 2016
Initial Registration	Monday, Jun. 27 – Monday, Sept. 25, 2016	Monday, May 2 – Sunday, Aug. 21, 2016	Monday, May 2 – Sunday, Aug. 21, 2016
Last Day to Register	Monday, Sept. 12, 2016		
Last Day to Pay Fall Tuition to Avoid Late Fee	Tuesday, Oct. 26, 2016	Wednesday, Sept. 14, 2016	Wednesday, Sept. 14, 2016
Drop and Withdrawal Dates			
Last Day to Drop or Add a Class (100% refund)	Sunday, Oct. 2, 2016	Sunday, Aug. 28, 2016	Sunday, Aug. 28, 2016
Last Day to Withdraw (75% refund)	Sunday, Oct. 9, 2016	Sunday, Sept. 4, 2016	Sunday, Sept. 4, 2016
Withdrawal with no fefund	Sunday, Nov. 27, 2016	Sunday, Nov. 27, 2016	Sunday, Nov. 27, 2016
University Holidays and Special Events			
Labor Day (University Closed)	Monday, Sept. 5, 2016		
Thanksgiving (University Closed)	Thursday, Nov. 24, 2016		
University Closed	Friday, Nov. 25, 2016		
Commencement	Friday, May 12, 2017		
Winter Break (No Classes)	Saturday, Dec. 24, 2016 – Monday, Jan. 2, 2017		

Winter 2017

WINTER 2016	B.H.Sc. and B.S.R.T.—Online Programs	B.S.R.T.—First Professional Program	B.S.—Cardiovascular Sonography, and Medical Sonography Programs
Term Dates	**Monday, Jan. 3 – Sunday, Mar. 26, 2017**	**Monday, Jan. 9 – Sunday, May 14, 2017**	**Monday, Jan. 9 – Sunday, May 21, 2017**
Initial Registration	Monday, Oct. 10 – Friday, Dec. 14, 2016	Monday, Oct. 19 – Friday, Dec. 19, 2016	Monday, Oct. 10 – Friday, Dec. 19, 2016
Last Day to Pay Fall Tuition to Avoid Late Fee	Tuesday, Feb. 3, 2017	Tuesday, Feb. 3, 2017	Tuesday, Feb. 3, 2017
Drop and Withdrawal Dates			
Last Day to Drop or Add a Class (100% refund)	Sunday, Jan. 8, 2017	Sunday, Jan. 15, 2017	Sunday, Jan. 15, 2017
Last Day to Withdraw (75% refund)	Sunday, Jan. 15, 2017	Sunday, Jan. 22, 2017	Sunday, Jan. 22, 2017
Withdrawal with no efund	Sunday, Mar. 5, 2017	Sunday, Apr. 23, 2017	Sunday, Apr. 30, 2017
University Holidays and Special Events			
Martin Luther King (University Closed)	Monday, Jan. 16, 2017		
HPD Spring Break (No Classes)	N/A	Monday, Apr. 10 – Friday, Apr. 14, 2017	Monday, Apr. 10 – Friday, Apr. 14, 2017
Registration for Fall 2017	Contact program office.		

Spring 2017

SPRING 2017	B.H.Sc. and B.R.S.T.—Online Programs
Term Dates	**Monday, April 3 – Sunday, June 25, 2017**
Initial Registration	Monday Jan. 23 – Monday, Mar. 20, 2017
Last Day to Pay Fall Tuition to Avoid Late Fee	Tuesday, May 3, 2017
Drop and Withdrawal Dates	
Last Day to Drop or Add a Class (100% refund)	Sunday, Apr. 9, 2017
Last Day to Withdraw (75% refund)	Sunday, Apr. 16, 2017
Withdrawal with no refund	Sunday, Jun. 4, 2017
University Holidays and Special Events	
Memorial Day (University Closed)	Monday, May 29, 2017

Summer I 2017

SUMMER I	B.S.R.T.—First Professional Program
Term Dates	**Monday, May 15 –Sunday, Aug. 20, 2016**
Initial Registration	Monday, Mar. 6 – Sunday, May 14, 2017
Last Day to Pay Fall Tuition to Avoid Late Fee	Tuesday, Jun. 15, 2017
Drop and Withdrawal Dates	
Last Day to Drop or Add a Class (100% refund)	Sunday, May 21, 2017
Last Day to Withdraw (75% refund)	Sunday, May 28, 2017
Withdrawal with no refund	Sunday, Jul. 20, 2017
University Holidays and Special Events	
Commencement	Friday, May 12, 2017
Memorial Day (University Closed)	Monday, May 23, 2017

Exam Schedules

The following exam schedules are for undergraduate students of the Abraham S. Fischler College of Education; College of Arts, Humanities, and Social Sciences; College of Engineering and Computing; College of Psychology; Farquhar Honors College; H. Wayne Huizenga College of Business and Entrepreneurship; and Halmos College of Natural Sciences and Oceanography. The exam schedules for students of the College of Health Care Sciences and College of Nursing vary by major. For more information, students are encouraged to contact their academic advisor.

Fall 2016

Term I: Final and Semester Mid-Term Exams

Class Meetings: Day—Time	Exam Days: Monday, October 10 – Saturday, October 15, 2016	
	Date	Time
Monday—7:55/8:00 a.m.	Wednesday, October 12, 2016	8:00 a.m. – 10:00 a.m.
Monday—9:00 a.m.	Monday, October 10, 2016	10:30 a.m. – 12:30 p.m.
Monday—10:05 a.m.	Wednesday, October 12, 2016	10:30 a.m. – 12:30 p.m.
Monday—11:10 a.m.	Friday, October 14, 2016	10:30 a.m. – 12:30 p.m.
Monday—1:00 p.m.	Wednesday, October 12, 2016	1:00 – 3:00 p.m.
Monday—2:05 p.m.	Friday, October 14, 2016	1:00 – 3:00 p.m.
Monday—3:10 p.m.	Friday, October 14, 2016	3:30 – 5:30 p.m.
Monday—4:15 p.m.	Wednesday, October 12, 2016	3:30 – 5:30 p.m
Monday—6:00 p.m.	Monday, October 10, 2016	6:00 – 8:00 p.m.
Monday 8:00 p.m.	Monday, October 10, 2016	8:15 – 10:15 p.m.
Tuesday—7:45/8:00 am	Thursday, October 13, 2016	8:00 – 10:00 a.m.
Tuesday—9:15 a.m.	Tuesday, October 11, 2016	10:30 a.m. – 12:30 p.m.
Tuesday—10:45 p.m.	Thursday, October 13, 2016	10:30 a.m. – 12:30 p.m.
Tuesday—1:00 p.m.	Tuesday, October11, 2016	1:00 – 3:00 p.m.
Tuesday—2:30 p.m.	Thursday, October 13, 2016	1:00 – 3:00 p.m.
Tuesday—4:00 p.m.	Tuesday, October 11, 2016	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, October 11, 2016	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, October 11, 2016	8:15 – 10:15 p.m.
Wednesday—6:00 p.m.	Wednesday, October 12, 2016	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, October 12, 2016	8:15 – 10:15 p.m.
Thursday—6:00 p.m.	Thursday, October 13, 2016	6:00 – 8:00 p.m.
Thursday—8:00 p.m.	Thursday, October 13, 2016	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, October 14, 2016	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday, October 14, 2016	8:15 – 10:15 p.m.
Saturday—a.m.	Saturday, October 15, 2016	10:30 a.m. – 12:30 p.m.
Saturday—p.m.	Saturday, October 15, 2016	1:00 – 3:00 p.m.

Term II: Final and Semester Final Exams

Class Meetings: Day—Time	Monday, December 5 – Saturday, December 10, 2016	
	Date	Time
Monday—7:55/8:00 a.m.	Wednesday, December 7, 2016	8:00 – 10:00 a.m.
Monday—9:00 a.m.	Monday, December 5, 2016	10:30 a.m. – 12:30 p.m.
Monday—10:05 a.m.	Wednesday, December 7, 2016	10:30 a.m. – 12:30 p.m.
Monday—11:10 a.m.	Friday, December 9, 2016	10:30 a.m. – 12:30 p.m.
Monday—1:00 p.m.	Wednesday, December 7, 2016	1:00 – 3:00 p.m.
Monday—2:05 p.m.	Friday, December 9, 2016	1:00 – 3:00 p.m.
Monday—3:10 p.m.	Friday, December 9, 2016	3:30 – 5:30 p.m.
Monday—4:15 p.m.	Wednesday, December 7, 2016	3:30 – 5:30 p.m
Monday—6:00 p.m.	Monday, December 5, 2016	6:00 – 8:00 p.m.
Monday—8:00 p.m.	Monday, December 5, 2016	8:15 – 10:15 p.m.
Tuesday—7:45/8:00 a.m.	Thursday, December 8, 2016	8:00 – 10:00 a.m.
Tuesday—9:15 a.m.	Tuesday, December 6, 2016	10:30 a.m. – 12:30 p.m.
Tuesday—10:45 p.m.	Thursday, December 8, 2016	10:30 a.m. – 12:30 p.m.
Tuesday—1:00 p.m.	Tuesday, December 6, 2016	1:00 – 3:00 p.m.
Tuesday—2:30 p.m.	Thursday, December 8, 2016	1:00 – 3:00 p.m.
Tuesday—4:00 p.m.	Tuesday, December 6, 2016	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, December 6, 2016	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, December 6, 2016	8:15 – 10:15 p.m.
Wednesday—6:00 p.m.	Wednesday, December 7, 2016	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, December 7, 2016	8:15 – 10:15 p.m.
Thursday—6:00 p.m.	Thursday, December 8, 2016	6:00 – 8:00 p.m.
Thursday—8:00 p.m.	Thursday, December 8, 2016	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, December 9, 2016	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday, December 9, 2016	8:15 – 10:15 p.m.
Saturday—a.m.	Saturday, December 10, 2016	10:30 a.m. – 12:30 p.m.
Saturday—p.m.	Saturday, December 10, 2016	1:00 – 3:00 p.m.
General Chemistry common exam	Tuesday, December 6, 2016	8:00 – 10:00 a.m. **
Organic Chemistry common exam	Friday, December 9, 2016	8:00 – 10:00 a.m.
First Year Seminar common exam	Monday, December 5, 2016	1:00 p.m. – 4:00 p.m.
Physics common exam	Thursday, December 8, 2016	3:30 – 5:30 p.m.

Winter 2017

Term I: Final and Semester Mid-Term Exams

Class Meetings: Day—Time	Exam Days: Monday, February 27 – Saturday, March 4, 2017	
	Date	Time
Monday—7:55/8:00 a.m.	Wednesday, March 1, 2017	8:00 – 10:00 a.m.
Monday—9:00 a.m.	Monday, February 27, 2017	10:30 – 12:30 p.m.
Monday—10:05 a.m.	Wednesday, March 1, 2017	10:30 – 12:30 p.m.

Monday—11:10 a.m.	Friday, March 3, 2017	10:30 – 12:30 p.m.
Monday—1:00 p.m.	Wednesday, March 1, 2017	1:00 – 3:00 p.m.
Monday—2:05 p.m.	Friday, March 3, 2017	1:00 – 3:00 p.m.
Monday—3:10 p.m.	Friday, March 3, 2017	3:30 – 5:30 p.m.
Monday—4:15 p.m.	Wednesday, March 1, 2017	3:30 – 5:30 p.m
Monday—6:00 p.m.	Monday, February 27, 2017	6:00 – 8:00 p.m.
Monday—8:00 p.m.	Monday, February 27, 2017	8:15 – 10:15 p.m.
Tuesday—7:45/8:00 a.m.	Thursday, March 2, 2017	8:00 – 10:00 a.m.
Tuesday—9:15 a.m.	Tuesday, February 28, 2017	10:30 – 12:30 p.m.
Tuesday—10:45 p.m.	Thursday, March 2, 2017	10:30- 12:30 p.m.
Tuesday—1:00 p.m.	Tuesday, February 28, 2017	1:00 – 3:00 p.m.
Tuesday—2:30 p.m.	Thursday, March 2, 2017	1:00 – 3:00 p.m.
Tuesday—4:00 p.m.	Tuesday, February 28, 2017	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, February 28, 2017	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, February 28, 2017	8:15 – 10:15 p.m.
Wednesday—6:00 p.m.	Wednesday, March 1, 2017	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, March 1, 2017	8:15 – 10:15 p.m.
Thursday—6:00 p.m.	Thursday, March 2, 2017	6:00 – 8:00 p.m.
Thursday—8:00 p.m.	Thursday, March 2, 2017	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, March 3, 2017	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday,March 3, 2017	8:15 – 10:15 p.m.
Saturday—a.m.	Saturday, March 4, 2017	10:30 – 12:30 p.m.
Saturday—p.m.	Saturday, March 4, 2017	1:00 – 3:00 p.m.

Term II Final and Semester Final Exams

Class Meetings: Day—Time	Exam Days: Monday, May 1 – Saturday, May 6, 2017	
	Date	Time
Monday—7:55/8:00 a.m.	Wednesday, May 3, 2017	8:00 – 10:00 a.m.
Monday—9:00 a.m.	Monday, May 1, 2017	10:30 – 12:30 p.m.
Monday—10:05 a.m.	Wednesday, May 3, 2017	10:30 – 12:30 p.m.
Monday—11:10 a.m.	Friday, May 5, 2017	10:30 – 12:30 p.m.
Monday—1:00 p.m.	Wednesday, May 3, 2017	1:00 – 3:00 p.m.
Monday—2:05 p.m.	Friday, May 5, 2017	1:00 – 3:00 p.m.
Monday—3:10 p.m.	Friday, May 5, 2017	3:30 – 5:30 p.m.
Monday—4:15 p.m.	Wednesday, May 3, 2017	3:30 – 5:30 p.m
Monday—6:00 p.m.	Monday, May 1, 2017	6:00 – 8:00 p.m.
Monday—8:00 p.m.	Monday, May 1, 2017	8:15 – 10:15 p.m.
Tuesday—7:45/8:00 a.m.	Thursday, May 4, 2017	8:00 – 10:00 a.m.
Tuesday—9:15 a.m.	Tuesday, May 2, 2017	10:30 – 12:30 p.m.
Tuesday—10:45 p.m.	Thursday, May 4, 2017	10:30– 12:30 p.m.
Tuesday—1:00 p.m.	Tuesday, May 2, 2017	1:00 – 3:00 p.m.
Tuesday—2:30 p.m.	Tuesday, May 4, 2017	1:00 – 3:00 p.m.
Tuesday—4:00 p.m.	Tuesday, May 2, 2017	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, May 2, 2017	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, May 2, 2017	8:15 – 10:15 p.m.

Wednesday—6:00 p.m.	Wednesday, May 3, 2017	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, May 3, 2017	8:15 – 10:15 p.m.
Thursday—6:00 p.m.	Thursday, May 4, 2017	6:00 – 8:00 p.m.
Thursday—8:00 p.m.	Thursday, May 4, 2017	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, May 5, 2017	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday, May 5, 2017	8:15 – 10:15 p.m.
Saturday—a.m.	Saturday, May 6, 2017	10:30 – 12:30 p.m.
Saturday—p.m.	Saturday, May 6, 2017	1:00 – 3:00 p.m.
General Chemistry Common Exam	Tuesday, May 2, 2017	8:00 – 10:00 a.m. **
Organic Chemistry Common Exam	Friday, May 5, 2017	8:00 – 10:00 a.m.
Physics Common Exam	Thursday, May 4, 2017	3:30 – 5:30 p.m.

Summer 2017

7-Week Classes Final Exams

Class Meetings: Day—Time	Exam Days: Monday, June 19 – Saturday, June 24, 2017	
	Date	Time
Monday—8:00/8:10 a.m.	Wednesday, June 21, 2017	8:00 – 10:00 a.m.
Monday—9:15 a.m.	Friday, June 23, 2017	8:00 – 10:00 a.m.
Monday—10:00 / 10:30 a.m.	Wednesday, June 21, 2017	10:30 – 12:30 p.m.
Monday—12:00/1:00 p.m.	Friday, June 23, 2017	10:30 – 12:30 p.m.
Monday—2:00 / 2:15 p.m.	Wednesday, June 21, 2017	1:00 – 3:00 p.m.
Monday—3:30 / 4:00 p.m.	Friday, June 23, 2017	3:30 – 5:30 p.m.
Monday—6:00 p.m.	Monday, June 19, 2017	6:00 – 8:00 p.m..
Monday—8:00 p.m.	Monday, June 19, 2017	8:15 – 10:15 p.m.
Tuesday—8:00 am	Thursday, June 22, 2017	8:00 – 10:00 a.m.
Tuesday—9:20 / 10:45 a.m.	Thursday, June 22, 2017	10:30 – 12:30 p.m.
Tuesday—1:00 p.m.	Thursday, June 22, 2017	1:00 – 3:00 p.m.
Tuesday—2:25 / 2:45 p.m.	Thursday, June 22, 2017	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, June 20, 2017	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, June 20, 2017	8:15 – 10:15 p.m.
Wednesday—6:00 p.m.	Wednesday, June 21, 2017	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, June 21, 2017	8:15 – 10:15 p.m.
Thursday 6:00 p.m.	Thursday, June 22, 2017	6:00 – 8:00 p.m.
Thursday 8:00 p.m.	Thursday, June 22, 2017	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, June 23, 2017	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday, June 23, 2017	8:15 – 10:15 p.m.

12-Week Classes Final Exams

Class Meetings: Day—Time	Exam Days: Monday, July 24 to Saturday, July 29, 2017	
	Date	Time
Monday—8:00 a.m.	Wednesday, July 26 2017	8:00 – 10:00 a.m.
Monday—9:15 a.m.	Friday, July 28, 2017	8:00 – 10:00 a.m.

Monday—10:30a.m.	Wednesday, July 26, 2017	10:30 – 12:30 p.m.
Monday—1:00 p.m.	Friday, July 28, 2017	10:30 – 12:30 p.m.
Monday—2:15 a.m.	Wednesday, July 26, 2017	1:00 – 3:00 p.m.
Monday—3:30 p.m.	Friday, July 28, 2017	3:30 – 5:30 p.m.
Monday—6:00 p.m.	Monday, July 24, 2017	6:00 – 8:00 p.m.
Monday—8:00 p.m.	Monday, July 24, 2017	8:15 – 10:15 p.m.
Tuesday—8:00 am	Thursday, July 27, 2017	8:00 – 10:00 a.m.
Tuesday—10:45 a.m.	Thursday, July 27, 2017	10:30 – 12:30 p.m.
Tuesday—1:00 p.m.	Thursday, July 27, 2017	1:00 – 3:00 p.m.
Tuesday—2:45p.m.	Thursday, July 27, 2017	3:30 – 5:30 p.m.
Tuesday—6:00 p.m.	Tuesday, July 25, 2017	6:00 – 8:00 p.m.
Tuesday—8:00 p.m.	Tuesday, July 25, 2017	8:15 – 10:15 p.m.
Wednesday—6:00 p.m.	Wednesday, July 26, 2017	6:00 – 8:00 p.m.
Wednesday—8:00 p.m.	Wednesday, July 26, 2017	8:15 – 10:15 p.m.
Thursday 6:00 p.m.	Thursday, July 27, 2017	6:00 – 8:00 p.m.
Thursday 8:00 p.m.	Thursday, July 27, 2017	8:15 – 10:15 p.m.
Friday—6:00 p.m.	Friday, July 28, 2017	6:00 – 8:00 p.m.
Friday—8:00 p.m.	Friday, July 28, 2017	8:15 – 10:15 p.m.
Saturday—a.m.	Saturday, July 29, 2017	10:30- 12:30 p.m.
Saturday—p.m.	Saturday, July 29, 2017	1:00 – 3:00 p.m.

Undergraduate Correspondence Directory

Abraham S. Fischler College of Education

Undergraduate Education	Abraham S. Fischler College of Education Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Toll-free: 800-986-3223, ext. 27900 Phone: (954) 262-7900 Fax: (954) 262-3925
Office of Enrollment and Recruitment	Abraham S. Fischler College of Education Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Toll-free: 800-986-3223, ext. 27900 Phone: (954) 262-7900 Email: *utepenrollment@nova.edu*

For administrators, faculty, and/or staff listing, visit:
education.nova.edu/aboutus/

College of Arts, Humanities, and Social Sciences

Office of the Dean Honggang Yang, Ph.D., Dean	College of Arts, Humanities, and Social Sciences Nova Southeastern University Maltz Building, Suite 2025 3301 College Avenue Fort Lauderdale-Davie, FL 33314	Phone. (954) 262-3003 Fax (954) 262-3050
Department of Conflict Resolution Studies Robin Cooper, Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Maltz Building, Suite 2025 3301 College Avenue Fort Lauderdale-Davie, FL 33314	Phone: (954) 262-3034 Fax: (954) 262-3968
Department of Justice and Human Services Kimberly Durham, Psy.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-7001 Fax: (954) 262-7005
Department of Family Therapy Tommie V. Boyd, Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Maltz Building, Suite 1044A 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-3011 Fax: (954) 262-3968
Department of History and Political Science Andrea Shaw Nevins, Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Parker Building, Suite 320 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-8200 Fax: (954) 262-3881
Department of Literature and Modern Languages Marlisa Santos, Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Parker Building, Suite 320 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-8200 Fax: (954) 262-3881

Department of Multidisciplinary Studies Judith McKay, J.D., Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Maltz Building, Suite 1118 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-3013 Fax: (954) 262-2462
Department of Performing and Visual Arts Mark Duncan, M.F.A., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Don Taft University Center, Performing and Visual Arts Wing, Suite 337 3301 College Avenue, Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-7620 Fax: (954) 262-2470
Department of Writing and Communication Shanti Bruce, Ph.D., Chair	College of Arts, Humanities, and Social Sciences Nova Southeastern University Parker Building, Suite 130 3301 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-8415 Fax: (954) 262-3881

For faculty listing, visit:
chass.nova.edu/faculty/

College of Engineering and Computing

Office of the Dean Yong X. Tao, Ph.D., Dean	College of Engineering and Computing Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-2035 Fax: (954) 262-2752
Department of Computer Science Michael Laszlo, Ph.D., Chair	College of Engineering and Computing Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-2035 Fax: (954) 262-2752
Department of Engineering and Technology Jose Ramos, Ph.D., Chair	College of Engineering and Computing Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-2035 Fax: (954) 262-2752
Department of Information Systems and Cybersecurity James Parrish, Ph.D., Chair	College of Engineering and Computing Nova Southeastern University Carl DeSantis Building, Fourth Floor 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-2035 Fax: (954) 262-2752

For faculty listing, visit:
cec.nova.edu/faculty/

College of Health Care Sciences

Office of the Dean Stanley H. Wilson, Ed.D., Dean	College of Health Care Sciences Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: (954) 262-1205

Office of the Dean Sandrine Gaillard-Kenney, Ed.D., Assistant Dean for Undergraduate Studies	College of Health Care Sciences Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: (954) 262-1260 Email: *gaillard@nova.edu*
Department of Health Science Brianna Black Kent, Ph.D., Chair	College of Health Care Sciences Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: 800-356-0026, ext. 21296 Email: *brianna@nova.edu*
Bachelor of Health Science—Online	College of Health Care Sciences Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: 800-356-0026, ext. 21222, 21239, or 21217 Email: *bhsinfo@nova.edu*
Bachelor of Science—Cardiovascular Sonography	College of Health Care Sciences Health Professions Division Nova Southeastern University, Tampa Campus 3632 Queen Palm Drive Tampa, Florida 33619	Phone: (813) 574-5372 Email: *yoders@nova.edu*
Bachelor of Science—Medical Sonography	College of Health Care Sciences Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: 800-356-0026, ext. 21964 Email: *jh1608@nova.edu*
Department of Health and Human Performance Elizabeth Swann, PhD, AT-C, Chair	College of Health Care Sciences Nova Southeastern University 3200 South University Drive Fort Lauderdale-Davie, FL 33328-2018	Phone: (954) 262-8334 Email: *swann@nova.edu*
Bachelor of Science—Athletic Training	College of Health Care Sciences Nova Southeastern University 3200 South University Drive Fort Lauderdale-Davie, FL 33328-2018	Telephone: (954) 262-8166 Email: *pv101@nova.edu*
Bachelor of Science—Exercise and Sport Science	College of Health Care Sciences Nova Southeastern University 3200 South University Drive Fort Lauderdale-Davie, FL 33328-2018	Phone: (954) 262-8046 Email: *gm588@nova.edu*
Department of Speech—Language Pathology Wren S. Newman, S.L.P.D., CCC-SLP, Chair	College of Health Care Sciences Nova Southeastern University 3100 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-7740 Email: *newmanw@nova.edu*
Bachelor of Science—Speech Language and Communication Disorders	College of Health Care Sciences Nova Southeastern University 3100 College Avenue Fort Lauderdale-Davie, Florida 33314	Phone: (954) 262-7782 or (954)-262-7905 Email: *medrich@nova.edu*
Department of Cardiopulmonary Sciences Lisa Farach, M.S., R.R.T., R.N., Chair	Bachelor of Science in Respiratory Therapy Nova Southeastern University Palm Beach Campus 11501 North Military Trail Palm Beach Gardens, FL 33410-6507	Phone: (561) 805-2301 or 800-541-6682, ext. 52301 Email: *lfarach@nova.edu*

For faculty listing, visit:
healthsciences.nova.edu/faculty/

College of Nursing

Office of the Dean Marcella Rutherford, Ph.D., Dean	College of Nursing Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: (954) 262-1963 Fax: (954) 262-1036 Email: *rmarcell@nova.edu*
Bachelor of Science in Nursing	College of Nursing Health Professions Division Nova Southeastern University 3200 S. University Drive Fort Lauderdale-Davie, Florida 33328-2018	Phone: (954) 262-1874 Email: *nsu_nursing@nova.edu*

For faculty listing, visit:
nursing.nova.edu/about/faculty.html

College of Psychology

Office of the Dean Karen Grosby, Ed.D., Dean	College of Psychology Nova Southeastern University Maltz Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-5701 Fax: (954) 262-3859
Department of Psychology and Neuroscience Glenn Scheyd, Ph.D., Chair	College of Psychology Nova Southeastern University Parker Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-7991 Fax: (954) 262-3760

For faculty listing, visit:
psychology.nova.edu/faculty/

College of Undergraduate Studies

Office of the Dean Brad Williams, Ed.D., Dean Daniel Sullivan, Ed.D., Associate Dean	College of Undergraduate Studies Horvitz Administration Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-7015 Email: *sullivan@nova.edu*

For administrators, faculty, and/or staff listing, visit:
nova.edu/undergraduatestudies/

Farquhar Honors College

Office of the Dean Don Rosenblum, Ph.D., Dean	Farquhar Honors College Mailman-Hollywood Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-8402 Fax: (954) 262-3930 Email: *DonR@nova.edu*

For faculty listing, visit:
honors.nova.edu/faculty-engagement.html

H. Wayne Huizenga College of Business and Entrepreneurship

Office of the Dean J. Preston Jones, D.B.A., Dean	H. Wayne Huizenga College of Business and Entrepreneurship Nova Southeastern University Carl DeSantis Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-5001 Email: *info@huizenga.nova.edu*

Office of Recruitment and Admissions	H. Wayne Huizenga College of Business and Entrepreneurship Nova Southeastern University Carl DeSantis Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Toll-free: 800-672-7223, ext. 25168 Phone: (954) 262-5168
Office of Program Management	H. Wayne Huizenga College of Business and Entrepreneurship Nova Southeastern University Carl DeSantis Building 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-8041

For administrators listing, visit:
huizenga.nova.edu/about/executiveadministration.cfm

For faculty listing, visit:
huizenga.nova.edu/about/faculty.cfm

Halmos College of Natural Sciences and Oceanography

Office of the Dean Richard E. Dodge, Ph.D., Dean	Halmos College of Natural Sciences and Oceanography Nova Southeastern University 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Phone: (954) 262-3700 Fax: (954) 262-4020 Email: *dodge@nova.edu*
Department of Biological Sciences Emily Schmitt Lavin, Ph.D., Chair	Halmos College of Natural Sciences and Oceanography Nova Southeastern University 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Email: *eschmitt@nova.edu*
Department of Chemistry and Physics Reza Razeghifard, Ph.D., Chair	Halmos College of Natural Sciences and Oceanography Nova Southeastern University 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Email: *razeghif@nova.edu*
Department of Marine and Environmental Sciences Bernhard Riegl, Ph.D., Chair	Halmos College of Natural Sciences and Oceanography Nova Southeastern University Ocean Campus 8000 North Ocean Drive Dania Beach, Florida 33004	Email: *rieglb@nova.edu*
Department of Mathematics Jason Gershman, Ph.D., Chair	Halmos College of Natural Sciences and Oceanography Nova Southeastern University 3301 College Avenue Fort Lauderdale-Davie, Florida 33314-7796	Email: *jgershma@nova.edu*

For faculty listing, visit:
cnso.nova.edu/overview/faculty-staff-profiles/

University-Wide Services Directory

Areas of Services	Contact Information		
Academic Advising	**Undergraduate Academic Advising Center**	Horvitz Administration Building , Second Floor, room 252 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7990 / 800-541-8862, ext. 27990 Fax: (954) 262-3709 Email: *UGadvising@nova.edu*
Admissions	**Office of Undergraduate Admissions**	Horvitz Administration Building, Room 192 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8000 Fax: (954) 262-3811 Email: *admissions@nova.edu*
Alumni Relations	**Office of Alumni Association**	Horvitz Administration Building, 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-2118 Email: *alumni@nova.edu* Website: *nova.edu/index.html#tabs1-alumni*
Athletics	**Athletics Department**	3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8250 Fax: (954) 262-3926 Email: *nsuathletics@nova.edu*
Career	**Office of Career Development**	Horvitz Administration Building, Room 152 Carl DeSantis Building Room 1042 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7201 Fax: (954) 262-3897 Email: *career@nova.edu*
Class Registration	**Office of the University Registrar**	Enrollment and Student Services 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7200 Fax: (954) 262-3256 Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings
Counseling	**Henderson Student Counseling Center**	3538 South University Drive (in University Park Plaza) Davie, FL 33328	Phone: (954) 424-6911 or (954) 262-7050 (available 24 hours, 7 days per week) Fax: (954) 424-6915
Disability	**Office of Student Disability Services**	Rosenthal Student Center 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7185 Fax: (954) 262-1390 Email: *disabilityservices@nova.edu*
Enrollment Verification	**Enrollment and Student Services (ESS)**	Enrollment and Student Services 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings
Financial Aid	**Office of Student Financial Assistance**	Enrollment and Student Services 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-3380 Fax: (954) 262-3966 Email: *finaid@nova.edu* Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings

Areas of Services	Contact Information		
Housing and Residential Life	**Office of Residential Life and Housing**	Nova Southeastern University The Commons Residence Hall 3625 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7052 Fax: (954) 262-3812 Email: *reslife@nova.edu*
International Affairs	**Office of International Affairs**	Horvitz Administration Building 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7240/7242 Fax: (954) 262-3846 Email: *intl@nova.edu*
Orientation	**Office of Orientation**	Student Affairs Building, Room 106 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8050 Email: *orientation@nova.edu*
Parking Decal	**Enrollment and Student Services**	Enrollment and Student Services 3301 College Avenue Fort Lauderdale, Florida	Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings
Recreation and Wellness	**Office of Recreation and Wellness**	Office of Recreation and Wellness Nova Southeastern University Don Taft University Center 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7301 Email: *recwell@nova.edu* Website: *www.rec.nova.edu*
Safety/Emergency	**Department of Public Safety**	Nova Southeastern University Campus Support Building 3301 College Ave Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8999 Fax: (954) 262-3924 Email: *Dispatch@nova.edu*
Student Affairs	**Division of Student Affairs**	Rosenthal Student Center, Suite 121 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7280, Fax: (954) 262-1390 Email: *studentaffairs@nova.edu*
Student Accounts, Loans, and Collections	**Office of the University Bursar**	Enrollment and Student Services Nova Southeastern University 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-5200 Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings
Student Media—campus newspaper, radio. and television	**Office of Student Media**	Office of Student Media Nova Southeastern University 3301 College Avenue Student Affairs Building, Third Floor Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-7188 Website: *nova.edu/studentmedia/*
Student Success	**Office of Undergraduate Student Success**	Carl DeSantis Building, 4th floor 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8386 Fax: (954) 262-2664 Email: *studentsuccess@nova.edu*
Student Support	**Office of Student Communication and Support**	Nova Southeastern University Carl DeSantis Building, Room 4050 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-5144 Email: *majneric@nova.edu*
Technology Support	**Help Desk**	Enrollment and Student Services Nova Southeastern University 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: 800-541-6682, ext. 24357 Email: *help@nova.edu* Website: *nova.edu/help/students/*

Areas of Services	Contact Information		
Transcripts	**Office of the University Registrar**	Enrollment and Student Services 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Request online via SharkLink For instructions on how to place a request, visit *nova.edu/registrar/services.html* Phone: (954) 262-7200 Fax: (954) 262-3256 Walk-in service: One-Stop Shops Horvitz and Terry Administration Buildings
Transfer Evaluation Services	**Transfer Evaluation Services**	Enrollment and Student Services Horvitz Administration Building, One-Stop Shop 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8117 Fax: (954) 262-2627 Email: *esstes@nova.edu*
Tutoring and Testing	**Tutoring and Testing Center**	Student Affairs Building, Second Floor 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-8350 (Tutoring) Phone: (954) 262-8374 (Testing) Fax: (954) 262-3935 Email: *tutoringservices@nova.edu*
Veterans Services	**Veterans Resource Center**	Rosenthal Student Center, Second Floor, Room 218 3301 College Avenue Fort Lauderdale, Florida 33314-7796	Phone: (954) 262-FLAG (3524) Email: *vrc@nova.edu*

Admissions

General Admission Information

Office of Undergraduate Admissions
Nova Southeastern University
Horvitz Administration Building, Room 192
3301 College Avenue
Fort Lauderdale, Florida 33314-7796
Phone:
in Broward County, (954) 262-8000
in Miami-Dade County, (305) 940-6447, ext. 28000
from other locations, 800-338-4723
from the Caribbean islands and Canada, 800-554-6682 ext. 28000

Fax: (954) 262-3811
Email: *admissions@nova.edu*

See the *Overview of Undergraduate Studies at NSU* section for more information about undergraduate majors, minors, and other programs offered by Nova Southeastern University.

Admission Procedures and Requirements

To learn specific admission policies, procedures, and requirements for each individual program or college, prospective undergraduate students should review the following catalog guidelines, as well as contact an admissions representative (see *General Admission Information*) or visit *nova.edu/undergraduate/admissions/*.

Application Deadlines (revised: see *Addendum I*)

Prospective undergraduate students may apply for admission and be accepted to NSU by stated deadlines. Students should apply early to ensure their application receives prompt consideration. For more information on a specific program's application deadline or how to apply for priority consideration, students should contact an admissions representative at the Office of Undergraduate Admissions at (954) 262-8000 or refer to *nova.edu/undergraduate/admissions/*.

Please note the following deadlines:

Program	Term	Application Deadline	Class start
A.A., B.A., and B.S. degrees— Abraham S. Fischler College of Education; College of Arts, Humanities, and Social Sciences; College of Engineering and Computing; College of Health Care Sciences; College of Psychology; H. Wayne Huizenga College of Business and Entrepreneurship; and Halmos College of Natural Sciences and Oceanography;	Fall	Early Decision and Early Action: November 1, 2015 Regular Decision: January 1, 2016	August 22, 2016
	Winter	November 28, 2016	January 2, 2017
	Summer	April 3, 2017	May 8, 2017
B.H.Sc. Online, B.S.R.T. Post-Professional (Online)	Summer	May 23, 2016	June 27, 2016
	Fall	August 22, 2016	September 26, 2016
	Winter	December 2, 2016	January 3, 2017
	Spring	March 3, 2017	April 3, 2017

Respiratory Therapy B.S.R.T. First-Professional (entry-level)	Fall	July 18, 2016	August 22, 2016
Entry B. S. N.*	Fall	June 1, 2016	August 22, 2016
	Winter	November 1, 2016	January 4, 2017
R.N. to B.S.N./M.S.N.*	Fall	July 30, 2016	August 22, 2016
	Winter	November 30, 2016	January 4, 2017
B.S. Cardiovascular	Summer	April 3, 2017	May 8, 2017
B.S. Medical Sonography	Summer	April 3, 2017	May 8, 2017

* Please see additional requirement in the Bachelor of Science in Nursing section on page 46.

Required Documentation

The Office of Undergraduate Admissions reviews applications and makes a determination of admittance or non-admittance. Factors affecting the committee's decision include high school grade point average (GPA), Scholastic Aptitude Test (SAT) or American College Test (ACT) scores, previous college performance, recommendations, interviews, student essays, and any other matters deemed relevant by the committee. Applicants must provide official high school and college transcripts from all previous schools attended, whether or not credit was granted. The high school transcript and SAT/ACT test scores may be omitted for students who have at least 24 transferable credits from a regionally accredited institution. The university aligns its admissions requirements with the federal regulations regarding academic eligibility qualifications to receive federal student aid funds with respect to the requirement of a high school credential or its equivalent. Based on information submitted by students in their Free Applications for Federal Student Aid (FAFSA), students may be required to submit additional documentation to verify the completion of high school or its equivalent.

Applicants who attended foreign institutions must have coursework from the foreign institutions evaluated for U.S. institutional equivalence. For more information, see the *International Student and Foreign Credentials in Special Circumstances* segment of this section (Admissions).

For information on additional documentation required for admittance into specific majors or programs, students should review the following individual program requirements.

Bachelor of Science in Respiratory Therapy First Professional and Post-Professional Programs (revised: see *Addendum J*)

For prerequisite information and admissions requirements, please visit *healthsciences.nova.edu/rrt.*

In addition to the documents described in the *Required Documentation* section, students applying for entry to the Bachelor of Science in Respiratory Therapy—First Professional Program must submit evidence of the following:

- Completion of 41 credits, with a minimum grade of C, from a regionally accredited college of university.
- Minimum cumulative GPA of 2.5 on a 4.0 scale from all undergraduate work.
- Minimum cumulative Science GPA of 2.5.
- Application and a non-refundable application fee.

Students applying for the Post-Professional (online) must submit evidence of the following:

- NBRC Registration as a Registered Respiratory Therapist. (A block grant of 45 credits will be applied toward the B.S.R.T. upon proof of RRT and Licensure where applicable, and successful completion of all B.S.R.T. course work).
- A license to practice respiratory therapy, where applicable.
- Application and non-refundable application fee.
- Official transcripts from each high school, university/college attended.
- Completion of the following prerequisite general education coursework, with a minimum grade of C. All general

education coursework will be evaluated for equivalency.

- Students must have at a minimum 2 Written Communication above 1500 level (6 credits), 2 Math above 1040 level (6 Credits)—one of which much be college algebra, 2 Social and Behavioral Sciences (6 Credits), 2 Humanities (6 credits), and 2 Natural and Physical Sciences (6 credits) to enter the B.S.R.T. Post-Professional program.
- Students may be concurrently enrolled while completing any additional general education requirements. Credits can be transferred in prior to completion of the program. Degree will not be granted until all general education requirements are met.

Bachelor of Health Science Online Programs, Bachelor of Science—Cardiovascular Sonography, and Bachelor of Science—Medical Sonography

For prerequisite information and admissions requirements, please visit:

B.S Cardiovascular Sonography: *healthsciences.nova.edu/healthsciences/cardiovascular/*
B.S Medical Sonography: *healthsciences.nova.edu/healthsciences/sonography/*

Prospective Cardiovascular, B.H.Sc. Online, and Medical Sonography students are selected by the Department of Health Science committee on admissions through consideration of the overall qualities of the applicant.

The B.H.Sc.—Online program will admit midlevel clinicians and allied health professionals with diverse education, work, and life experiences who have demonstrated capacity to pursue the course of study and increasingly responsible positions in health care.

The B.S.—Medical Sonography program will admit individuals with diverse education, work, and life experiences who have demonstrated capacity to pursue the course of study in medical sonography.

The B.S.—Cardiovascular Sonography program will admit individuals with diverse education, work, and life experiences who have demonstrated capacity to pursue the course of study in cardiovascular sonography.

Areas of consideration include application content, academic record, prior scientific, health care, or elder care work or volunteer experience in a health care facility, letters of evaluation, and personal motivation. The Bachelor of Science—Cardiovascular Sonography and Bachelor of Science—Medical Sonography require a personal interview. In special circumstances, a personal interview with members of the committee may be required (phone interview may be substituted) for Bachelor of Health Science Online. All interview expenses are the responsibility of the applicant.

Many criteria, in addition to academic credentials, play a role in the process for the B.H.Sc Online, Bachelor of Science in Cardiovascular Sonography and Bachelor of Science in Medical Sonography. While those programs allow the student to demonstrate academic capability, they do not assure admission to any graduate school. Admission to the Cardiovascular, B.H.Sc Online and Medical Sonography programs will not guarantee admission to any other program at Nova Southeastern University.

Upon receipt of the completed application, fees, credentials, and transcripts, the admissions officers and the College of Health Care Sciences will review all material for evidence of the proper education, training, and background to enter the B.H.Sc. Online, Cardiovascular, and Medical Sonography programs.

In addition to the documents described in the Required Documentation section, students applying for entry to the B.H.Sc.—Online Program must submit evidence of the following:

- Completion prior to matriculation of three semester hours (or equivalent) of college-level written composition from a regionally accredited college or university with a minimum grade of C (GPA of 2.0 on a 4.0 scale).
- An associate's degree in a professional field of health from a regionally accredited college or university with a minimum cumulative GPA of 2.6 on a 4.0 grading scale OR a post-high school level diploma or certificate of completion in a field of health care with a minimum cumulative GPA of 2.6 on a 4.0 grading scale. In order for this

coursework and education to be considered for credit, an applicant may be required to submit a student-prepared learning portfolio requesting assessment of prior experiences for academic credit. This will describe all traditional, online, military, and other health care education, as well as work-related experience and health care-related conferences attended. A resume or CV, transcripts, and/or official documentation of attendance must accompany all prior learning portfolios. The admissions committee will review the portfolio to determine the amount of credit given for prior learning.

- Documented evidence demonstrating education or experience in the health care field within the past five years.
- All applicants must show evidence of computer skills through course work or self-study prior to the end of the first term. Students may obtain instruction through the NSU Student Microcomputer Laboratory or other training facilities.
- Two letters of evaluation from individuals other than relatives, such as academic advisors, professors, or clinical or nonclinical supervisors, or community associates.
- Copies of national and or state professional certification, licensure, or registration, if applicable.

In addition to the documents described in the Required Documentation section, students applying for entry to the B.H.Sc**.—Online Pre-MOT Track** program must submit evidence of the following:

B.H.Sc. Pre-MOT Track Admissions Requirements

- Prior to matriculation, all applicants must have 3 credits (or the equivalent) of college-level written composition from a regionally accredited college or university with a minimum grade of C (GPA of 2.0 on a 4.0 grading scale).
- An associate's degree in occupational therapy from an Accreditation Council for Occupational Therapy Education (ACOTE®)-accredited program at a regionally accredited college or university with a minimum cumulative GPA of 2.6 on a 4.0 grading scale and initial certification by the National Board for Certification in Occupational Therapy, Inc. (NBCOT®) as a Certified OT Assistant (COTA).
- Documented evidence demonstrating education or experience in the health care field within the past five years.

For more information about admissions requirements for the entry-level Master of Occupational Therapy program, visit *healthsciences.nova.edu/healthsciences/bhs/pre-mot-track.html* or email *hpdinfo@nova.edu*, or call 800-356-0026, ext. 21101.

B.H.Sc. Pre-O.T.D. Track Admissions Requirements

- Prior to matriculation, all applicants must have 3 credits (or the equivalent) of college-level written composition from a regionally accredited college or university with a minimum grade of C (GPA of 2.0 on a 4.0 grading scale).
- An associate's degree in occupational therapy from an Accreditation Council for Occupational Therapy Education (ACOTE®)-accredited program at a regionally accredited college or university with a minimum cumulative GPA of 2.6 on a 4.0 grading scale and initial certification by the National Board for Certification in Occupational Therapy, Inc. (NBCOT®) as a certified OT Assistant (O.T.A.).
- Documented evidence demonstrating education or experience in the health care field within the past five years.

B.H.Sc. O.T.D. Admissions Requirements—Occupational Therapy Assistants Applicants

The entry-level Doctor of Occupational Therapy (O.T.D.) Program selects students based on grade point average (GPA), Graduate Record Examination (GRE) scores, a written essay, letters of recommendation, and an interview. These scores will be factored into the rubric that the department uses in evaluating applicant qualifications. Strong candidates will also demonstrate concern for people of diverse backgrounds, as well as the ability to use judgment, insight, and reasoning.

- Prior to matriculation, all applicants must have earned a cumulative average of 3.0 or better on a 4.0 scale in B.H.Sc. courses
- Earned a grade of 2.0 or better in all prerequisite courses
- Submit minimum GRE scores that are less than five years old for all three areas of the general test (verbal, quantitative, and analytical writing)
- Submit a written essay
- Submit three letters of recommendation
- Demonstrate computer and word processing competency to include, but not limited to, World Wide Web navigation, software and learning management system (e.g., BlackBoard) utilization, e-correspondence, database explorations, etc.

- If applicable, have a Test of English as a Foreign Language (TOEFL) score of 550 or higher for the written test or 213 or higher for the computer-based test OR have a Pearson Test of English-Academic (PTE-Academic) score of 54 or higher

Upon successful completion of the B.H.Sc. degree, the above requirements, and an interview with the admissions team of the NSU Occupational Therapy Program, students will be offered a seat in the NSU Doctor of Occupational Therapy Hybrid Program at NSU's regional campus in Tampa, FL. (O.T.D.). This interview will be scheduled after the completed application has been submitted.

For more information about admissions requirements for the entry-level Doctor of Occupational Therapy program, visit *healthsciences.nova.edu/ot/* or email *hpdinfo@nova.edu*, or call 800-356-0026, ext. 21101 or (813) 574-5278.

In addition to the documents described in the *Required Documents* section, students applying for entry to the **B.S. Cardiovascular Sonography** or to the **B.S. Medical Sonography** programs must submit evidence of the following:

- A minimum of 30 semester credits—6 credits in Physical/Human/Biological Science (including 3 required credits in General Anatomy and Physiology I, and 3 credits in Physics), 6 credits of Social and Behavioral Sciences, 6 credits of Humanities, 6 credits of English Composition, and 6 credits of College Math above 1040 level—from a regionally accredited college or university with a minimum cumulative GPA of 2.6 on a 4.0 grading scale. Only courses with a minimum GPA of 2.0 on a 4.0 grading may be considered for possible transfer of credit.
- With case-by-case basis approval, up to 9-credit hours of a combination of English, Arts and Humanities, Social and Behavioral Sciences, and one Mathematics course may be completed as co-requisites during the program.
- All applicants must show evidence of computer skills through coursework or self-study prior to the end of the first term. Students may obtain instruction through the NSU Student Microcomputer Laboratory or other training facilities.
- Two letters of evaluation from individuals other than relatives such as academic advisors, professors, or clinical or nonclinical supervisors, or community associates.
- Graduates from programs other than those from regionally accredited colleges or universities must submit a student-prepared learning portfolio requesting Assessment of Prior Experiences for Academic Credit.
- Copies of national and or state professional certification, licensure or registration, if applicable.
- A complete resume or CV.

Bachelor of Science in Nursing

In addition to the documents described in the *Required Documentation* section, students applying for entry to the Bachelor of Science in Nursing—Entry Track must submit evidence of the following:

- Applicants must have completed a minimum of 39 semester hours (or equivalent quarter hours) of specific undergraduate coursework from a regionally accredited college or university prior to matriculation into the nursing program with an overall 3.0 or higher GPA and 2.75 in all science pre-requisites, on a 4.0 scale.
- Official transcripts indicating completion of each prerequisite course with a grade of C or higher. (Students may submit transcripts if enrolled in a final semester of courses in progress.) Preference may be given to students with no repeated or withdrawn coursework.
- Eligible students are required to successfully complete an interview prior to final acceptance into College of Nursing programs.

The entry B.S. in Nursing program participates in Nursing's Centralized Application Service (NursingCAS). The NursingCAS application must be received no later than May 15 to be considered for the August class and October 15 to be considered for the winter class.

In addition to the documents described in the *Required Documentation* section, students applying for entry to the **Bachelor of Science in Nursing—R.N. to B.S.N. Track** must submit evidence of the following:

- Overall GPA 2.6 or higher on a 4.0 scale.
- Proof of current, unencumbered registered nurse (R.N.) licensure.

- Licensure must remain current throughout the program. Students who do not hold a United States (U.S.) nursing license must receive prior approval from the department chair and College of Nursing dean for admission into the program.

The R.N. to B.S.N. program participates in the centralized application service, NursingCAS. The NursingCAS application must be received no later than July 15 to be considered for the August class and November 15 to be considered for the winter class.

In addition to the documents described in the *Required Documentation* section, students applying for entry to the **Bachelor of Science in Nursing—R.N. to M.S.N. Track** must submit evidence of the following:

Initial admission criteria would be the current admission requirements for the RN to BSN degree:

- Applicants must have an overall GPA of 2.6 or higher on a 4.0 scale.
- Applicants must have a current/active United States R.N. license. If the applicant resides out of the United States and does not hold this license, the applicant's application must be approved by the College of Nursing associate dean of the program or the dean.
- Students interested in the R.N. to M.S.N. program must be able to complete all pre-requisite and general education courses prior to the end of their first semester.
- All students in the R.N. to M.S.N. program will be assessed for eligibility by the program director at the end of the first and third semesters.
- The student will complete three terms of B.S.N. coursework. At the end of three terms, the student must meet the 3.0 or higher GPA admission requirement for the M.S.N. The 3.0 GPA will be calculated from the B.S.N. courses completed at NSU. Students enrolled in the R.N. to M.S.N. program who do not meet the 3.0 GPA requirements in the third term will be moved to the R.N. to B.S.N. program and complete the two additional terms for the B.S.N. The department chairs for the R.N. to B.S.N. and the graduate department chair will review applicants at the completion of term III. Written notification to the student regarding their progression into the M.S.N. program will be done by the College of Nursing.

Traditional Day Students—Full-Time

In addition to the documents described in the *Required Documentation* section, **freshman applicants** must submit all final, official transcripts reflecting academic coursework prior to enrollment and final grades earned (e.g., current high-school transcript or GED equivalent), including proof of graduation and official SAT or ACT scores by the final day of the drop and add period noted on the academic calendar for the student's first semester at Nova Southeastern University. Prospective undergraduate students who have graduated high school at least two years prior without attending post-secondary schools are not required to submit SAT or ACT scores.

In addition to the documents described in the *Required Documentation* section, **transfer applicants** with at least 24 transferable credits must submit official, final college transcripts from all previous schools attended, whether or not credit was awarded, reflecting final grades earned. If, at the time of application, students have any courses in progress at another institution, a final, official transcript must be submitted. **Transfer applicants** with less than 24 transferable credits must submit official, final college transcripts from all previous schools attended, whether or not credit was awarded, reflecting final grades earned, in addition to submitting all final, official high school transcripts reflecting academic coursework, and SAT or ACT scores.

Traditional day students, on receiving notification of acceptance, should promptly inform the Office of Undergraduate Admissions by submitting a $200 enrollment deposit to be credited toward tuition.

Non-Traditional Students—Evening, Online, and Off-Campus

In addition to the documents described in the *Required Documentation* section, all applicants to the **non-traditional programs (evening, online, or off-campus)** must submit proof of high school graduation (or GED equivalent) if they have not previously attended a college-level institution. Transfer students with at least 24 transferable credits, must submit official college transcripts reflecting final grades earned from all previous schools attended, whether or not credit was

awarded. Transfer students with less than 24 transferable credits must submit official, final college transcripts from all previous schools attended, whether or not credit was awarded, reflecting final grades earned, in addition to submitting all final, official high school transcripts reflecting academic coursework, and official SAT or ACT scores. If, at the time of application, students have any courses in progress at another institution, a final, official transcript reflecting final grades earned must be submitted. All final, official documents must be submitted by the final day of the drop and add period noted on the academic calendar for the student's first semester at Nova Southeastern University.

Special Programs

Dual Admission Program Applications

NSU offers dual admission to a select number of highly motivated, academically talented students interested in pursuing both an undergraduate degree and future graduate studies. For information and a list of dual admission programs, see the *Dual Admission Program* in *Academic Policies and Procedures* section of this catalog. Students interested in applying for dual admission programs should speak with an undergraduate admissions counselor to determine eligibility.

Honors Program Applications

Facilitated by the Farquhar Honors College, the Undergraduate Honors Program fosters intellectual community both within and across academic disciplines by offering special coursework, reading groups, and workshops to help students prepare for graduate school, advanced research, study abroad, and post-baccalaureate fellowships. Students must complete a separate application for the Undergraduate Honors Program, available at *honors.nova.edu*. Academically motivated students are encouraged to apply.

The Honors Program application includes two essay questions. Essays are reviewed by a faculty committee. Applications are accepted and reviewed on a continuous basis year round, and interested students are encouraged to apply as early as possible. Application review for the fall or winter semester closes six weeks prior to the start of that semester. Prospective students may submit an application for the Undergraduate Honors Program prior to being admitted to NSU, and students who apply to Honors may also apply for other special programs.

For more information, see *Undergraduate Honors Program* in the *Farquhar Honors College* section of the catalog

Razor's Edge Program Applications

Nova Southeastern University offers five programmatic scholarship programs. These four-year residential programs combine curricular and co-curricular experiences intended to capture the unique interests and talents of prospective and current students. Students who complete a specific program will earn an academic minor that will be on their official NSU transcript. In return for their participation, students are awarded an annual renewable scholarship. For more information, please visit *nova.edu/razorsedge/*.

Special Circumstances

Home-Schooling

Nova Southeastern University welcomes undergraduate applicants who have been home-schooled for their secondary school education. Home-schooled applicants should provide a notarized transcript or official SAT or ACT scores to demonstrate high-school equivalence. As with all candidates for admission, each applicant is considered on his or her

individual merits and potential for academic success at NSU. Acceptance is not based on any one criterion, and in appropriate cases, requirements for documentation may vary or be modified.

International Students and Foreign Credentials

International students applying to NSU's Fort Lauderdale-Davie campus, or to any of the university's Florida NSU regional campuses, are required to obtain a student (F-1) visa or an exchange visitor (J-1) visa. Students are not permitted to study in the United States on a visitor (B-2) visa. To apply, international students should submit an online application form and a $50 nonrefundable application fee, following the program's application instructions.

Transcript Evaluation

Applicants with foreign credentials must have the equivalent of a United States high school diploma. Applicants should submit all secondary school and college-level transcripts and certificates and provide official English-language translations for any transcripts that are not already in English. Credits earned at non-U.S. institutions must be evaluated for equivalence by an outside agency approved by the National Association of Credential Evaluation Services (NACES). Applicants are responsible for all evaluation fees. Foreign coursework must be evaluated with a course-by-course evaluation by an NACES-approved evaluation company, such as:

World Education Services
Attention: Documentation Center
P.O. Box 5087
Bowling Green Station
New York, New York 10274-5087
Phone: (212) 966-6311
Email: *wes.org*

Josef Silny & Associates
7101 SW 102nd Avenue
Miami, Florida 33173
Phone: (305) 273-1616
Fax: (305) 273-1338 fax
Website: *jsilny.com*
Email: *info@jsilny.com*

Educational Credential Evaluators
P.O. Box 514070
Milwaukee, Wisconsin 53203-3470
Phone: (414) 289-3400
Email: *ece.org*

A complete list of NACES-approved evaluation companies can be found at *naces.org/members.htm*.

English Proficiency Requirements

Applicants to NSU's colleges whose native language is not English, are required to demonstrate English proficiency by one of the following methods:

1. Test of English as a Foreign Language (TOEFL) score of 213 on the computerized test; 550 on the paper test format, or 79 on the Internet format.
2. International English Language Testing System (IELTS) requires a 6.0 on the test module.
3. Scholastic Assessment Test (SAT) with a score of at least 480 in the critical reading section, or the American College Test (ACT) with a score of at least 20 on the reading section.
4. Applicants may also show English proficiency by achieving a grade of C or higher in a freshman level English composition course at a U.S. regionally accredited institution.

5. Applicants may also show English proficiency by passing Academa II Levels from The TALK School of Languages.
6. Applicants may also show English proficiency by achieving a grade of 54 or higher on the Pearson Test of English Academic (PTE).

Official test scores results should be sent directly to Nova Southeastern University from the testing agency. Students who are applying to majors in the College of Nursing do not need to demonstrate English proficiency according to one of the methods listed above because these students are required to complete English composition courses, as well as other college-level coursework, prior to becoming eligible to apply.

Financial Documents

International applicants must submit an original bank statement or original letter from a financial institution indicating ability to meet all costs of education without financial aid from NSU. The minimum amount is determined by a budget prepared by the NSU Office of Student Financial Assistance. A notarized letter from a sponsor is required if a public or private organization or an individual sponsors the student. The financial guarantee must include provisions for any dependents who will be residing with the student in the United States. Students should check with the Office of International Affairs at *nova.edu/internationalstudents/current/payments.html*.

Medical Insurance

International students must purchase medical insurance (J-1 visas only). Students should contact the international student academic advisor for further information or call (954) 262-4060.

Acceptance Letters and Deposits

After NSU has received all of the above information and has granted admission, an acceptance letter will be sent. The process of issuing the I-20 will begin only after all final, official documents have been received, and on receipt of a $200 tuition deposit. Requirements for international online students may differ. The deposit is nonrefundable.

Non-Degree-Seeking Students

NSU provides opportunities for individuals who wish to continue their education without seeking a degree from the university. A non-degree-seeking student is one who takes courses without pursuing a degree. If a non-degree-seeking student decides to pursue a degree at NSU, the student must submit a new admission application and meet all the admission requirements to be considered for admission to his or her degree program of choice. Such a student may request the application of credits taken as a non-degree-seeking student in accordance with the transfer policy of the program to which the student is applying. Enrollment in courses as a non-degree-seeking student does not guarantee acceptance into a Nova Southeastern University degree program.

Non-degree-seeking students are not eligible for financial aid, unless they are pursuing a financial aid-eligible certificate program. Contact an admissions or financial aid counselor for details. Students must submit a transcript indicating completion of high school or GED equivalent, or a transcript from the last college attended.

Non-degree-seeking students may take up to 24 credit hours or enroll in a specialty program without being admitted to a degree program. The 24-credit limit does not apply to students who have already earned a baccalaureate degree. Students seeking a paralegal certificate must hold a baccalaureate degree.

College of Health Care Sciences

Students may not take courses in the cardiovascular sonography program, medical sonography program, or respiratory therapy program on a non-degree seeking basis.

Non-degree-seeking students seeking to take courses in the Bachelor of Health Science—Online Program must complete

the following admission requirements:

- prior to matriculation, three semester hours (or equivalent) of college-level written composition from a regionally accredited college or university with a minimum grade of C (GPA of 2.0 on a 4.0 scale);
- associate's degree in a field of health from a regionally accredited college or university with a minimum cumulative GPA of 2.6 (from a nursing program) or 2.6 on a 4.0 grading scale

  OR

- a diploma or certificate of completion in a field of health care with a minimum cumulative GPA of 2.6 on a 4.0 grading scale.
- Due to the limited number of seats available in the program, preference for admission and registration will be given to degree-seeking students. Students are limited to a maximum of 9 credit hours of B.H.Sc. coursework. All applicants must show evidence of computer skills through coursework or self-study prior to the end of the first semester.

College of Nursing

Non-degree-seeking students are not eligible to take courses in the College of Nursing.

Second Bachelor's Degree

Individuals who already hold a bachelor's degree from an accredited institution, including NSU, may earn a second bachelor's degree from NSU by completing a minimum of 30 additional credits toward the second degree. At least 50 percent of the major must be taken at NSU.

Concurrent Enrollment

Students enrolled at NSU are generally not permitted to be concurrently enrolled at other institutions. Once students enroll at NSU, they may not take courses at other colleges or universities for the purpose of earning an NSU degree without specific, written approval from their college. Written approval must be obtained before registering for a non-NSU course. See the *Enrollment at Other Universities* Academic Policies and Procedures of this catalog for policies and requirements.

Delayed Enrollment and Reapplication for Admission

Students who apply for admission but do not complete the admissions process, or are admitted but never attended NSU, may reactivate their applications within a period of 12 months after the intended semester of enrollment. For example, a student admitted for the fall semester must enroll no later than the following fall semester. After the 12 month deadline, students must reapply for admission and a new application fee will be assessed. Students who wish to apply for readmission must clear all financial and academic holds from their record before a readmission application is processed.

Transfer Credits

NSU welcomes undergraduate students who have studied and earned college credits at other institutions. Students may access the online interactive NSU Transfer Credit System at *nova.edu/tes* to view and create an unofficial equivalency review of credits earned and their respective NSU equivalencies. For an official review, transcripts from all previously attended institutions should be submitted to:

Nova Southeastern University
Enrollment Processing Services
Attn: Undergraduate Admissions (UGA)
P.O. Box 29900
Fort Lauderdale, Florida 33329-9905

Electronic transcripts can be sent to *electronictranscripts@nova.edu.*

Once at least one transcript from each previously attended institution has been received and the student has been admitted to the university, the Office of Transfer Evaluation Services (TES) will evaluate the student's transcripts. Please note that students will not be fully admitted to the university until all final official transcripts have been received.

Award of transfer credit is based upon faculty review that focuses on comparability of learning outcomes. Transfer credit letters and course evaluation reports are sent in the mail and include instructions on how to run an online degree audit (Curriculum, Advising & Program Plan-CAPP) as well as recommendations on courses to take.

Admissions and Transfer Policy for Students Transferring from Institutions Accredited by the Southern Association of Colleges and Schools (SACS)

Transfer credit will be accepted at NSU for students who have earned an Associate in Arts Degree or 60 credits from a SACS-accredited institution and are in good academic standing since the 1992 inception of the Articulation Agreement between Independent Colleges and Universities of Florida (ICUF) and the Division of Florida Colleges. Transfer students who have earned an Associate in Arts Degree or 60 credits from a SACS-accredited institution and are in good academic standing, as defined by the transfer institution, shall be admitted to NSU with junior standing.

Transfer students under this policy shall be governed by the graduation requirements published in the NSU Catalog at the point of matriculation.

Transfer students may be required to complete additional courses at NSU prior to the awarding of the baccalaureate degree. The additional courses may include general education requirements and may result in students graduating with more than 120 credits. Should the maximum timeframe for Satisfactory Academic Progress (SAP) be exceeded, their financial aid may be impacted.

Transfer credit will be accepted for a grade of D provided credit has been earned and the student's academic program at NSU permits the grade.

For more information on transferring credit, students should visit TES online at *nova.edu/tes/* or speak with a transfer evaluation services counselor by calling (954) 262-8117 or 800-806-3680, ext. 28117.

Transferring NSU Credits to Other Institutions

Credits earned at NSU are eligible for transfer to programs at other institutions. Students should contact the institution of intended transfer for their policies related to accepting transfer credit.

Assessment of Prior Experiences for Academic Credit

NSU undergraduate students may convert prior professional and other life experiences into academic credit. All requests for prior learning credit must be initiated before a student completes 24 credits at NSU. Credits earned through prior learning will be posted to the student's academic record after 12 credits are successfully earned at NSU.

1. Advanced Placement and International Baccalaureate Credit

Students who have completed Advanced Placement (AP) or International Baccalaureate (IB) courses may receive college credit toward a bachelor degree at NSU. Please visit the Office of Transfer Evaluation online at *nova.edu/tes* for a course-by-course listing.

Official test scores should be sent directly from the appropriate agency to:

Nova Southeastern University
Enrollment Processing Services
Attn: Undergraduate Admissions (UGA)
P.O. Box 299000
Fort Lauderdale, Florida 33329-9905

2. Full Portfolio

Students who intend to challenge a specific college-level course must submit a full portfolio that presents their knowledge of the course topic. Full portfolios are evaluated by an appropriate faculty member. Students may earn a maximum of 25 percent of their credits through the full portfolio process. Full portfolios include course syllabus or course description, resume, autobiography, written skills inventory that compares learning experiences with equivalent course subject matter, and other relevant documents, including certificates, training documents, and verification of employment. Students interested in submitting a full portfolio for academic credit should work directly with the Office of Transfer Evaluation Services.

3. General and Subject Testing

Students may meet certain general education, major, and elective requirements in a variety of areas through objective tests in which they demonstrate specific subject knowledge. These tests include the College Board's College-Level Examination Program (CLE), DANTES Subject Standardized Test (DSST), and New York University proficiency exams. Students who plan to take these exams as prerequisites for other courses must successfully complete the exams before registering for more advanced coursework. Students who enroll in courses that require TECH 1110 (Technology in the Information Age) as a prerequisite may satisfy the prerequisite by taking an exam that tests their computer knowledge. Students must contact their academic advisor before taking any exams.

4. Standard Grants

NSU has established a series of standard college credit grants for common, documented learning experiences. These experiences include certain training courses, certificates, and licenses.

For more information on assessment of prior experiences, students should visit TES online at *nova.tes/* or speak with a transfer evaluation services counselor by calling (954) 262-8117 or 800-806-3680, ext. 28117.

Academic Policies and Procedures

Academic Advising

Abraham S. Fischler College of Education

College of Arts, Humanities, and Social Sciences

College of Engineering and Computing

College of Psychology

Farquhar Honors College

H. Wayne Huizenga College of Business and Entrepreneurship

Halmos College of Natural Sciences and Oceanography

Academic advisors provide students with confidential academic, social, and developmental advising to ensure they receive the individual attention they need to succeed. Students are required to contact an academic advisor prior to registering for their first semester. It is strongly recommended that all undergraduate students entering a program, changing majors or specializations/concentrations, inquiring about transfer of credits, or attempting to meet specific renewal or certification requirements contact an academic advisor for assistance. Academic advisors additionally serve as liaisons and referral agents by helping students gain needed assistance from other NSU divisions or from the community.

Students should maintain regular contact with their academic advisors throughout their academic careers at NSU. Students are encouraged to consult with an academic advisor if they believe their rights as students are being, or have been, violated. Students are also encouraged to discuss aspects of their education with faculty members, and program administrators.

Undergraduate Academic Advising Center
Horvitz Administration Building, Second Floor, Room 252
Phone: (954) 262-7990 | 800-541-6682, ext. 27990
Fax: (954) 262-3709
Email: *UGadvising@nova.edu*

College of Health Care Sciences

Academic Advising and Administrative Support

Each student is required to contact the program director for academic advising prior to beginning the program. The program director and the department coordinator will advise and assist the student during their matriculation into the program. Students may communicate with the director and coordinator via phone, fax, email, or in person if they visit campus.

Department of Cardiopulmonary Sciences
Phone: (561) 805-2301

Department of Health and Human Performance
B.S. in Athletic Training and B.S. in Exercise and Sport Science
Telephone: (954) 262-8334

Department of Health Science—Cardiovascular Sonography
Phone: (813) 574-5372

Department of Health Science—Online
Phone: (954) 262-1239 for administrative support | (954) 288-9695 for academic advising

Department of Health Science—Medical Sonography
Phone: (954) 262-1964

Department of Speech and Language Pathology
Telephone: (954) 262-7782 or (954) 262-7905

College of Nursing

A designated nursing faculty member will help students with course selections for each semester. Prior to selecting courses for the next semester, students should review all nursing program course requirements and tracking. If students have difficulty with registration or financial aid issues, they should contact their program director immediately for assistance. All students are asked to meet with their designated faculty advisor each term, including the last term of coursework prior to graduation.

Academic Advising
Phone: (954) 262-1824

Review of Academic Progress

Policies outlined below apply to all undergraduate programs. However, if students are admitted to and active in the professional phases of selected professional programs within the Colleges of Health Care Sciences or Nursing, they are subject to higher levels of academic performance than the university standard, which will be reviewed and addressed by the host colleges in accordance with their program and accreditation standards. Please refer to the College of Health Care Sciences and College of Nursing handbooks below.

- *College of Health Care Science Student Handbook: https://nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Academic Progress, as defined in the following section, is separate from the standards for Satisfactory Academic Progress (SAP) for financial aid purposes. For detailed information about maintaining SAP for financial aid eligibility, visit *nova.edu/sap.*

Nova Southeastern University is committed to ensure accurate tracking and review of a student's permanent academic record. Academic transcripts serve as documentation for the student and as a record for other agencies (employers, other academic institutions, etc.). The academic transcript reflects the record of courses attempted, grades received, degrees sought and/or earned (with award and academic completion dates), practicum/dissertation titles, honors awarded, and disciplinary actions which result in a student's suspension or expulsion from the institution. Additionally, the student's academic standing is reflected on an academic transcript to provide a more complete depiction of the student's academic history. The following designations provide for a student's status as it relates to her/his End-of Term Academic Standing within the university:

Good Academic Standing

By definition, a student is in good academic standing unless he or she is not making sufficient progress toward degree completion and/or is placed on academic probation, academic suspension, or academic dismissal.

Academic Warning

Academic warning will be assigned for any semester in which a student has a semester GPA below 2.0 (regardless of cumulative GPA). A student on warning will receive a formal communication via email. Academic warning will not be a designation of any kind on a student's transcript. Academic warning will be considered a warning to the student and is not a designation of poor academic standing within the university.

Academic Probation

Academic probation is assigned when a student's cumulative GPA falls below a 2.0 AND the student was already on academic warning. Academic probation will be designated on a student's transcript. To be removed from AP, a student

must raise his/her cumulative AND semester GPA to a 2.0 or higher by the end of the following semester the student is enrolled. A student may remain on academic probation with a cumulative GPA below 2.0 if the semester GPA is 2.0 or higher. A student on probation will receive a formal communication via email.

Academic Suspension

A student is placed on academic suspension when he or she has a cumulative GPA below 2.0 AND a semester GPA below 2.0 AND was already on academic probation. Suspension results in the cessation of enrollment/registration for the next semester (summer semester does not satisfy the period of academic suspension). A student may not apply any credits earned during suspension (one semester) toward their NSU degree. Academic suspension carries a permanent designation on a student's transcript. A student on suspension will receive a formal communication via email and a hard copy mailed to their permanent address.

Academic Dismissal

A student is placed on academic dismissal when he or she has a cumulative GPA below 2.0 AND a semester GPA below 2.0, AND was previously academically suspended, AND was already on academic probation. Academic dismissal carries a permanent designation on the student's transcript. A student on dismissal will receive a formal communication via email and a hard copy mailed to their permanent address.

Increased Standards

Due to external factors including but not limited to areas such as regional and national accreditation as well as state licensure, certain colleges/programs reserve the right to require a level of academic performance that is greater than the base level established by the university for all undergraduate students. Please refer to the College of Health Care Sciences and College of Nursing handbooks below.

- *College of Health Care Science Student Handbook: https://nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Appeals

A student may appeal a determination of academic suspension or academic dismissal within ten days of notification. The student will be automatically dropped from classes on determination of suspension or dismissal. The student may not attend class during a period of appeal. Appeals are reviewed and considered by the Academic Progress Committee, comprised of faculty members.

Petition for permission to enroll after academic suspension:

Students who have been suspended and wish to return to NSU must petition for re-enrollment by the date indicated on their suspension notice. No coursework completed at another institution during the period of suspension will be considered applicable to an NSU degree program.

Students who are approved to re-enroll after academic suspension may register for classes for the next semester. These students return on academic probation.

If students have not registered for coursework at NSU for more than one year, they must reapply for admission and their major program's required curriculum will be re-evaluated according to the most current *NSU Undergraduate Student Catalog*.

Petition for permission to enroll after academic dismissal:

Academically dismissed students may petition for permission to reapply only after two or more years have elapsed following dismissal. No coursework completed at another institution during the period of dismissal will be considered applicable to an NSU degree program. Only documented, extreme extenuating circumstances will be considered for a student to become eligible to reapply to NSU following an academic dismissal.

College of Nursing students, please refer to *https://nova.edu/publications/nursing/student-handbook/*.

The petition will be reviewed by the Academic Progress Committee, who will submit a recommendation to the Dean of the College of Undergraduate Studies or designee, who will make a final decision and communicate with the student. This decision determines if the student is eligible to reapply for admission to NSU.

If students have not registered for coursework at NSU for more than one year, they must reapply for admission and their major program's required curriculum will be re-evaluated according to the most current NSU Undergraduate Student Catalog.

Address and Name Changes

NSU maintains student contact information through SharkLink at *https://sharklink.nova.edu*, including current mailing address and phone number. Students should update their address and phone number in SharkLink and submit a request for a name change, along with supporting legal documentation, to *nsuregistrar@nova.edu*.

Attendance Policy

As the educational process at NSU depends on a close working relationship between students and faculty members, students are expected to attend class regularly. Specific requirements are established by individual instructors and are communicated in the syllabus or at the first class meeting. The administration supports faculty attendance requirements. Students are responsible for the academic consequences resulting from class absences. Missed assignments/tests can be made up solely at the discretion of the course professor/instructor. Students who miss a class must inform instructors before the class meeting. Students who miss class because of an illness or other emergency should contact the instructor as soon as possible to arrange for make-up work.

The university reserves the right to administratively withdraw any student from a course if that student fails to notify instructors and/or to appear on the first scheduled day of class.

This policy applies to all undergraduate programs; however, details can vary for students in the College of Health Care Sciences and College of Nursing. Please refer to your respective college's student handbook for more specific Attendance Policy.

- *College of Health Care Science Student Handbook: https://nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Clinic Exploration Program (CEP)

Housed within the Halmos College of Natural Sciences and Oceanography, the Clinic Exploration Program (CEP) pairs students with health professionals so they can personally experience a broad range of medical and therapeutic fields. Students in the CEP acquire valuable practical knowledge by shadowing professionals on the job in many of NSU's clinics. Working side-by-side with seasoned health professionals, participants gain a first-hand perspective into possible career options. The program organizes rotations with doctors, physical therapists, dentists, certified athletic trainers, and other professionals.

Any undergraduate student can take part in the CEP, regardless of major or professional experience. Program participants are given a special blue lab jacket to wear during clinical experiences and are assigned a clinic for one or two rotations a semester. For more information about the program, students can visit *cnso.nova.edu/undergraduate/biology/*.

Course Credits—Application Toward Multiple Requirements

Courses taken to fulfill major, minor, certificate, general education, and other program requirements may generally be applied to other program requirements. For example, courses used to satisfy major requirements may also be used to satisfy general education requirements. However, some programs have specific exceptions to this general policy. Students should consult their academic advisor or division to determine specific policies about application of course credit.

Course Delivery

Classes are scheduled at a variety of times and locations to best meet student schedules and course demand. Classes may be on-campus, off-campus, day, evening, online, and through independent study. Students should review registration choices with their academic advisor.

Day

Day classes are intended primarily for recent high-school graduates and transfer students, although non-traditional evening students may also register for day classes.

Evening

Evening classes are intended primarily for working and professional adults, although traditional day students may also register for evening classes. To ensure that students obtain the maximum benefit from the non-traditional evening programs' accelerated format, most of the evening courses offered require that assignments for the first class be completed before the first class meeting.

Online

Online courses are available to all active NSU students. Students who participate in online classes are supported through a variety of technologies and teaching methods: email, bulletin boards, chat rooms, electronic journals, synchronous conferencing tools, content sharing tools, video lectures, and other digital and Web-based tools and resources. Each student must obtain an NSU account to access email, course materials, and library resources. Students may be required to participate in an online orientation before the start of each class.

Ground-based classes may also include some online instruction in addition to regular classroom instruction. Although most instruction will take place on campus or in site classrooms, some assignments may be administered through Internet-based sites associated with class textbooks or through the university's online course management system. Instructors will explain specific requirements for participation in online components.

Regional Campuses

Undergraduate courses are offered at a variety of locations and format. See the *NSU Campus Locations* and *NSU Regional Campuses/Instructional Sites* in the front section of this catalog.

Video-conferenced Courses

Nova Southeastern University reserves the right to record video-conferenced courses without seeking permission or

release forms from students. The recordings are for pedagogical purposes only within the university and will not be shared outside the university. The recordings act as back-up in case a technical issue occurs and distant-site students are not able to participate in a class. Students cannot request copies of lectures without the instructor's approval.

Independent Study

Independent study provides qualified students with an opportunity to research a question of interest under faculty supervision. Students interested in independent study should contact their academic advisor and consult with a faculty member to draw up a contract outlining student responsibilities. The student, the instructor, the department chair, and the dean must sign the contract. Subject to limitations in each major, students may apply a maximum of 12 credits in independent study coursework toward the degree program, which includes all General Education Program requirements, major requirements, and electives. Regular tuition schedules and rates apply to independent study.

Requests for independent study contracts must be received by the appropriate academic division no later than the following applicable deadlines. However, students are encouraged to work with faculty as early as possible to explore these options:

- Fall independent study: August 1
- Winter independent study: December 1
- Summer independent study: April 1

Course Evaluations

Course evaluations facilitate the collection of feedback from students about their classes—how they feel about course content, instructors' effectiveness, appropriateness of textbook selection, and other aspects. All evaluations are confidential and anonymous. Students are urged to be honest and constructive in their remarks. The course evaluation process is conducted completely online. Students must have an NSU email account to access the course evaluation website. Students will receive an email to their *@nova.edu* account when the online evaluation system is open prior to the Exam Week. Evaluations will remain open for a limited time, usually seven days. It is important to complete the course evaluations when you are sent the link for your courses. Administration uses student feedback to evaluate the course, the text book and instructor.

Curriculum, Advising, and Program Planning

The Curriculum, Advising, and Program Planning (CAPP) degree evaluation system allows students to compare their completed coursework against the degree requirements published in the college catalog. This useful reference tool helps you track your progress towards degree completion and is available through SharkLink, the university's interactive online portal. Please note that CAPP does not replace your academic advisor or college catalog information. CAPP degree evaluations are not official. You should consult with your academic advisor/program office for detailed program requirements and course options. Final approval for the completion of graduation requirements is granted by your program office. For further information about CAPP degree evaluation, please visit the Registrar's website: *nova.edu/capp*.

Declaring and Changing Majors, Minors, and Programs

Declaring and Changing Majors

Undergraduate students study and work in major fields that prepare them to enter careers or continue formal education

in graduate and professional school. Students who do not select a major program during the admissions process are considered "deciding." All students, including transfer students, must declare a major by the completion of 60 cumulative credits (including non-NSU credits). Deciding students and students who wish to change their originally declared major should contact their academic advisor.

Request for Second Major

Pursuing a second major is a serious commitment and requires significant student responsibility. Students may graduate with a second major depending on the availability of courses and academic department schedules. Students who wish to declare a second major must inform their academic advisor.

A request for a second major may be made following completion of 30 credits towards a bachelor's degree and before 90 credits are earned towards a bachelor's degree. A student must have a cumulative grade point average of 2.5 or higher in order to declare a second major.

The student is responsible for tracking requirements and prerequisites for both major programs, with guidance and assistance from departmental advisors. Both majors will be posted to the transcript at the time of conferral of the bachelor's degree. A second major will not be added to a transcript following conferral of degree.

Requirements for the second major, as for the first major, are based on the curriculum published in the NSU Undergraduate Student Catalog for the semester of the student's entry into the university. For majors subsequently added to the college, curriculum requirements are based on the catalog in effect during the semester the second major is declared.

Declaring and Conferral of Minors

Many NSU colleges offer undergraduate minors. Most courses taken to fulfill general education and major requirements may also be used to satisfy minor requirements. Some restrictions may apply. For details, refer to each minor description.

Pursuing a minor is a serious commitment and requires significant student responsibility. Students may graduate with a minor depending on the availability of courses and academic department schedules. Students who wish to declare a minor must inform their academic advisor.

Students may request a minor after having earned a minimum of 30 credits but before earning 90 credits. The university will strive to make courses available for students to complete the minor in a timely fashion; however, this is not always possible. Successful completion of a minor requires the student to complete at least 50 percent of the coursework for the minor at NSU and attain a grade point average of at least 2.25 for the minor. A minor will be posted to the student's transcript at the time of conferral of the bachelor's degree. Minors will not be posted following conferral of the degree.

Changing Colleges Within NSU

Students who wish to change their major to another housed in a different college within Nova Southeastern University should contact their academic advisor for more information about this process.

Dual Admission Programs

NSU dual admission programs are designed for students who are focused on their career goals and interested in securing a reserved seat in one of our participating NSU graduate and professional programs. Students who are accepted into the university and meet the entry requirements for their preferred dual admission program may apply for dual admission status, which would allow them to transition into one of our highly selective health professions, law school, or one of several additional graduate programs in business, computer science, education, humanities, marine biology and psychology. In most cases, students are allowed to complete any undergraduate major, as long as they meet all degree requirements and program pre-requisites.

Entering freshmen will have their advanced placement coursework evaluated for applicability to Dual Admission. Students selected for Dual Admission will receive a student agreement that outlines all specific program requirements and expectations in order to enter into the graduate/professional program. Students who wish to modify their transition date into the graduate/professional program may petition at the end of their first year at NSU.

Final admission into the graduate or professional school is contingent on completing the prescribed undergraduate course of study, maintaining the requisite grades, adhering to the student code of conduct, achieving specific scores on professional or graduate school admission tests, submission of graduate or professional school application, and, in some cases, a final interview with the graduate or professional school admissions committee. The receiving College reserves the right to make the final judgement on all admission decisions. Undergraduate scholarships granted by any college do not carry over into graduate and professional programs.

For dual admission programs in the health professions, only freshmen applicants are eligible to apply. For more details regarding dual admission programs and requirements, please go to *nova.edu/undergraduate/academics/dual-admission/*.

Available Dual Admission Programs

Health and Medical Professions

Doctor of Audiology (Au.D.)
Doctor of Dental Medicine (D.M.D.)
Doctor of Osteopathic Medicine (D.O.)
Doctor of Optometry (O.D.)
Doctor of Pharmacy (Pharm.D.)
Doctor of Physical Therapy (D.P.T.)
Masters of Science in Anesthesiologist Assistant (M.S.)
Masters of Medical Science in Physician Assistant (M.M.S.)
Master of Occupational Therapy (M.O.T.)
Masters of Science Speech-Language Pathology (M.S)

Business

Master of Accounting
Master of Business Administration (M.B.A.) with concentrations in:

- Business Administration
- Human Resource Management
- International Business Administration
- Leadership
- Public Administration

Computer Science

Master of Science in Computer Science (M.S)

Education

Master of Science in Education (M.S.) with concentrations in:

- Education
- Instructional Design and Diversity Education
- Leadership

Humanities and Social Sciences

Master of Arts in Cross-Disciplinary Studies (M.A.)
Master of Science in College Student Affairs (M.S.)
Master of Science in Conflict Analysis and Resolution (M.S.)
Master of Science in Criminal Justice (M.S.)
Master of Science in Family Therapy (M.S.)
Master of Science in National Security Affairs (M.S.)

Law

Juris Doctor (J.D.)

Oceanography

Master of Science in Marine Biology (M.S.)

Psychology

Doctor of Philosophy in Clinical Psychology (Ph.D.)
Doctor of Psychology in Clinical Psychology (Psy.D.)
Doctor of Psychology in School Psychology (Psy.D.)
Master of Science in Mental Health Counseling (M.S)
Specialist in School Psychology (Psy.S.)

Dual Admission Program for Enrolled Students (DAPES)

The Dual Admission Program for Enrolled Students (DAPES) is available for select dual admission programs to eligible students at NSU after completion of their freshman year. To be eligible for DAPES, students must complete at least 30 credits during their freshman year (fall/winter) at NSU with a cumulative GPA of 3.5 or higher, including at least 8 credits of laboratory science with a GPA of 3.5 or higher for health professions. The application period for DAPES is from August 1st to September 15th, after completion of the freshman year. For additional information regarding the DAPES program, students should contact their academic advisors and go to *nova.edu/undergraduatestudies/dual-admit/dapes.html*.

Enrollment and Student Services

Enrollment and Student Services (ESS) is comprised of the Office of Student Financial Assistance (OSFA), the Office of the University Registrar, the Office of the University Bursar, the One-Stop Shops in the Horvitz and Terry Administration Buildings, the University Call Center, Enrollment Processing Services/Admissions Management Services, Transfer Evaluation Services, Health Professions Divisions (HPD) Office of Admissions, and the Help Desk Collectively, ESS's ultimate goal is to exceed the information and service needs of all NSU students.

Means of Communication with Students

ESS' official means of communicating with students is via SharkLink and NSU email. Students are encouraged to access SharkLink at *https://sharklink.nova.edu* to complete the following tasks:

- check their NSU email
- access their financial aid information
- request official transcripts and view unofficial transcripts
- view their student accounts
- make payments
- access their grades
- register for and drop courses
- view their course schedule
- change their primary and mailing addresses and Phone numbers
- apply for student employment jobs
- sign the Student Enrollment Agreement (SEA)

Office of Student Financial Assistance

The NSU Office of Student Financial Assistance (OSFA) is dedicated to helping students make educated financial choices while attending college.

The OSFA administers federal, state, and institutional aid programs such as grants, scholarships, federal work-study funds, and loans. In order to be eligible for these programs, students must complete the Free Application for Federal Student Aid (FAFSA) at *fafsa.gov*. The NSU Federal School Code is 001509. Florida residents pursuing their first bachelor's degree will be required to complete the NSU State Aid Application to apply for state funds.

Financial Aid Checklist

1. Complete the FAFSA and NSU State Aid Application.

Students should complete the Free Application for Federal Student Aid (FAFSA) at *fafsa.gov* annually. The 2016–2017 academic year is the last year that the FAFSA became available on January 1. The FASFA for the 2017–2018 academic year will become available in October of 2016. The earlier students apply, the better chance they have of being considered for maximum available funds. To apply for Florida grants and scholarships, undergraduate students should complete the Nova Southeastern University State Aid Application available on the financial aid website at *nova.edu/financialaid/forms*.

2. Plan for housing and meal expenses.

The budget includes a housing and meal component. Students should ensure that their budget covers these expenses, if they intend to live on campus.

3. Check your financial aid account regularly.

Students should log in to SharkLink at *https://sharklink.nova.edu/cp/home/displaylogin* and regularly check their financial aid status to ensure that there are no outstanding requirements. The link to "My Financial Aid" is located in the center of the SharkLink "Student" tab. Students should confirm their admissions status, as they must be fully admitted in order for financial aid funds to disburse.

4. Submit additional documents and complete Master Promissory Note.

Some students may be required to submit additional documents prior to being awarded. Students will be notified of outstanding requirements via NSU email. Requirements (outstanding and completed) can also be viewed in SharkLink. Students interested in receiving Federal Direct Loans are required to complete a Direct Loan Master Promissory Note (MPN) and entrance counseling at *studentloans.gov*.

5. Students must accept, reduce, or decline loan and federal work-study award(s).

The financial aid award notice provides students with detailed instructions on how to accept, reduce, or decline their financial aid award. Awards are not disbursed until this step has been completed.

6. Students should continuously identify and apply for scholarships.

For comprehensive information, students should visit the scholarship web page: *nova.edu/financialaid/scholarships.*

7. Students should check their NSU email daily.

NSU email and SharkLink are the official means that the OSFA will use to communicate with students. Keep up-to-date by checking your NSU email daily.

8. Register for classes (early).

Students awarded federal direct loans must be enrolled at least half-time. Half-time enrollment is defined as 6 credits per semester for all undergraduate students. For graduate and first professional students, half-time status varies by program. Enrollment requirements for federal and state grants vary. Students need to familiarize themselves with the enrollment requirements defined by their program office as well as by the financial aid programs through which aid is received. Students should register as early as possible to ensure timely disbursement of financial aid funds.

Federal Grants and Scholarships

Grants and scholarships are considered "gift" aid and generally do not have to be repaid. However, if a student drops or withdraws from any classes for which financial aid has been received, the student may have to return any "unearned" funds. For more information on grants and scholarships, students should visit the financial aid website at *nova.edu/financialaid*.

Institutional Scholarships

There are numerous scholarships available to help students fund the cost of attending NSU. Generally, scholarships are awarded to students who meet particular criteria for qualification, such as academic achievement, financial need, field of study, talent, or athletic ability. The NSU scholarship website at *nova.edu/financialaid/scholarships* provides resources to help students locate and apply for scholarships. New scholarships are regularly added to the website. For more information on scholarships and grants, students may also refer to the *Scholarships and Grants for Undergraduate Students* section of this catalog.

Student Employment

There are three main student employment programs:

- Federal Work-Study (FWS)
- Nova Southeastern University Student Employment (NSE)
- Job Location and Development (JLD)

The Nova Southeastern University Student Employment and Job Location Development programs provide jobs to students regardless of financial need. The FWS program is need-based and requires the completion of the FAFSA. Students awarded FWS may participate in the America Reads/America Counts Programs through which students serve as reading or math tutors to elementary school children. For more information on NSU student employment and information on how to apply for jobs, visit *nova.edu/financialaid/employment/*. New and exciting on- and off-campus jobs are available throughout the year.

Loans

A student loan, unlike a grant and work-study, is borrowed money that must be repaid with interest. Student loan repayment is a legal obligation. Before deciding to take out a loan, students should determine the amount that needs to be repaid on the loan.

For detailed information on loans available to students, visit the financial aid website at *nova.edu/financialaid/grantsloans/.*

Return of Title IV Funds

Any student who does not complete at least one course within an academic semester for which financial aid is received, or could have been received, will be reviewed for a Return of Title IV Funds calculation. For complete information, please review *nova.edu/financialaid/apply-for-aid/title-iv-return.html.*

Satisfactory Academic Progress (SAP)

In order to receive financial assistance, a student must continually meet Satisfactory Academic Progress (SAP). Different definitions of SAP apply for Florida state and federal aid. According to federal regulations, NSU has established university-wide quantitative, qualitative, maximum time frame, and pace SAP requirements.

Students who fail to meet SAP during the 2016–2017 academic year will not be eligible for Title IV federal and Florida state

financial aid during the 2017–2018 academic year. Comprehensive information is available on the financial aid website at *nova.edu/sap/*.

Enrollment at Other Universities

Abraham S. Fischler College of Education

College of Arts, Humanities, and Social Sciences

College of Engineering and Computing

College of Psychology

Farquhar Honors College

H. Wayne Huizenga College of Business and Entrepreneurship

Halmos College of Natural Sciences and Oceanography

Students enrolled at NSU are generally not permitted to be concurrently enrolled at other institutions. Once students enroll at NSU, they may not take courses at other colleges or universities for the purpose of earning an NSU degree without specific, written approval from their college. Written approval must be obtained before registering for a non-NSU course. Only under unusual circumstances will permission be granted. Students must carefully check the guidelines of their financial aid awards and consult with their academic advisors about their transfer credits in advance, to avoid serious ramifications.

Students may take no more than 10 percent of their remaining credits at another university. This quantity is based on status at time of initial matriculation. However, students must meet NSU's residency requirements as outlined in the *Graduation Requirements* section of this catalog. To request permission to take courses at other institutions, students must submit a Concurrent/Interim Enrollment Application, which can be obtained from their academic advisor.

If approved, courses taken at other institutions may be used only for "open" elective credit. Financial aid recipients will be required to complete the NSU Consortium Agreement Form in order to receive financial aid for enrollment at the other institution, if eligible. If courses are to be taken at an institution abroad, the student must also have an NSU Study Abroad Agreement approved.

Students participating in approved Travel Study programs may be exempted from some of the limitations in this policy.

College of Health Care Sciences

Students may be permitted with prior approval to take courses and co-requisites at other regionally accredited institutions. All pre-requisite and co-requisite courses must be from regionally accredited institutions and equivalent to NSU's general education courses.

College of Nursing

Once matriculated into the program, students may not take required courses at any other college or university and transfer the credits in.

General Education Program

The General Education Program is designed to foster critical skills by helping students develop the ability to solve problems, think analytically, and communicate clearly. The program provides a common connection among all NSU undergraduates through a rigorous set of writing; mathematics; arts and humanities; and social, biological, and physical science requirements. As a result of the General Education Program, students develop effective communication skills in speaking, listening, writing, reading, and critical interpretation. The program also helps students place ideas in their proper context and appreciate the role of different cultural traditions.

General Education Program Mission Statement

The NSU undergraduate General Education Program prepares students to be responsible citizens in a dynamic, global environment with a commitment to independent and continuous learning.

General Education Program Framework

All students are required to complete general education requirements. Students normally complete general education requirements by the end of their junior year through a series of courses in the areas of written communication; mathematics; arts and humanities (including literature, history, ethics, and the performing arts); social and behavioral sciences; and biological and physical sciences.

Using General Education Credits for Major and Minor Requirements

Most courses may count toward both general education and major/minor requirements. Students should refer to their program curriculum and consult their academic advisor to determine which courses serve both sets of requirements.

General Education Learning Outcomes

Upon successful completion of the General Education Program, students are expected to:

1. Demonstrate an understanding of and appreciation for the various methods utilized in a variety of arts and humanities disciplines
2. Delineate the means by which different scholarly fields reflect, interact with, and influence human thought, culture, and values
3. Demonstrate knowledge of fundamental mathematical principles and concepts
4. Achieve basic quantitative literacy to interpret quantitative data into meaningful terms and understand relationships between sets of quantitative data
5. Apply methods of scientific inquiry
6. Achieve basic scientific literacy to make informed decisions on contemporary consumer or social issues
7. Understand and appreciate the role of the individual in a group
8. Understand the major concepts and methods used by social or behavioral scientists to investigate, analyze, or predict human or group behavior
9. Express ideas clearly and coherently
10. Use the English language effectively to construct logical and persuasive arguments

General Education Requirements

Nova Southeastern University requires that undergraduate students complete 30 credit hours as part of the General Education Program. All students are encouraged to begin the Written Composition and Mathematics requirements during

their first semester. Some majors have determined specific courses to be used to satisfy general education requirements. Students should contact their academic advisor to determine their major's specific general education requirement list. Honors courses (with the HONR prefix) may be used to satisfy general education requirements of the appropriate general education section.

Students should refer to *Course Descriptions* for specific course prerequisites. Additionally, students should read the *Academic Requirements—New Students* section for information on eligibility to take college-level written composition and mathematics courses, which are required as part of the General Education Program.

Equivalent courses taken prior to enrollment at NSU at an accredited community college or another university may be considered for a transfer of credit to fulfill a program's general education requirements.

General Education	Credits
Written Composition—6 COMP credits at or above COMP 1500	6
Mathematics—6 MATH credits at or above MATH 1040	6
Arts and Humanities—6 credits in any courses with a prefix of ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, SPAN, THEA, or WRIT, or in a foreign language	6
Social and Behavioral Sciences—6 credits in any courses with a prefix of ANTH, COMM, ECN, GEOG, GEST, INST, POLS, PSYC, or SOCL	6
Science—6 credits in any courses with a prefix of BIOL, CHEM, ENVS, MBIO, SCIE, or PHYS	6
Total General Education Credits	**30**

Freshman Seminar Requirement UNIV 1000

All freshmen entering in the Fall of 2016 or later, will be required to complete the First Year Seminar (UNIV 1000) in their first semester of attendance at NSU. The learning objective for this course to our students is to deliver an engaging educational experience so all our students can learn to master the skills and know-how, both academic and personal, they need to be successful adult learners at NSU. Students should contact their academic advisor if they have any questions.

Grade Forgiveness (revised: see *Addendum B*)

The grade forgiveness policy enables an undergraduate student to repeat a limited number of courses to improve his or her cumulative NSU grade point average (GPA), by excluding the original (and lower) grade from calculation. Undergraduate students may use the forgiveness policy for a **maximum of three NSU courses****, and only for courses in which a grade of "C-" or lower was earned, no more than one excluded grade per course will be allowed.

Students who choose to exercise this option must meet with their academic advisor and complete the Grade Forgiveness Policy Form, which should be submitted once the course has been successfully repeated and a grade has been received, no later than one semester after the repeated course has been completed. If approved, the grade for the previous attempt will be excluded from the calculation of the term and cumulative NSU GPA, although it will remain on the transcript.

Grade exclusions may not apply to certain programs such as dual admission, graduate/professional school admission, and transfer to other institutions. Due to external factors including but not limited to areas such as regional and national accreditation as well as state licensure, certain colleges/programs reserve the right to require a level of academic performance that is greater than the base level established by the university for all undergraduate students.

Only courses taken at NSU qualify for grade forgiveness. Grade exclusions are subject to availability of the course, and there is no guarantee that a particular course will be offered again. This policy does not restrict the number of attempts to repeat courses, but does restrict the number of course grades to be excluded from the cumulative GPA. Course credit may be applied only once toward completion of degree requirements. While this policy may retroactively change a semester GPA, it will not affect related academic standing sanction, and cannot be applied once a degree has been conferred.

**** Please be aware of the Repeat Course Policy for Financial Aid and the maximum number of attempts for an individual course that will be covered by Financial Aid. Go to** *nova.edu/financialaid/apply-for-aid/repeat-course.html* **for additional information.**

Grading System

Grading Scale

Instructors assign grades based on criteria established in course syllabi.

Letter Grade	Description	GPA Equivalent
A	Excellent	4.0
A-		3.7
B+		3.3
B	Good	3.0
B-		2.7
C+		2.3
C	Satisfactory	2.0
C-		1.7
D+		1.3
D	Marginal	1.0
F	Failure	0.0
W	Withdrawn	-
I	Incomplete	-
P	Pass	-
AU	Audit (may not be available in all programs)	-

Grade Point Average and Quality Points

A student's academic standing for a specific semester or term is indicated by the grade point average (GPA). The GPA is calculated based on earned credits and letter grades (including Fs, for which students receieve 0 credits). The GPA does not include classes from which the student has successfully withdrawn or received an Incomplete. Overall academic standing is indicated by the cumulative GPA (CGPA). GPA calculations include NSU coursework only, based on the following formulas and definitions.

- Quality points = A letter grade's numerical GPA value MULTIPLIED BY the number of credits assigned to the course
- GPA hours = Earned credits, including Fs, excluding withdrawals, and audits, and successfully-completed pass/fail courses
- Current semester or term GPA = The total number of quality points for the semester or term DIVIDED BY the total GPA hours for the semester or term
- Cumulative GPA (CGPA) = Total quality points DIVIDED BY total GPA hours

Grade Reports

Student grades are disseminated online via SharkLink at *https://sharklink.nova.edu*. Legal provisions prohibit the release of personally identifiable information to anyone other than legally authorized persons. Students are permitted to inspect, review, and challenge such information as provided by law.

Dean's List

Undergraduate students who enrolled full-time (12 or more credits) at NSU for the previous semester, earned at least a 3.8 semester GPA, and received no incomplete grades (I), are placed on the Dean's List for that semester.

Students placed on the dean's list will have a notation made on their official transcripts. The Dean's List is not recognized during summer semesters.

Incomplete

A grade of Incomplete (I) is issued in rare cases because of unusual and exceptional circumstances. Students are only eligible for an Incomplete if

- 50% of the coursework has been completed with a C or above average, and
- the remaining coursework can be completed in a timeframe agreed upon by the faculty member and the student, not exceeding one semester beyond the final date of the course.

It is the student's responsibility to consult the faculty member regarding an Incomplete request. A student requesting an Incomplete due to medical or military reasons is expected to provide official documentation. Both student, faculty member, and department chair must sign the Incomplete Grade Agreement Form/Contract prior to the end of the course, or agree upon its conditions via email.

In the nursing programs, the decision to grant an Incomplete request rests with the individual course faculty. However, nursing students may appeal the faculty decision, if it is negative, to the division chair, whose decision is final.

If the student does not complete the coursework within the agreed upon time period, the Incomplete automatically changes to the grade earned based on the work accepted by the instructor to date as stipulated in the contract or agreement; the student gains no points for assignments included in the incomplete agreement. A student cannot remove an Incomplete by retaking the course in a subsequent semester. A student who is absent at the final examination without prior approval is generally not eligible to receive an Incomplete grade.

Graduation—Degrees, Diplomas, and Commencement

Degree Conferral

Students are eligible for graduation when they meet the requirements listed in the NSU Undergraduate Student Catalog in effect when they entered the university, unless a prior request to follow a more recent catalog has been approved. Degrees are conferred once a month, by the university's Board of Trustees once students have met all the criteria for graduation. The conferral date reflects the last day of the month in which the academic department of the appropriate college approved the degree application. Once degrees have been conferred, transcripts and diplomas showing the awarding of the degree are sent to students by mail. Students must complete a degree application in order to be eligible for degree conferral. Students must apply for their degree online.

Diplomas

The diploma indicates that the student has earned a degree (for example, Bachelor of Arts degree or Bachelor of Science degree). The academic transcript, the official record of work at NSU, indicates degree or certificate earned, major field of study, minor, and any honors, if any.

Graduation with Distinction

A student eligible for graduation with a cumulative grade point average of 3.8 or higher, and at least 54 credits completed at NSU, is eligible to receive the degree with distinction.

There are no special ceremonies at Commencement for students graduating with distinction. However, notation will be added to the student's diploma and official transcript.

Commencement

Undergraduate Commencement is held in May. While all students are encouraged to attend Commencement, attendance is not required. Students receiving a certificate only do not participate in the Commencement ceremony. Students must contact their program office for Commencement requirement details.

There is no fee for participating in Commencement; however, students will have to pay the cost of their regalia (cap and gown). Degrees are conferred throughout the year on the final day of each month in which the academic department of the appropriate college approves the degree application. This may be different than the month in which all academic requirements were completed (see *Tuition and Fee* for more information).

Graduation Requirements

Minimum Graduation Requirements

All degree-seeking students must be matriculated and complete the minimum credits as designated by their chosen major.

The following conditions are also required:

1. Completion of at least 120 credits, including major, minor, general education, specialization, concentration, exams, and electives coursework, as specified by program requirements;
2. Attainment of a 2.0 cumulative grade point average*;
3. Attainment of a 2.25 grade point average in the major area*;
4. Completion, at NSU, of at least 30 credits (not including CLEP, proficiency examinations, nor prior experiential learning credits);
5. Completion of at least 50 percent of the credits in the major area at NSU (not including CLEP, proficiency examinations, nor prior experiential learning credits). In the nursing programs, students are allowed to apply only six credits from another program;
6. For students in the Bachelor of Science in Nursing Program, Bachelor of Science in Respiratory Therapy Program, Bachelor of Science in Medical Sonography, Bachelor of Science in Cardiovascular Sonography, all courses in the program of study required for the degree must be completed with a grade of C or better;
7. Submission of a degree application form and payment of the $100 fee, preferably no later than the last semester;

* Degree-seeking students in programs that lead to initial teacher certification in the Abraham S. Fischler College of Education must attain a 2.50 cumulative grade point and major area average. Students enrolled in the dual Bachelor of Science in Cardiovascular Sonography/Master of Health Science; and dual Bachelor of Science in Medical Sonography and Master of Health Science need a minimum overall GPA of 3.0. Students seeking a Bachelor of Science in Speech Language and Communication Disorders must attain a 2.50 cumulative grade point and major area average.

Honor Societies and Academic Organizations

Honor societies recognize student excellence, promote understanding of the major, and provide a means by which undergraduates can network and move forward in their career. The following undergraduate organizations are affiliated with Nova Southeastern University.

Honor Societies

Alpha Chi

Alpha Chi is an academic honor society with more than 289 chapters in the United States. To qualify for Alpha Chi, students must be juniors or seniors, complete a minimum of 24 credits at NSU, and be in the top 10 percent of their major. Qualifying students are invited to join once a year. Membership in Alpha Chi includes eligibility to compete for local and national scholarships. Alpha Chi is open to all undergraduate majors. For more information, contact the Farquhar Honors College (*honors.nova.edu*).

Alpha Eta

Alpha Eta is the national scholastic society for the allied health professions. The society's purpose is the promotion and recognition of significant scholarship, leadership, and contributions to the allied health professions. To quality for Alpha Eta, students shall be enrolled in an allied health program leading to an associate or baccalaureate degree, and will be enrolled in their last year in residence, shall have maintained an overall GPA of 3.5 or better (out of 4.0) while enrolled in the allied health program on this campus, shall have shown capacity for leadership and achievement in their chosen allied health field, and shall have been recommended by active members through a nominating process in each department or program and approved by the chapter Executive Council. Alpha Eta is for students majoring in Allied Health Professions. For more information, contact the College of Health Care Sciences (*healthsciences.nova.edu*) or visit *healthsciences.nova.edu/alpha-eta-society.html*.

Alpha Kappa Delta

Alpha Kappa Delta, the international sociology honor society, seeks to acknowledge and promote excellence in scholarship in the study of sociology, the research of social problems, and such other social and intellectual activities as will lead to improvement in the human condition. To qualify for Alpha Kappa Delta, a student must be a declared Sociology major leading to a baccalaureate degree or demonstrate a serious interest in sociology within an official program of the host institution, be at or above Junior Standing and have completed at least four (4) courses within the sociology curriculum prior to initiation (exclusive of extension or courses graded pass/fail), transfer students must have completed at least 3 of the 4 courses at Nova Southeastern University, cumulative GPA of 3.3 on a 4.0 scale, as well as a 3.0 average in Sociology courses. For more information, contact the College of Arts, Humanities, and Social Sciences (*cahss.nova.edu*).

Alpha Phi Sigma

Established in 1942, Alpha Phi Sigma is recognized by both the Academy of Criminal Justice Sciences and the Association of College Honor Societies as the National Criminal Justice Honor Society. NSU's chapter, Omega Tau, includes members from both the undergraduate major and the Master of Science program. The mission of Alpha Phi Sigma is to promote critical thinking, rigorous scholarship, and life-long learning; to keep abreast of the advances in scientific research; to elevate the ethical standards of the criminal justice professions; and to sustain in the public mind the benefit and necessity of education and professional training. Alpha Phi Sigma is the largest and only official criminal justice honor society in America. To become a member, a student must have completed one-third of their total hours required for graduation at his/her institution, and must be recommended by the chapter adviser. Undergraduate students must maintain a minimum of 3.0 overall GPA on a 4.0 scale, a 3.2 GPA, on a 4.0 scale, in criminal justice courses. The student must also rank in the top 35 percent of their classes and have completed a minimum of four courses within the criminal justice curriculum. The Honor Society is open to those with a declared criminal justice major or minor. Graduate students are required to maintain a minimum of a 3.4 GPA in both Criminal Justice courses and overall courses on a 4.0 scale and must have completed a minimum of four courses within the criminal justice curriculum. Law students enrolled in law school, having completed one academic year, with a GPA of 2.5 or higher on a 4.0 scale. For more information, contact the College of Arts, Humanities, and Social Sciences (*cahss.nova.edu*).

Beta Beta Beta

Beta Beta Beta (TriBeta) is a society for students, particularly undergraduates, dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. To join the NSU chapter (Rho Rho) as a regular member, a student must be a biology major, have an overall GPA of 3.2 (or higher), at least three biology (BIOL) courses completed (one of which is above the introductory level), an average GPA of 3.0 or higher in all biology courses, at least 1 BIOL course completed at the 3xxx or 4xxx level at NSU, 15 or more NSU credits completed, and 45 credits or more completed toward the degree. For more information, contact the Halmos College of Natural Sciences and Oceanography (*cnso.nova.edu*).

Kappa Delta Pi

Kappa Delta Pi, International Honor Society in Education, is dedicated to scholarship and excellence in education. The society is a community of scholars dedicated to worthy ideals: recognize scholarship and excellence in education, promote the development and dissemination of worthy educational ideals and practices, enhance the continuous growth and leadership of its diverse membership, foster inquiry and reflection on significant educational issues, and maintain a high degree of professional fellowship. The Kappa Delta Pi Educational Foundation and local chapters award more than $100,000 annually in scholarships for academic study to active members who are undergraduate, graduate, or doctoral degree-seeking students. Undergraduate students majoring in Education must have 30 credit hours completed with a minimum 3.0 cumulative GPA with at least 12 education course credit hours completed or in progress. For more information, please contact the Abraham S. Fischler College of Education (*fischlerschool.nova.edu*).

Lambda Epsilon Chi

Nova Southeastern University maintains a charter membership in Lambda Epsilon Chi (LEX), the national honor society Nova Southeastern University maintains a charter membership in Lambda Epsilon Chi (LEX), the national honor society for paralegal/legal assistant studies. The purpose of LEX is to recognize those who have demonstrated superior academic performance in an established program of paralegal studies offered at an institution that is an institutional member in good standing of the American Association for Paralegal Education (AAfPE). Students are inducted into LEX once a year. To be inducted, a student must demonstrate "superior academic performance" which is evidenced by an overall GPA of at least 3.25, and a GPA in their paralegal classes of at least 3.50 after completing two thirds of the program requirements. For more information, contact the College of Arts, Humanities, and Social Sciences (*cahss.nova.edu*) or visit *aafpe.org*.

Lambda Pi Eta

Lambda Pi Eta (LPH) is the honor society of the National Communication Association. NSU's Upsilon Zeta chapter of LPH was chartered in 2005. To be eligible for membership, students must be communication studies majors with a minimum of 60 earned credit semester hours (90 quarter hours) in undergraduate credit courses, a cumulative GPA of at least 3.0, at least 12 earned credit semester hours (18 quarter hours) in communication studies major courses with at least a 3.25 GPA in those courses, be in the top 35 percent of their graduating class, and be currently enrolled as a full-time student in good standing. For more information, contact the College of Arts, Humanities, and Social Sciences (*cahss.nova.edu*) or visit *natcom.org/lambdapieta/*.

Omicron Delta Kappa

Omicron Delta Kappa is the National Leadership Honors Society. Membership in Omicron Delta Kappa is granted to those who demonstrate leadership achievements in one of five phases of NSU's campus life: Athletics; Campus or Community Service, Social and Religious Activities, and Campus Government; Creative and Performing Arts; Journalism, Speech and Mass Media; and Scholarship. Members are undergraduate students who are juniors or seniors and rank in the upper 35 percent of their class; graduate students; faculty and staff members; and alumni, who graduated more than five years ago. For more information, visit *odk.org*.

Psi Chi

Psi Chi, the U.S. national honor society in psychology, promotes excellence in scholarship and advances the science of psychology. Membership is open to undergraduate and graduate students who meet minimum academic qualifications: undergraduate students (by August of the year preceding induction) must be enrolled and have established a GPA at NSU, must be at least a second-semester sophomore at NSU, must be enrolled as a major or minor in psychology at NSU and have completed at least 9 semester hours or 14 quarter hours of psychology courses at NSU, must have an overall GPA that is in the top 35 percent of their class based on rankings within sophomore, junior, and senior classes, must have an

overall GPA of at least 3.30 on a 4-point scale, and must have a GPA in psychology classes that is at least 3.30 on a 4-point scale. Undergraduate students who have transferred to NSU and are interested in becoming a Psi Chi member must meet the requirements listed above, plus have completed one semester at NSU (by August of the year preceding induction) to establish a GPA, and to complete 9 hours of psychology courses at NSU. Psi Chi is for students with a declared major or minor in Psychology. For more information, visit *nova.edu/~sterngla/psichi.html*.

Rho Rho Rho

The Beta Chapter of this honor society was established to recognize outstanding students earning a degree in marine biology. Members of Rho Rho Rho work to promote awareness of marine biology and appreciation of the marine environment with students of all majors. Students are inducted into this society annually. To be eligible as a regular member, a student must have declared a major or minor in marine biology, completed at least two full semesters (30 credits), completed at least two courses that qualify for the marine biology major and are at the 2000 level or above with an average grade of 3.0 (B) or better in those courses, have an overall NSU GPA of 3.2 or better, and be in good academic standing. For more information, contact the Halmos College of Natural Sciences and Oceanography (*cnso.nova.edu*).

Sigma Beta Delta

The purposes of Sigma Beta Delta are to encourage and recognize scholarship and achievement among students of business, management, and administration, and to encourage and promote personal and professional improvement. To be eligible for membership, a business student must complete all coursework by March of the commencement year and maintain a 3.8 or higher GPA in all classes taken; and be invited to membership by the faculty officers. Students must be enrolled in the courses required to complete the degree; students are inducted on the day of the annual commencement ceremony. Students must have completed at least one half of the degree program at NSU. Each year, students are notified by mail if they meet the criteria to join Sigma Beta Delta. For more information, contact the H. Wayne Huizenga College of Business and Entrepreneurship (*business.nova.edu*).

Sigma Tau Delta

Alpha Nu Iota is NSU's chapter of Sigma Tau Delta, the international English honor society. Sigma Tau Delta's goals are to recognize academic excellence of students of the English language and literature, as well as the accomplishments of professional writers. In order to be eligible for membership, students must be an English major or minor or M.A. in Writing student, have a minimum of a 3.5 GPA in NSU LITR and WRIT courses, a minimum 3.5 cumulative GPA, have completed at least 6 credits of LITR or WRIT, and have completed at least 36 credits of college work (transfer or NSU). For more information, contact the College of Arts, Humanities, and Social Sciences (*cahss.nova.edu*).

Sigma Theta Tau

Upsilon Chi is NSU's chapter of Sigma Theta Tau, the International Honor Society of Nursing. Sigma Theta Tau supports the learning, knowledge, and professional development of nurses committed to making a difference in health worldwide. In order to quality, undergraduate students must have a 3.0 GPA or higher or be in the top thirty-five percent of their class. For more information, contact the College of Nursing (*nursing.nova.edu*).

Tau Sigma

The Tau Sigma National Honor Society is specifically for transfer students. Undergraduate students who transfer at least 30 credits from their prior institution and earn a 3.5 (or higher) GPA in their first semester at NSU, may be invited to join the Tau Sigma Honor Society. Students must be enrolled full time (12 or more credits). For more information, contact the College of Undergraduate Studies (*nova.edu/undergraduatestudies*).

Academic and Pre-Professional Organizations

Nova Southeastern University supports a diverse group of student organizations. For more university organizations, including Greek organizations and social, athletic, and service clubs, refer to the NSU Student Handbook (*nova.edu/student-handbook/*).

Internships

Internships provide opportunities for experiential learning. They provide opportunities for students to experience their chosen work environment, to make connections with potential future employers, and to network with potential colleagues and mentors. Students may earn credit for internships that complement and enhance their academic programs.

There are several ways that students wishing to pursue an internship can initiate the process. The student can:

- Meet with a professional in the field who is willing to provide an internship experience and then meet with their academic advisor.
- Explore ideas for internships with faculty and then meet with their academic advisor.
- Meet with personnel in the Office of Career Development and discuss options for internships and then meet with their academic advisor.
- Check the Web or the newspaper for available internships and then meet with their academic advisor.

The process should be initiated at least one month prior to the start of the term in which the internship is requested. Students interested in pursuing internships should contact their academic advisor to determine eligibility requirements and to complete an internship enrollment form. Internships are supervised by faculty and must be pre-approved. Regular tuition schedules and rates apply to internships.

Online Course Access and SharkLink

Nova Southeastern University handles much of its business online. The NSU website (*nova.edu*) provides links for current students to access most of the NSU services.

Distance Education Support

Distance education students are provided with NSU computer accounts including email. Students, however, must obtain their own Internet service providers (ISP) and use their own computer systems (PC or Apple Macintosh and an Internet connection). New students receive an orientation and extensive online technical support online access, online tools and methods, and library resources.

Online interactive learning methods involve web-based course materials, the electronic library, and online activities that facilitate frequent student-professor interaction. Faculty members and students interact via online forums using threaded discussion boards, chat rooms, and email. Students submit assignments through a Web-based learning environment.

Online students have access to books, journal articles, microfiche, dissertations, index searches, catalog searches, and reference librarians. The online medical database collection at NSU is extensive and includes access to quality subscription services free of charge to the student.

SharkLink

SharkLink is NSU's online information portal. With a single username and password, it provides students access to their NSU email account, online courses and discussion groups, university announcements and calendar reminders, and student records. SharkLink also enables students to register online, view course availability, and check their grades. All students are assigned a Sharklink ID, which is also their NSU email username, that uniquely identifies them and provides them access to the NSU administrative system. SharkLink can be accessed at *https://sharklink.nova.edu*. students should visit *nova.edu/resources/nsuidentity.html*.

Online Course Access

The university uses a secure course management platform for developing and delivering interactive courses and their components over the Web. Students are granted access to this platform based on registration for online courses. Students

must use their SharkLink login and password in order to access their online courses. All online students must use this platform when communicating with their program. Course communication will be done through the particular course that the student is attending. Online courses can be accessed at SharkLearn (*https://sharklearn.nova.edu*).

NSU Email

All official NSU business, such as information on accounts, financial aid, class emails, etc., is done through students' NSU email accounts. Students can access NSU email by logging into *sharkmail.nova.edu*. Students' SharkLink ID serves as their NSU email username.

Pre-Degree Granting Programs

Nova Southeastern University offers three undergraduate pre-degree granting programs. The deciding pre-degree program is for students who have not yet chosen a major at NSU. The pre-athletic training and pre-nursing programs are for students who do not meet the admission requirements of their desired majors at NSU, and are committed to successfully completing those prerequisite courses at the university. These pre-degree programs do not grant degrees nor certificates upon completion. Successful completion of these pre-degree granting programs does not guarantee admission into their respective bachelor's degree-granting programs at NSU.

Students enrolled in these programs, intending to pursue a bachelor's degree, may be eligible for financial aid and institutional scholarships.

Deciding Program

Many students have not decided which program of study or career path to follow when they enter college. Many change their minds more than once during their college education. Through the Deciding Program, NSU faculty and staff help students choose a career path and select a major. Students have the opportunity to explore a variety of interests before declaring a major field of study.

Students who do not select a major program during the admissions process are considered "deciding." All students, including transfer students, must declare a major by the completion of 60 cumulative credits (including non-NSU credits). Deciding students and students who wish to change their originally declared major should contact their academic advisor.

Pre-Athletic Training Program

Students admitted into the athletic training major (professional phase) at the College of Health Care Sciences must first complete the Pre-Athletic Training Program. This program fulfills the Level I requirements of the NSU Athletic Training Education Program (ATEP) and the pre-professional phase of the athletic training major.

The Pre-Athletic Training Program includes successful completion (C or higher) of six courses: ATTR 1100 Introduction to Athletic Training, ATTR 1200 Principles of Athletic Training, ATTR 1300 Emergency Care, ATTR 1400 Health and Fitness, BIOL 1400 Introduction to Cell Biology or equivalent, and BIOL 3312 Human Anatomy and Physiology/Lab or equivalent. In addition, each student must complete a specified number of clinical experience hours as part of the ATTR 1100 and ATTR 1200 courses, observing ATEP-Preceptors (i.e., Certified Athletic Trainers) in a variety of settings. Students in the Pre-Athletic Training Program are eligible to submit a professional portfolio as part of the ATTR 1200 course. Submission of the professional portfolio does not guarantee matriculation into the professional phase of the athletic training major. Students should refer to the athletic training major section of this catalog for more information.

Pre-Nursing Program

The undergraduate Pre-Nursing Program at the College of Arts, Humanities, and Social Sciences is designed for students who wish to apply to NSU's Entry Bachelor of Science in Nursing program, and complete the program's admission

prerequisite courses at the university. These prerequisite courses are offered by NSU's College of Arts, Humanities, and Social Sciences through the Pre-Nursing Concentration in the General Studies major and are held on NSU's main campus. Successful completion of these prerequisite courses does not guarantee admission to the B.S.N. program. Additional requirements, beyond course prerequisites, are needed for B.S.N. applicants to be eligible for admission. Admission prerequisites are subject to change at any time. Students must contact NSU's College of Nursing for the applicable B.S.N. program admission requirements.

Pre-nursing students must abide by the policies of the College of Arts, Humanities, and Social Sciences.

For more information on B.S.N. admission requirements and prerequisites, refer to the *Admissions Procedures and Requirements* section and the Bachelor of Science in Nursing portion of the *General Education Program* section of this catalog.

Problem Resolution Procedures

Nova Southeastern University is committed to maintaining policies and procedures supportive of the student community. Students must follow specific policies and instructions described in this catalog, in the *NSU Student Handbook* (*nova.edu/student-handbook/*), and in course schedules, program brochures, information sheets, and periodic special mailings.

Formal problems or grievances fall into three categories: harassment or discrimination grievances, grade/academic grievances, and administrative grievances. Detailed instructions on how to submit an academic or administrative grievance are described below.

Student-athletes should refer to the *NSU Student-Athlete Handbook* for additional information regarding team membership and discipline grievances. Grievances related to Athletic Financial Aid reductions, cancellations, renewals and non-renewals are handled through the NSU's Office of Student Financial Assistance, according to NCAA Bylaws.

Types of Grievances

Harassment or Discrimination

Information on these policies can be found in the NSU Student Handbook at *nova.edu/student-handbook/*.

Grade/Academic Disputes

Faculty members serve as the initial contacts for all grievances involving the fairness of a grade, or any classroom or instructor activity, in their courses. Students unable to resolve a grade/academic grievance with a faculty member should contact the appropriate department chair or program director in the college responsible for the course, who will make a final decision on the fairness of the grade. Grade/academic grievances will not be permitted to proceed any further unless evidence of discrimination or a violation of rights can be demonstrated.

Grade/academic grievances must be initiated in a timely fashion, no later than the end of the semester following the occurrence of the grievance issue. The student may forfeit all rights under the grievance procedure if each step is not followed within the prescribed time limit.

Administrative Grievances

Administrative grievances are related to academic policies and administrative actions. Grievance procedures must be initiated by submitting a student action request (SAR) no later than 20 days after the end of the semester in which the grievance issue took place. The student may forfeit all rights under the grievance procedure if each step is not followed within the prescribed time limit.

Administrative Grievance Process

All administrative grievances must begin at the first level contact. Grievances brought to higher level contacts without previously going through the appropriate administrative grievance procedure will be referred to the appropriate step in the process, thus delaying problem resolution. Students who are not sure of the appropriate university employee to contact about an administrative issue should communicate with their academic advisor.

Student Action Request (SAR)

Student Action Requests (SAR) are used to request waivers from specific university or college policies under unusual circumstances. Students can officially request a waiver from a published academic policy by submitting an SAR no later than 20 days after the end of the semester in which the grievance issue took place. Before an SAR is submitted, students should seek advice from their academic advisor in an effort to resolve their issue of concern and determine if an official SAR is necessary. NOTE: If an SAR involves changing enrollment status, including dropping courses, the action may affect students' eligibility for financial aid (see *Withdrawal from Classes* in this section).

Steps for Submitting Administrative Grievances

Administrative grievances are related to academic policies and administrative actions.

Step One: Meet with the party involved

Students should discuss their grievance with the party involved as soon as possible.

Step Two: Meet with the advisor

Students who feel that their grievance was not satisfactorily resolved after meeting with the party involved should meet with their advisor for guidance in submitting a formal grievance in writing, using a Student Action Request (SAR).

Prior to submitting the request, students should carefully read and be aware of any consequences if the grievance involves changes in enrollment status. It is also essential that students maintain copies of relevant documentation (emails, medical documents, etc.) sent to academic advisors or other NSU personnel.

How to Submit a Student Action Request

The following information must be included in all Student Action Requests. Requests lacking the required information will not be reviewed. Students should consult with their academic advisor before submitting an SAR. The SAR should then be submitted in person to the academic advisor or be sent as a Word document from the student's official NSU email account if they cannot meet in person, no later than 20 days after the end of the semester in which the grievance issue took place.

1. Student Name
2. Student ID number
3. Major/Program/Site Location
4. Day/Evening Phone Number
5. Mailing Address
6. Email Address
7. Problem: Provide an explanation of the problem and include any pertinent documentation as support.
8. Action Requested: Provide an explanation of the requested action. Include the referring page in the current undergraduate student catalog for the policy in question or any other relevant information, including specific courses or terms.
9. Prior Action Taken: Provide a list of all individuals contacted about the problem, including their departments. For more information on submitting an SAR, students can visit *nova.edu/undergraduatestudies/sar.html*.

After receiving, reviewing, and signing the SAR, the advisor will send it to the appropriate party for a decision.

Step Three: Review and Decision

The College of Undergraduate Studies receives the SAR from advising, reviews all materials provided with the request, requests relevant information and recommendations from the appropriate academic colleges, and reaches a decision based upon all available information. Once a decision has been made, the decision will be communicated to the student to the address on record and/or to the NSU email address.

Step Four: Appeal

Students who wish to appeal a denied SAR may submit an appeal, in writing, to the associate dean of the College of Undergraduate Studies, with any new information and/or documentation. Students will receive a formal response either by mail to the address on record and/or to their NSU email account. This decision is final and binding and cannot be appealed further.

Razor's Edge Scholars Programs

Razor's Edge Global Scholars Program

The Razor's Edge Global Scholars Program combines curricular and co-curricular activities designed to provide learning experiences inside the classroom as well as outside the classroom through involvement in global leadership and engagement activities on campus and at the local, state, national and international levels. The requirements for the minor in "Global Engagement" are only available to students admitted to the Razor's Edge Global Scholars Program offered by the Office of International Affairs. For program requirements, please see the listing of minors in the Abraham S. Fischler College of Education section of this catalog.

For additional information, please visit the program page at *nova.edu/razorsedge/global/*.

Razor's Edge Leadership Scholars Program

Razor's Edge Leadership combines curricular and co-curricular activities designed to provide learning experience inside the classroom as well as outside the classroom through involvement and leadership initiatives throughout campus. The requirements for the minor in "Experiential Leadership" are only available for students admitted into the Razor's Edge Leadership Scholars Program offered by the Office of Student Leadership and Civic Engagement. For program requirements, please see the listing of minors in the Abraham S. Fischler College of Education section of this catalog.

For additional information, please visit the program page at *nova.edu/studentleadership/razorsedge/*.

Razor's Edge Research Scholars Program

The Razor's Edge Research Scholars Program combines curricular and co-curricular activities designed to provide learning experiences inside the classroom as well as outside the classroom through involvement in firsthand research experiences, scientific inquiry and problem-solving activities and initiatives. The Razor's Edge Research Scholars will benefit from mentored research experiences with faculty researchers at NSU. The requirements for the minor in "Research Studies" are only available for students admitted into the Razor's Edge Research Scholars Program offered by the Office of Institutional and Community Engagement in cooperation with the Division of Student Affairs. For program requirements, please see the listing of minors in the Abraham S. Fischler College of Education section of this catalog.

For additional information, please visit the program page at *nova.edu/razorsedge/research/*.

Razor's Edge Shark Cage Scholars Program

The Razor's Edge Shark Cage Scholars Program combines curricular and co-curricular activities designed to provide

meaningful learning experiences through coursework, participating in business plan competitions, starting a business on campus that engages the campus community, and through involvement and leadership initiatives in the Huizenga College of Business and Entrepreneurship and throughout campus. The minor in "Entrepreneurship or Applied Entrepreneurship" is only available to students who are admitted into the Razor's Edge Shark Cage Scholars Program. To complete the requirements for the minor, students must complete all courses in the minor in entrepreneurship. The listing of minors for the H. Wayne Huizenga College of Business and Entrepreneurship sectionof this catalog.

For additional information, please visit the program page at *nova.edu/razorsedge/sharkcage/*.

Razor's Edge Shark Talent Scholars Program

The Razor's Edge Shark Talent Scholars Program combines curricular and co-curricular activities designed to provide learning experiences through coursework, productions, exhibitions, and leadership initiatives in arts events in the Department of Performing and Visual Arts and throughout campus. To complete the requirements for this program, students must complete, ARTS 2600 Introduction to Arts Administration, and complete a PVA major or minor in art, arts administration, dance, music, or theatre. See the listing of majors and minors in the College of Arts Humanities and Social Science section of this catalog.

For additional information, please visit the program page at *nova.edu/razorsedge/sharktalent/*.

Registration

As part of the registration process, all students must complete the Nova Southeastern University Student Enrollment Agreement (SEA) each semester or risk being dropped from their courses. A registration hold on a student's account does not prevent the student from completing the SEA. Students are encouraged to register online via SharkLink. Students who do not know their SharkLink username ID and password should visit *nova.edu/resources/nsuidentity.html*.

All students must have at least provisional admission status, be officially registered, and pay tuition and fees in order to attend class, receive a grade, and receive academic credit. Students should register via SharkLink for the fall, winter, and summer semester during the open registration period. Students should register for all courses they intend to complete within a semester and not wait until the semester has started to register for part of a term. Petitions for changes to course registrations will not be accepted 20 days after each semester ends. Registering early for the entire semester ensures availability of seats in required classes and allows the NSU Office of Student Financial Assistance to properly process and disburse the student's financial aid. An official grade will not be recorded and credit will not be given for anyone who attends class as an unregistered student. For information on dropping, adding, or withdrawing from classes, refer to the *Dropping and Adding Classes or Withdrawal from Classes* sections of this catalog.

The following holds will prevent students from registering:

New student hold—New students must meet with their academic advisor before registering with the exception of nursing students. Nursing students must register through their advisors.

NSU employee hold—NSU employees must submit a Student Transaction Form to register.

Other holds—Other holds, such as a bursar or academic hold, may prevent students from registering. Students must contact the respective hold originator to resolve the hold before registering in SharkLink.

Auditing a Course

Students may register to audit courses except in the cardiovascular sonography, medical sonography, or respiratory therapy programs. Registration as "audit" must be done by an advisor prior to the first class meeting . No academic credit is awarded for audited courses. Students may attend all classes but are not required to take examinations, and a grade of AU is awarded at the time of registration. Once a student has registered for an audit, the registration may not be changed

back to one in the normal grading system. An audited course may be included in the flat-rate tuition, provided the total number of credit hours, including credits assigned to audited courses, does not exceed 18. Otherwise, tuition will be charged at the prevailing, per-credit-hour rate.

Closed Classes

Enrollment capacity for each class is carefully determined to reflect the physical limitations of the classroom or lab as well as the subject's most effective learning and teaching environment. Once a class has been filled and closed to further registration, students should meet with their academic advisor for help adjusting schedules and choosing alternative classes that meet degree program requirements.

Students may appeal to register for closed classes under exceptional circumstances. Student appeals must be made in writing by the student's academic advisor to the chair of the department in which the course is offered. **Appeals should not be directed to course instructors.** Department chair review appeals and may consult instructors when considering such requests. All appeals must explain why no alternative class will support the student's degree requirements, explain why the student was unable to register for the class when space was available, and include a written endorsement from an academic advisor (e.g., by email).

Appeals will only be considered up to the date of the first class meeting. If a student appeal is granted, the department chair will authorize the student's academic advisor in writing (e.g., by email) to register the student. However, the registration must be processed within 24 hours of the department chair's notification. If the registration is not processed within that time period, the authorization is removed and the student's space in the closed class may be released to another student.

Dropping and Adding Classes

During the drop and add periods (the first week of class), students may modify their schedules by changing classes without any further academic implications. However, even during the drop and add period, dropping a class may result in a tuition charge, affect fees, or impact a student's financial aid. Students may withdraw from a class after the drop period has ended (see academic calendar for deadlines). Changes to course registrations will not be accepted 20 days after each semester ends. Dropping a course may result in a refund for tuition paid and will not negatively affect the GPA. However, students need to be cautious because dropping classes may affect the student's enrollment status, eligibility for financial aid, and loan deferment. If a student drops below half-time or full-time status (whichever was the basis for financial aid awarded), the student may become ineligible for grant aid, loans, and scholarships that were awarded prior to the drop. This may cause a reduction in certain types of financial aid and, consequently, may result in a higher balance due. For students completing a Bachelor of Science degree in Nursing, the number of credits constituting half-time or full-time enrollment may vary. All other students are considered half-time at 6–11 credits and full-time at 12 credits or above. Students receiving financial aid are strongly encouraged to consult a financial aid counselor before dropping or withdrawing from classes to ensure compliance with federal and state Standards of Academic Progress (SAP). Student athletes should also contact the athletic compliance officer before dropping or withdrawing from class. For refund policies related to courses dropped, refer to the Tuition section of this catalog.

Students are directed to make their course selection based on their program curriculum requirements and scheduling needs, not based on the instructor. Course instructors may change without notice before or during the semester. In such instances, student petitions based on instructor preference will not be granted.

Dropping Courses

Abraham S. Fischler College of Education
College of Arts, Humanities, and Social Sciences
College of Engineering and Computing
College of Psychology
Farquhar Honors College
H. Wayne Huizenga College of Business and Entrepreneurship
Halmos College of Natural Sciences and Oceanography

Students who intend to drop all their courses for an upcoming semester may not process the full drop through SharkLink. Students must complete a student transaction form and are encouraged to contact their academic advisor to process the full drop.

College of Health Care Sciences
College of Nursing

Students of the College of Health Care Sciences and the College of Nursing must to contact their department chair prior to dropping all courses.

Drop and Add Periods

Abraham S. Fischler College of Education
College of Arts, Humanities, and Social Sciences
College of Engineering and Computing
College of Psychology
Farquhar Honors College
H. Wayne Huizenga College of Business and Entrepreneurship
Halmos College of Natural Sciences and Oceanography

The first week of each semester comprises the drop/add period. The drop/add period is the designated time frame in which course schedules may be edited before they become official. Students who add classes after they have started are responsible for all course requirements.

The second and third weeks of each semester are drop periods. Dropped courses are removed from the student's class schedule and will not appear on transcripts. A percentage of the student's tuition will be reversed as applicable. Only subsequent term (Term II) classes may be added during these weeks. See *Academic Calendar* section of this catalog for deadlines.

The withdrawal period starts with the fourth week of each semester and ends three weeks prior to the end of the semester. Students who intend to withdraw from all courses for a semester are encouraged to meet with their academic advisor and must submit a Student Transaction Form for the withdrawal to be processed.

College of Health Care Sciences
College of Nursing

Bachelor of Health Science—Online Program AND

Bachelor of Science in Respiratory Therapy—Post-Professional (online) Program

Students enrolled in the Bachelor of Health Science—Online Program or in the Bachelor of Science in Respiratory Therapy—Online Program may add or drop courses via SharkLink during the first week of the term. No academic or financial penalties will be assessed during that time frame. No grade notation will be entered on the transcript. No classes may be added or dropped after this period. Dropping a course may affect the loans, scholarships, or grant aid that has been awarded prior to the drop. A student may have tuition refunded when dropping a course; however, this may cause a reduction in certain types of financial aid, which can result in a balance due.

Sequential Programs

The Bachelor of Science—Cardiovascular Sonography Program, Bachelor of Science—Medical Sonography Program, Bachelor of Science in Nursing—Entry Level Track, and Bachelor of Science in Nursing—R.N. to B.S.N. Track Program are sequential programs with lockstep coursework.

Bachelor of Science—Cardiovascular Sonography Program
Bachelor of Science- Medical Sonography Program
Bachelor of Science- Respiratory Therapy (First Professional)

Students in the B.S.—Cardiovascular Sonography, B.S Medical Sonography and B.S. Respiratory Therapy First Professional Programs are not allowed to drop individual classes because the curriculum must be taken

concurrently and in a specific sequence, according to the program requirements. Students enter the program, take the common set of courses in sequence, and graduate together. If a student fails a core sonography or respiratory therapy course, he or she may be dismissed from the program. If the student is otherwise in good academic standing, remediation may be provided or the student may be required to repeat the course in the following year. Students will not be allowed to begin their clinical training unless all sonography or respiratory therapy core courses are passed with a C or better. Students who experience extenuating circumstances may request a Leave of Absence (refer to the Withdrawal from the University and Leaves of Absence sections of this catalog).

Bachelor of Science in Nursing Programs

Students completing a Bachelor of Science degree in Nursing or enrolled in the R.N. to M.S.N. program may drop a course in the first week of class without financial penalties. Students who would like to drop a nursing course must make an appointment to see the program director prior to processing the drop. The program director can answer specific questions about tuition refunds and policy guidelines.

Military Leaves of Absence

Students in the military whether active, reserve, or national guard desiring to take a leave of absence because of military deployment or changes in orders may request a leave of absence for the duration of the time indicated in their orders. To request a military leave of absence, students must contact and supply their academic advisor with a copy of the orders and complete a Student Action Request (SAR) form. Students in the College of Health Sciences must contact the Program Office and College of Nursing students must contact their Department Chair to provide a copy of the orders.

Because the B.H.Sc.—On-line program, R.N. to B.S.N. program, and R.N. to M.S.N. program are distance based, students are encouraged, if at all possible, to continue their studies.

Students in the College of Health Sciences and the College of Nursing students should review the Leave Policy in their Student Handbook for more detailed information.

- *College of Health Care Sciences Student Handbook: https://www.nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Registration Schedule

In advance of open registration periods, students should meet with their academic advisors as early as possible to engage in academic planning. Timely registration ensures availability of seats in required classes, reduces the risk of financial aid problems, and decreases the need for last-minute advising appointments.

Registration deadlines can be found in the *Academic Calendars* section of the Undergraduate Student Catalog.

Faculty members are required to notify the Office of the University Registrar of any registered student who is not in attendance at the beginning of each semester. Therefore, it is of utmost importance that you attend the courses you registered for at the beginning of each semester. If that is not possible, be sure to notify your professor. Otherwise, your professor may report you as not in attendance, and you can be dropped from the course.

Student-Athlete Eligibility

To retain student-athlete eligibility, student-athletes must meet National Collegiate Athletic Association (NCAA), Sunshine State Conference and Peach Belt Conference standards. For further information, student-athletes should consult the *Student-Athlete Handbook* available from the Department of Athletics.

Scholarships

Please refer to *Enrollment and Student Services* section of this catalog.

Student Conduct—Academic Integrity

Students should refer to the full Code of Student Conduct and Academic Responsibility in the *NSU Student Handbook* (*nova.edu/student-handbook/*). Conduct standards, supplementary standards, and university policies and procedures are handled by the NSU's Office of the Vice President of Student Affairs or by the individual colleges and schools, as deemed appropriate.

Nova Southeastern University has established clear expectations regarding student conduct and academic responsibility. When these standards are violated, significant disciplinary action can be expected, including expulsion from the university. Students are expected to abide by all university, college, school, and program rules and regulations as well as all federal, state, and local laws. Students are also expected to comply with the legal and ethical standards of their chosen fields of study. Violations of academic standards are handled by the Office of the Dean in individual colleges and schools.

Academic Integrity in the Classroom

The university is an academic community and expects its students to manifest a commitment to academic integrity through rigid observance of standards for academic honesty. Faculty members are committed to uphold the standards of academic integrity and do their utmost to prevent academic misconduct by being alert to its possibility. If academic misconduct is detected, the faculty member communicates with the student and takes appropriate grade actions within the scope of the course. Faculty members report all violations of academic honesty to their college/school administration, which will be reported to the College of Undergraduate Studies. Depending on the severity or reoccurrence of the academic misconduct, academic leadership can impose institutional sanctions. Deans, associate deans, or department chairs, at their discretion, may immediately suspend students pending a hearing on charges of violations. Sanctions may include academic misconduct warning, academic misconduct suspension, or academic misconduct dismissal, including notation on the student's academic transcript. Students found responsible for violations of academic integrity have the option of appealing the sanctions.

Academic Standards

Excerpt from the *NSU Student Handbook* (*nova.edu/student-handbook/*).

The university is an academic community and expects its students to manifest a commitment to academic integrity through rigid observance of standards for academic honesty. The university can function properly only when its members adhere to clearly established goals and values. Accordingly, the academic standards are designed to ensure that the principles of academic honesty are upheld.

The following acts violate the academic honesty standards:

1. **Cheating:** intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise
2. **Fabrication:** intentional and unauthorized falsification or invention of any information or citation in an academic exercise
3. **Facilitating Academic Dishonesty:** intentionally or knowingly helping or attempting to help another to violate any provision of this code
4. **Plagiarism:** the adoption or reproduction of ideas, words, or statements of another person as one's own without proper acknowledgment

Students are expected to submit tests and assignments that they have completed without aid or assistance from other

sources. Using sources to provide information without giving credit to the original source is dishonest. Students should avoid any impropriety or the appearance thereof in taking examinations or completing work in pursuance of their educational goals.

Students are expected to comply with the following academic standards:

1. **Original Work:**

   Assignments such as course preparations, exams, texts, projects, term papers, practicum, etc., must be the original work of the student. Original work may include the thoughts and words of another author. Entire thoughts or words of another author should be identified using quotation marks. At all times, students are expected to comply with the university and/or program center's recognized form and style manual and accepted citation practice and policy.

   Work is not original when it has been submitted previously by the author or by anyone else for academic credit. Work is not original when it has been copied or partially copied from any other source, including another student, unless such copying is acknowledged by the person submitting the work for the credit at the time the work is being submitted, or unless copying, sharing, or joint authorship is an express part of the assignment. Exams and tests are original work when no unauthorized aid is given, received, or used before or during the course of the examination, re-examination, and/or remediation.

2. **Referencing the Works of Another Author:**

   All academic work submitted for credit or as partial fulfillment of course requirements must adhere to each program center's specific accepted reference manuals and rules of documentation. Standards of scholarship require that the writer give proper acknowledgment when the thoughts and words of another author are used. Students must acquire a style manual approved by their center and become familiar with accepted scholarly and editorial practice in their program. Students' work must comport with the adopted citation manual for their particular center.

   At Nova Southeastern University, it is plagiarism to represent another person's work, words, or ideas as one's own without use of a center-recognized method of citation. Deviating from center standards (see above) are considered plagiarism at Nova Southeastern University.

3. **Tendering of Information:**

   All academic work must be the original work of the student. Knowingly giving or allowing one's work to be copied, giving out exam questions or answers, or releasing or selling term papers is prohibited.

4. **Acts Prohibited:**

   Students should avoid any impropriety or the appearance thereof, in taking examinations or completing work in pursuance of their educational goals. Violations of academic responsibility include, but are not limited to the following:

   - Plagiarism
   - Any form of cheating
   - Conspiracy to commit academic dishonesty
   - Misrepresentation
   - Bribery in an attempt to gain an academic advantage
   - Forging or altering documents or credentials
   - Knowingly furnishing false information to the institution

Students in violation will be subject to disciplinary action.

Academic Misconduct Reporting, Sanctions, and Appeal

Faculty members are responsible for assessing classroom conduct including academic misconduct. Faculty members are required to report any incident of misconduct to their department chair and the college's Office of the Dean. These reports are reviewed for institutional sanction, which is distinct from a grading consequence administered by the faculty member.

A first report typically results in a letter of warning, while serious infractions can result in institutional sanctions including suspension and/or dismissal. Records of each reported incident are retained in the Office of the Dean in the reporting College and in the College of Undergraduate Studies. A subsequent report of academic misconduct will likely result in a more serious institutional sanction, such as suspension or dismissal. All incidents of misconduct retained on record will be disclosed to outside agencies and graduate/professional programs as required.

Certain majors, colleges, and programs within the university reserve the right to apply a more severe sanction, which may result in immediate suspension or dismissal from that major, college, or program. A report of academic misconduct for a student in the Undergraduate Honors Program or the Dual Admission Program requires a review meeting to determine whether the student's status in that program should be terminated. Both programs have requirements of the highest standard of conduct.

A student may appeal an academic misconduct sanction of suspension or dismissal. This appeal will only address the sanction and not whether academic misconduct took place. If a student wishes to address an academic misconduct report, he/she should follow the *Grade/Academic Disputes* located in the *Problem Resolution Procedures* section of the catalog.

Students charged with academic misconduct will be notified in writing of the impending sanction and be offered the opportunity to present mitigating evidence in their defense. If a student appeals an academic misconduct sanction, the College of Undergraduate Studies (COUS) will convene an Academic Integrity Committee (AIC), comprised of faculty members and students. All appeals must be initiated within **ten days** of the sanction notification letter. The College of Undergraduate Studies may appoint up to five undergraduate students to serve on the AIC. Faculty members from each academic college serve on the committee, appointed by the college's dean. The committee has no minimum number of members required for action; meetings are conducted based on faculty and student members present.

Instances of academic misconduct will likely affect the student's grade in the respective course. The Academic Integrity Committee does not review instructors' evaluation of coursework nor decisions on academic misconduct. Students may appeal a classroom grade consequence of academic misconduct through the instructor and the academic department chair/director. Following review of students' presentations, the AIC decides whether a revision of sanction is warranted. The committee will make a recommendation to the Dean or designee in the College of Undergraduate Studies, who will then make a final decision.

Petition for permission to enroll after academic misconduct suspension

Students who are suspended for academic misconduct may petition to re-enroll at NSU once they have served their sanctions, by submitting a request through their academic advisor to the College of Undergraduate Studies. No coursework completed at another institution during the period of suspension will be considered applicable to an NSU degree program.

If students have not registered for coursework at NSU for more than one year, they must reapply for admission and their major program's required curriculum will be re-evaluated according to the most current *NSU Undergraduate Student Catalog*.

Petition for permission to enroll after academic misconduct dismissal

Students who are dismissed for academic misconduct may petition to re-enroll at NSU only after two or more years have elapsed following dismissal. This request must be submitted to the College of Undergraduate Studies, where the final decision will be made by the Dean or designee. No coursework completed at another institution during the period of dismissal will be considered applicable to an NSU degree program.

If students have not registered for coursework at NSU for more than one year, they must reapply for admission and their major program's required curriculum will be re-evaluated according to the most current *NSU Undergraduate Student Catalog*.

Tuition and Fees

Students should refer to the *NSU Student Handbook* for more information about tuition payment policies and health insurance requirements. For students of the College of Health Care Sciences and College of Nursing, please also see next tables for more details about tuition and fees for your respective colleges.

Tuition and Fee Chart 2016–2017

Final Tuition and Fees	2016–2017 Rates	
Application Fee	$50	
Registration Fee (per semester)	$25	
Late Tuition Payment Fee (per semester)	$100	
Deferment Fee (per semester)	$75	
Student Services Fee (per semester):		
1–3 credits	$175	
4 or more credits	$350	
Traditional Day Programs Tuition:		
per semester, 12–18 credits	$13,993	
per credit, under 12 credits	$933	
per credit, over 18 credits	$933	
Non Traditional Program Tuition (per credit):	Active Enrolled Students Prior to Fall 2015 (only)	Students Enrolled after Fall 2015
Main Campus	$781	$933
Off-Campus	$628	$933
Online	$781	$933
Online eArmy U	$500	$500
Abraham S. Fischler College of Education:	$628	$933
Online Program		
A.A. with an Emphasis in Early Childhood Education Program	$397	$933
College of Health Care Sciences:		
Health Sciences	$340	$340
Respiratory Therapy (Post-Professional Program)	$445	$445
Respiratory Therapy (First-Professional Program)—per year	N/A	$26,500
College of Nursing:		
R.N. to B.S.N. Program	$399	$399
Laboratory Fee	ranging from $20 – $100	
Application for Degree Fee (Seniors only)	$100	
Transcript Fee	$10	
Regalia (Cap and Gown) Fee	Assessed when regalia are ordered.	

Final Tuition and Fees	2016–2017 Rates
Room Rate (per semester, varies based on occupancy and residence hall)	Contact the Office of Residential Life and Housing at (954) 262-7052 or visit *nova.edu/housing* for specific room rates and meal plans.
Meal Plan (per semester, declining balance)	

Tuition and Fee Chart 2016–2017: B.H.Sc. and B.S.

Fee Description	B.H.Sc.—Online Program	B.S.—Cardiovascular Sonography and Medical Sonography Programs
Application Fee	$50	$50
Acceptance Fee (payable within two weeks of an applicant's acceptance)	N/A	$500
Deposit (Due within four weeks of an applicant's acceptance)	N/A	$250
Health Professions Division Access Fee	N/A	$145
Preregistration Fee (due within six weeks of an applicant's acceptance)	N/A	$250
Registration Fee	N/A	N/A
Late Tuition Payment Fee (per semester)	$100	$100
Deferment Fee (per semester)	$75	$75
Student Services Fee (per year)	$1,050	
Program Tuition (per year):		
Florida Resident	N/A	$21,000
Out-of-State Resident	N/A	$21,000
Dual B.S./M.H.Sc. Option	N/A	$24,575
Program Tuition (per credit)	$340	N/A
Laboratory Fee (per semester)	N/A	N/A
Materials Fee	Variable where applicable	
SPI National Exam Fee (posted in winter or summer term)	N/A	$200*
I.D. Replacement Fee	$20	$20
Application for Degree (Seniors only)	$100	$100
Diploma Replacement Fee	$30	$30
Official Transcripts	$10	$10
Room Rate (per semester, varies based on occupancy and residence hall)	For specific room rates and meal plans, contact Residential Life and Housing at (954) 262-7052 or visit *nova.edu/housing*.	
Meal Plan (per semester, declining balance)		
Regalia (Cap and Gown) Fee	Assessed when regalia are ordered.	
Additional Fee if NSU needs to provide Clinical placement for the student	N/A	

*ONLY for B.S.—Cardiovascular Sonography

Tuition and Fee Chart 2016–2017: B.S.R.T.

Fee Description	B.S.R.T.— Post-Professional Program	B.S.R.T.— First Professional Program
Application Fee	$50	$50
Acceptance Fee	N/A	$200*
Registration Fee	N/A	
Late Tuition Payment Fee (per semester)	$100	$100
Deferment Fee (per semester)	$75	$75
Student Services Fee (per year)	$1,050	
Program Tuition (per year): Florida Resident	N/A	$26,500
Program Tuition (per credit)	$445	N/A
Laboratory Fee (per semester)	N/A	
Materials Fee	Variable where applicable	
SPI National Exam Fee (posted in winter or summer term)	N/A	
I.D. Replacement Fee	$20	$20
Application for Degree Fee (Seniors only)	$100	$100
Diploma Replacement Fee	$30	$30
Official Transcripts	$10	$10
Room Rate (per semester, varies based on occupancy and residence hall)	N/A	
Meal Plan (per semester, declining balance)		
Regalia (Cap and Gown) Fee	Assessed when regalia are ordered.	

* This fee is required to reserve the accepted applicant's place in the entering first year class, but is non-refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

Tuition and Fee Chart 2016–2017

Fee Description	Entry B.S.N. Program	R.N. to B.S.N. Program
Application Fee	$50	$50
Acceptance Fee	N/A	N/A
Deposit	$200	N/A
Health Professions Division Access Fee	$145	$145
Registration Fee	N/A	N/A
Late Tuition Payment Fee (per semester)	$100	$100
Student Services Fee (per semester)	$175 (1–3 credits) $350 (4 or more credits)	
Program Tuition (per year):		
Florida Resident	$26,520	N/A
Out-of-State Resident	$27,180	N/A
Program Tuition (per credit)	N/A	$399
Kaplan Testing Fee (per semester)	$86	N/A
Laboratory Fee (second semester only)	$150	N/A
Materials Fee	Variable where applicable	
I.D. Replacement Fee	$20	$20
Application for Degree Fee (Seniors only)	$100	$100
Diploma Replacement Fee	$30	$30
Official Transcripts	$10	$10
Room Rate (per semester, varies based on occupancy and residence hall)	For specific room rates and meal plans, contact Residential Life and Housing at (954) 262-7052 or visit *nova.edu/housing.*	
Meal Plan (per semester, declining balance)		
Regalia (Cap and Gown) Fee	Assessed when regalia are ordered.	

Course-Specific Fee Chart 2016–2017

Undergraduate courses not listed here may also require course-specific fees. Students should check SharkLink for the latest information.

ARTS

ARTS 1200	$40
ARTS 1250	$85
ARTS 1700	$40
ARTS 1800	$40
ARTS 2100	$40
ARTS 2200	$40
ARTS 2410	$40
ARTS 2450	$40
ARTS 2800	$40
ARTS 3100	$40
ARTS 3200	$40
ARTS 3450	$40
ARTS 3500	$40
ARTS 3550	$85
ARTS 3650	$40
ARTS 3700	$40
ARTS 4200	$40
ARTS 4250	$40
ARTS 4300	$40
ARTS 4400	$40
ARTS 4500	$40
ARTS 4995	$40

ATTR

ATTR 1300	$60
ATTR 2610	$60
ATTR 2620	$60
ATTR 3300	$80
ATTR 3500	$80
ATTR 3630	$60
ATTR 3640	$60

BIOL

BIOL 1451	$20
BIOL 1461	$20
BIOL 1500	$80
BIOL 1510	$80
BIOL 1510H	$80
BIOL 3151	$20
BIOL 3200	$80
BIOL 3251	$40
BIOL 3300	$80
BIOL 3311	$80
BIOL 3312	$100
BIOL 3320	$80
BIOL 3330	$80
BIOL 3340	$60
BIOL 3400	$80
BIOL 3500	$80
BIOL 3600	$80
BIOL 4350	$80
BIOL 4900C	$80

CENG

CENG 1600	$80

CHEM

CHEM 1200	$80
CHEM 1300	$80
CHEM 1300H	$80
CHEM 1310	$80
CHEM 1310H	$80
CHEM 2200	$80
CHEM 2400	$80
CHEM 2410	$80
CHEM 3250	$80
CHEM 3460	$80
CHEM 3650	$80
CHEM 3700	$80
CHEM 3710	$80
CHEM 4010	$80

COMM

COMM 2200	$40
COMM 2800	$40
COMM 3800	$40

COMP

COMP 1000	$40
COMP 1500	$40
COMP 2000	$40
COMP 2020	$40

DANC

DANC 1200	$40
DANC 1400	$40
DANC 1500	$40
DANC 1600	$40
DANC 2101	$40
DANC 2102	$40
DANC 2103	$40
DANC 2104	$40
DANC 2200	$40
DANC 2400	$40
DANC 2600	$40
DANC 3000	$40
DANC 3100	$40
DANC 3300	$40
DANC 3600	$40
DANC 3900	$40
DANC 4000	$40
DANC 4300	$40

EENG

EENG 2710	$80
EENG 3710	$80

EXSC

EXSC 3740	$80
EXSC 3760	$80
EXSC 3820	$80
EXSC 4220	$80

HS

HS 3530	$8,610*
HS 3540	$13,760*
HS 3550	$50,493*

* see detail chart table

LEGS

LEGS 2100	$55
LEGS 4110	$55
LEGS 4800	$55

MBIO

MBIO 1300	$256*
MBIO 2410	$80
MBIO 2500	$80
MBIO 3700	$80

* rounded to the nearest dollar

MUSC

MUSC 1200	$60
MUSC 1250	$60
MUSC 1300	$40
MUSC 1500	$40
MUSC 1800	$40
MUSC 1810	$40
MUSC 1850	$40
MUSC 1860	$40
MUSC 2000	$40
MUSC 2401	$275
MUSC 2402	$275
MUSC 2403	$275
MUSC 2404	$275
MUSC 2410	$225
MUSC 2411	$225
MUSC 2412	$225
MUSC 2413	$225
MUSC 2414	$225
MUSC 2420	$225
MUSC 2421	$225
MUSC 2422	$225
MUSC 2423	$225
MUSC 2424	$225
MUSC 2600	$40
MUSC 2700	$85
MUSC 2800	$40
MUSC 2810	$40
MUSC 2850	$40
MUSC 2860	$40
MUSC 3301	$40
MUSC 3302	$40
MUSC 3303	$40
MUSC 3304	$40
MUSC 3305	$40
MUSC 3306	$40
MUSC 3307	$40
MUSC 3308	$40
MUSC 3701	$85
MUSC 3702	$85
MUSC 3703	$85
MUSC 4000	$40
MUSC 4100	$40
MUSC 4401	$275
MUSC 4402	$275
MUSC 4403	$275
MUSC 4404	$275
MUSC 4410	$275
MUSC 4411	$225
MUSC 4412	$225
MUSC 4413	$225
MUSC 4414	$225
MUSC 4421	$225
MUSC 4422	$225
MUSC 4423	$225
MUSC 4424	$225

NEUR

NEUR 2500	$150
NEUR 2600	$30
NEUR 2700	$100
NEUR 3000	$50

PHYS

PHYS 2050	$80
PHYS 2150	$80
PHYS 2350	$80
PHYS 2360	$80
PHYS 2400	$80
PHYS 2500	$80

PSYC

PSYC 4300	$50
PSYC 4400	$50
PSYC 4810	$22

TECH

TECH 1110	$60
TECH 1111	$60
TECH 1800	$60
TECH 2130	$60
TECH 2150	$60
TECH 3000	$60
TECH 3010	$60
TECH 4710	$60

THEA

THEA 1500	$40
THEA 2000	$40
THEA 2020	$40
THEA 2025	$40
THEA 2060	$60
THEA 2101	$40
THEA 2102	$40
THEA 2103	$40
THEA 2104	$40
THEA 3020	$40
THEA 3025	$40
THEA 3050	$60
THEA 3060	$40
THEA 3070	$60
THEA 3500	$40
THEA 4020	$40
THEA 4100	$40

Detail Chart Table:

2016-2017 Course Fees for Basics in Aviation and Professional Development in Aviation Concentrations

	Basics in Aviation Concentration			Professional Development in Aviation Concentration		
Course	**Hours**	**Rate**	**Cost**	**Hours**	**Rate**	**Cost**
HS 3530 Integration of Technical Foundations of Flight Management	35	$246 per hour	$8,610	35	$246 per hour	$8,610
HS 3540 Application of Fundamental Competencies In Commercial Aviation	N/A	N/A	N/A	132	$104.24 per hour	$13,759.68
HS 3550 Leadership Principles and Effective Communication in Flight Instruction	N/A	N/A	N/A	40	$1,262.33 per hour	$50,493.20
Total	**35**		**$8,610**	**207**		**$72,862.88**

Explanation of Tuition Rates

Traditional Day Program Tuition

All students in the main campus Traditional Day Program enrolling in 12–18 credit hours per semester pay flat-rate tuition in the fall and winter semesters. Students will not be charged additional tuition for adding classes as long as they do not go above the 18-credit hour limit. Each credit above 18-credit hours will be charged on a per credit basis. Students seeking to register for course loads above 18 credits must request permission from their division or department chair. Courses dropped do not count in this total. However, courses withdrawn from do count toward attempted credit totals.

Students enrolled in 1–11 credits will be charged on a per-credit basis. Students who initially register for 1–11 credits, then add credits that increase their course load to 12–18 credits, will be charged the full flat-rate tuition. Students who officially drop courses and fall below 12 credits will have their tuition recalculated on a per-credit basis. Extreme care and consideration should be taken when deciding to enroll in fewer than 12 credits during a semester. Enrolling in fewer than 12 credit hours may reduce or eliminate scholarships, and institutional, federal, or other financial aid. A student enrolling in fewer than 12 credit hours (or dropping courses that results in fewer than 12 credits) is encouraged to speak with a financial aid counselor about the potential negative impact this decision may have on financial aid.

Tuition for the Traditional Day Program during summer terms is charged per credit regardless of the number of enrolled credits.

Non-Traditional Program Tuition

Students in the Non-Traditional Program pay tuition per credit hour. Rates vary depending on colleges and programs.

Charges and Payments—College of Health Care Sciences and College of Nursing

Tuition charges in the College of Health Care Sciences and the College of Nursing are automatically calculated when students register for classes. Students are expected to pay in full at the time of registration, or have completed the necessary paperwork for financial aid and have been awarded. Students may pay for tuition using credit cards: MasterCard, VISA, or American Express. Credit card payments may be made online.

Course Remediation Cost—College of Health Care Sciences and College of Nursing

The cost of repeating a course in the Health Professions Division is not covered in the regular tuition. Students who fail a course, didactic or fieldwork, will be required to repeat the course and will be charged the then prevailing per semester hour rate.

NSU Payment Plans

NSU students (with the exception of international students) who wish to defer payment of their tuition, fees, and other institutional charges, due at the time of registration, may sign up for an NSU payment plan. For detailed information, visit *nova.edu/bursar/payment/payment_plans.html.*

Tuition Assistance Plans

Tuition Deferment

Undergraduate students participating in employer tuition assistance programs who wish to defer tuition payment must

complete followings **before the first day of class**:

- submit a letter of eligibility, a purchase order from their employer, or details of their employer's program from the employer's human resources office or the employer's website.
- provide postdated payments (check or credit card authorizations) for the amount of tuition. Payment of tuition only (not fees) may be deferred for five weeks after course completion.
- pay a $75 deferment fee along with all other fees.
- notify the Office of Student Financial Assistance of participation in an employer tuition assistance program.

Tuition Direct Billing

A student whose employer, sponsor, or guarantor has agreed to be direct billed by NSU must notify the Office of the University Bursar accordingly. The student must complete the followings **before the first day of class**:

- provide a voucher, financial guarantee, letter of credit or eligibility from the respective payer with the amount and enrollment period for which funds are to be applied when charges are due at the time of registration.
- pay any amount due not covered in the billed party documentation.

Tuition Reimbursement

Some employers/sponsors/guarantors make payments directly to the student. Students must complete the followings **before the first day of class**:

- Pay charges in full for the semester/term to be reimbursed.
- Send an email to *bursar@nova.edu* from their SharkLink (NSU) email account to request a receipt of paid charges.

Florida Prepaid College Plan

NSU accepts and bills the Florida Prepaid College Plan for tuition, fees, and on-campus housing costs. The plans are based on the tuition rates of the tax-assisted Florida public colleges and universities. The difference between NSU tuition, fees, and on-campus housing costs and the allocations through the Florida Prepaid College Plan is the sole responsibility of the student. If a student is on the unrestricted plan, the student must designate a dollar amount for up to the cost of tuition and fees. Students new to NSU must contact Florida Prepaid at 800-552-GRAD to authorize NSU for payment. For those students who have notified the Florida PrePaid College Plan that they are attending NSU, the Plan will automatically be billed based on the hours of enrollment after the drop/add period. A student may request changes to this procedure by submitting a completed and signed Florida Prepaid College Plan Billing Request Form available on the bursar website at *nova.edu/bursar/forms/*. To learn more about the Florida Prepaid College Plan, visit *myfloridaprepaid.com*.

Consequences for Nonpayment

The student's failure to meet financial obligations at the end of 30 days, in accordance with university policy, will result in an automatic letter of notification being sent to the student informing him or her of failure to resolve his or her financial obligation.

The Office of the University Bursar shall:

- notify students who have failed to meet their financial obligation after 30 days from the start of the semester;
- place a financial hold and late fee of $100 on the student's account. A financial hold prevents a student from obtaining grades, registering for classes, and accessing the University RecPlex until all outstanding balances are paid in full.
- notify students of their failure to pay via their NSU (SharkLink) email;
- forward to the program office the names of all students in delinquent status for the program office to take appropriate administrative action.

Refund Policies

Refunds of Admission Deposits

The $200 deposit paid upon admission to the Traditional Day Program is refundable if requested by May 1 for fall enrollment, and September 1 for winter enrollment.

Refunds of Tuition and Fees

Pro-rated tuition refunds are limited to the first three weeks of each semester according to the policies outlined below for each program. All fees will be refunded to students prior to the first day of classes for a semester. Non-attendance does not constitute an official drop. Students must formally drop courses in order to be eligible for a refund. Contact an academic advisor for assistance.

Please note that students must be officially registered prior to the start date of course(s) in order to participate in and receive academic credit for those courses. The "start date" is generally through the first week of class. Petitions for changes to course registration will not be accepted 20 days after each semester ends. Students are responsible for reviewing their registration and academic records each semester for accuracy.

Students will not be charged tuition for each course dropped in SharkLink by the end of the first week of classes. In order to drop classes after the official add/drop period, students must drop the course via SharkLink or submit a Student Transaction Form to the Registrar's Office, the One-Stop Shops (located in the Horvitz and Terry Administration buildings), or the program office.

The following applies:

- Drops through the seventh day of term in which the class begins: 100 percent
- Drops during the eighth through 14th day of term: 75 percent
- Drops during the 15th through 21st day of term: 50 percent
- Withdrawals after the 21st day of term: no refund

Processing of Refunds

For tuition refund requests to be considered, students must provide written notification to their academic advisor. Refund amounts are based on the date of written notification, such as the date of sent email (must be from an NSU email account) or postmark for mailed requests. For general registration, drop/add, and withdrawal policies, refer to *Academic Policies and Procedures*.

Refunds for Expelled Students

Students who are expelled from NSU will not receive tuition refunds.

Refunds for Course Cancellations

The university reserves the right to cancel any course or section when registered enrollments are low. The university will refund 100 percent of tuition and any associated class fees for courses that are cancelled. If a student registered for only one course, the registration fee and student services fee will also be refunded.

Exceptions to Refund Policies

Refunds or credits to student accounts may be considered after the drop period if proof of exceptional circumstances exists. Students should contact their academic advisor with questions about exceptional circumstances. Requests for refunds must be made during the same semester in which courses are scheduled.

It is the student's responsibility to provide all necessary documentation. Academic advisors will forward requests to appropriate directors for consideration. See also the Student Action Request (SAR) in Problem Resolution Procedures segment of this section (Academic Policies and Procedures).

Veterans' Education Benefits

Department of Veterans Affairs (DVA) educational benefits are designated to provide eligible individuals with an opportunity for educational and career growth. Eligible veterans and their dependents should contact the Veterans Benefits Administrator Office at (954) 262-7236, toll free 800-541-6682, ext. 27236, Monday through Friday, between the hours of 8:30 a.m. and 5:00 p.m., or visit the office in the Horvitz Administration Building on the Fort Lauderdale-Davie campus. Detailed information is also available on the veterans education benefits web page at *nova.edu/financialaid/veterans/*. If you have any questions concerning eligibility, you may also contact the U.S. Department of Veterans Affairs (DVA) at 888-442-4551 or visit their website at *benefits.va.gov/gibill/*.

Grade/Progress Reports for Students Receiving Veterans' Benefits

Nova Southeastern University furnishes each student with a Notification of Posting of Grade with instructions on how to view an unofficial transcript that shows current status of grades and earned semester hours for all courses completed and/or attempted, and grades for courses in which the student is currently enrolled. At the end of every evaluation period (e.g., term, semester) each veteran can request an official transcript which shows the current status of grades and earned semester hours for all courses completed and/or attempted. This transcript can be obtained from the One-Stop Shop in the Horvitz or Terry Administration Buildings or online at *https://sharklink.nova.edu/cp/home/displaylogin*.

Withdrawal from Classes

Students may withdraw from a class after the drop period has ended up to three weeks prior to the end of the semester. Please refer to the Academic Calendars for specific dates. Withdrawn courses will remain on student transcripts with a notation of W, but will not affect the student's GPA. For information about the drop period, see Dropping and Adding Classes. For the tuition refund schedule during the drop period, refer to the Tuition and Fees section. Before withdrawing from classes, students are advised to consult with their academic advisor to discuss academic standing implications. Financial aid recipients are strongly encouraged to also speak with a financial aid counselor to avoid unwelcome consequences such as loss of financial aid eligibility or reversal or reduction of funds received. International students must be mindful the change in enrollment status may affect their immigration status and their eligibility for student visas.

Students may initiate a withdrawal from a course after the first three weeks from the start of the course. Students may withdraw from a course with no financial refund or credit until the third week before the class ends. For example, students may withdraw until the end of the fifth week of a term for an 8-week course or until the end of the 13th week of a semester for a 16-week course. For exact dates, refer to the Academic Calendars section of this catalog.

There is no financial refund if a student withdraws from a course. Total credits attempted are not reduced by course withdrawals. Withdrawals may affect a student's financial aid eligibility; therefore, students should check with a financial aid counselor before making adjustments to their schedule. Not attending classes does not constitute official withdrawal. A student who stops attending classes will receive grades based on course requirements and work completed.

Withdrawals cannot be processed via SharkLink. Students who plan to withdraw from a course must notify their academic advisor. Withdrawal forms must be received and processed by academic departments prior to withdrawal deadlines.

Students of the College of Heath Care Sciences and College of Nursing **must** also refer to their respective college's student handbooks for detailed procedure about class withdrawal as it may vary for each academic degree program.

- *College of Health Care Sciences Student Handbook: https://www.nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Withdrawal from the University and Leaves of Absence

Students who plan to withdraw from all courses during a semester and leave the university must contact their academic advisor before withdrawing. Students who withdraw from the university must formally apply to be considered for readmission at a later date.

Continuous Enrollment and Withdrawal from the B.H.Sc. and B.S.R.T. Online Programs

Although continuous enrollment is not a requirement, both programs strongly recommend students to enroll in at least two courses per semester, for the duration of their studies. Unless prior approval or a leave of absence has been granted, students who do not enroll in any classes for two consecutive semesters may be administratively withdrawn from the B.H.Sc. and B.S.R.T. online programs. If a student is administratively withdrawn from one of these programs, he or she would be required to petition the department chair in writing for reinstatement in the program.

Leaves of Absence

Students who require a leave of absence for less than one year may return and continue their programs without reapplying to the university. If students have not registered for coursework for more than one year, they must reapply for admission and their major program's required curriculum will be reevaluated according to the most recent requirements as listed in the most current *NSU Undergraduate Student Catalog*. Students should note that any leave of absence may affect eligibility for financial aid and loan deferment.

If there is an interruption in studies of more than one calendar year from the end of the last semester enrolled, the student must abide by the *NSU Undergraduate Student Catalog* in effect upon return, or to requirements approved by the student's academic department chair.

College of Health Care Sciences

A student seeking a voluntary leave of absence must submit the request in writing to the department chair. In collaboration with the dean, the director and/or chair will determine and notify the student in writing whether a leave of absence will be granted and the conditions and time frame under which the student may return to school. In making the request, the student understands that he or she may not be eligible to return to the program before the next academic year and may at the discretion of the department chair and or dean, be required to repeat coursework previously taken if the leave of absence is for an extended period of time, as defined by the department.

College of Nursing

A student seeking a voluntary leave of absence must submit the request in writing to the department chair and/or associate dean. In collaboration with the dean, the director and/or associate dean will determine and notify the student in writing whether a leave of absence will be granted and the conditions and time frame under which the student may return to school. In making the request, the student understands that he or she may not be eligible to return to the program before the next academic year and may at the discretion of the department chair and or dean, be required to repeat coursework previously taken if the leave of absence is for an extended period of time, as defined by the department.

Academic Resources and Student Services

Disability Services

The Office of Student Disability Services provides reasonable accommodations for qualified students with documented disabilities enrolled at NSU, regardless of location or instructional delivery format. The Office of Student Disability Services and its designated representatives are available to advise students regarding eligibility for classroom and testing accommodations and other disability-related services. For more information about ADA policy, services, and procedures, students may call the Office of Student Disability Services at (954) 262-7185 or visit *nova.edu/disabilityservices*.

NSU Student Handbook

The NSU Student Handbook addresses general university policies for NSU students, including student life, student rights and responsibilities, university policies and procedures, and NSU resources. The *NSU Student Handbook* can be viewed at *nova.edu/student-handbook/*.

For Health Professions Division (HPD) students in the College of Health Care Sciences and College of Nursing, please also refer to your college's student handbook for more information specific to your respective colleges.

- *College of Health Care Sciences Student Handbook: https://nova.edu/publications/chcs/chcs_student_handbook/*
- *College of Nursing Student Handbook: https://nova.edu/publications/nursing/student-handbook/*

Office of International Affairs (OIA)

The Office of International Affairs (OIA) serves as a base for the university's international initiatives, international student services, and international risk management travel registration procedures and undergraduate international recruitment and admissions, and includes the Office of International Students and Scholars (OISS), the Office of Education Abroad (OEA), and the Office of International Undergraduate Admissions (OIUGA). The OIA also provides ongoing assistance and support for all members of the university community engaged in campus internationalization, global partnerships and exchanges and other globalization efforts.

- The Office of International Students and Scholars (OISS) provides immigration, orientation, counseling and overall assistance to all new and continuing international students, visiting scholars, and faculty on and off campus.
- The Office of Education Abroad (OEA) provides comprehensive assistance to those students (domestic and international) who want to travel overseas and experience an academic semester, a summer, or year abroad.
- The Office of International Undergraduate Student Admissions (OIUGA) provides comprehensive international student recruitment and admission support for prospective international students.

The OIA is committed to welcoming international students, scholars, and their families while facilitating their transition to life at Nova Southeastern University; and the team is also committed to providing domestic students with the services they need to fulfill their global and international interests though study abroad opportunities. For further information, contact OIA at (954) 262-7240 or visit the website at *nova.edu/internationalaffairs*.

Orientation

Orientation connects students to educational and social programming, involvement opportunities and University resources. At orientation, we strive to welcome, prepare, and support the transition of new students and families into the Nova Southeastern University community. Orientation programs are held for all undergraduate students on the main campus, regional campuses, and in the online domain for students at a distance. All new undergraduate students must attend an orientation prior to beginning their first semester at NSU. To learn more about specific orientation programs and to sign up to attend, visit *nova.edu/studentorientation*, call (954) 262-8050, or email *orientation@nova.edu*.

Student Success Program

Housed under the Office of Undergraduate Student Success, the student success program is designed to provide a holistic approach to connecting undergraduate students with supportive services that promote academic growth and personal development. Students can meet one-on-one with an academic success coach whose sole function is to assist with navigating academic and student support services in order to overcome challenges such as but not limit to time management, organizational skills, goal setting, study strategies, campus engagement, and academic recovery. The office also facilitates Tools for Success workshops, the Super Sharks program, Greek Academic Excellence, and Student Success Fair geared towards creating awareness of programs and resources that enhance the academic and personal NSU experience. For more detailed information, please call (954) 262-8485 or visit our website at *nova.edu/yoursuccess*.

Study Abroad Programs

Nova Southeastern University is committed to providing undergraduate students with study abroad opportunities, the flexibility to earn college credit at a university abroad, and receive financial assistance as well as comprehensive support for students to plan and realize their own, individual study abroad goals for a semester, a summer or a full year. Students can select their study abroad destinations from a full array of programs at universities all around the world, and the Office of International Affairs provides all the guidance and support to assist students in getting ready for their international experience.

For more information about Study Abroad, contact the Office of International Affairs at (954) 262-7240 or *intl@nova.edu* or visit *nova.edu/internationalaffairs/travel-study-abroad/study-abroad/destinations.html*.

Technical Help

The Help Desk is dedicated to serving the NSU community from enrollment to graduation and beyond. Help Desk services include, but are not limited to, computer and browser configuration for NSU online resources; SharkLink account support; academic specified program installations; email configuration; basic network troubleshooting and configuration, and mobile device support. For technical help, call (954) 262-4357; 800-541-6682 ext. 24357; or email *help@nova.edu*.

Travel Study Programs

Several NSU colleges, in cooperation with the Office of International Affairs, offer organized faculty-led travel study programs that are part of established courses and may satisfy specific major requirements. Students may also choose to take advantage of organized travel study programs without receiving credit. Programs include travel study to England, the Great Barrier Reef, Peru, Ecuador, and the Galapagos Islands. In addition to these programs, an annual photographic expedition is also arranged. This expedition is led by a faculty member, to explore in-depth the natural history and culture of one country. In past years, expeditions have traveled to Chile, China, Costa Rica, East Africa, Malaysia, and St. Lucia.

For more information, contact the Office of International Affairs at (954) 262-7240 or *intl@nova.edu* or visit *chass.nova.edu/opportunities/travel-study/index.html*.

Tutoring and Testing Center (TTC)

The Tutoring and Testing Center (TTC) supports the academic progress of NSU undergraduate students. Among the various services are free individualized tutoring in writing, mathematics, and science, as well as a diverse array of testing services.

Tutoring Services

Students can receive one-on-one tutoring in writing, math, and science courses. Tutoring sessions are offered in 45 minute increments. Writing tutoring covers all stages of the writing process, from brainstorming and research to organization and revision. TTC does not provide editing services. Tutors help students identify ways in which they can improve their writing and research skills. Math and science tutors clarify and reinforce specific topics. Students are expected to bring attempted assignments to the session. For more information, please call (954) 262-8350 or visit our website at *nova.edu/tutoring-testing/tutoring-services/*.

Testing Services

Incoming undergraduate students, in consultation with their academic advisors, may request to take challenge/placement exams in writing, mathematics, Spanish, and technology. Testing Services also facilitates faculty make-up exams and accommodations for students with documented disabilities. Other credit-bearing examinations available to the students are the College-Level Examination Program (CLEP), DSST - DANTES subject standardized tests, and New York Proficiency Testing in Foreign Languages. All exams are by appointment. For more information, please call (954) 262-8374 or visit our website at *nova.edu/tutoring-testing/testing-services/*.

Veterans Resource Center

The mission of the Veterans Resource Center (VRC) is to link veterans with university and community resources, as well as provide a welcoming environment for student veterans to meet, relax, and gather. The VRC is located on the second floor of the Rosenthal Student Center in Room 218. The room is open from 7:00 a.m. to 10:00 p.m., seven days a week. For more information about NSU's Veterans Resource Center, please call (954) 262-FLAG (3524) or email *vrc@nova.edu*.

Abraham S. Fischler College of Education

ABRAHAM S. FISCHLER COLLEGE OF EDUCATION

Dean's Message

On behalf of the many men and women who are members of the Abraham S. Fischler College of Education learning community, I am pleased to provide Information on the undergraduate courses and programs we offer. We are proud of the high quality instruction and service our college provides to assist you on your pathway to a successful career.

We are committed to the successful enhancement of your personal and professional goals. We provide excellent instruction, technology designed to deliver high quality information, and an infrastructure designed to support your efforts. We maintain one of the largest library databases available and employ a host of initiatives designed to focus on developing new approaches to teaching and learning.

You are entering an exciting time in your life, and beginning an amazing journey at NSU. We remind you that our expectations and standards are high; however, we know you are up to this challenge. Our goal is to help you succeed, and we know that by working together, you will achieve your dreams. The end result will be the acquisition of new knowledge, talents, and skills. On behalf of the hundreds of professional men and women associated with the Abraham S. Fischler College of Education, I welcome you to the threshold of a new world.

Lynne R. Schrum, Ph.D.,
Dean, Abraham S. Fischler College of Education

Mission Statement

The Abraham S. Fischler College of Education (FCE) is dedicated to the enhancement and continuing support of teachers, administrators, trainers, and others working in related helping professions throughout the world. The college fulfills its commitment to the advancement of education by serving as a resource for practitioners, both novice and experienced, and by supporting them in their professional self-development.

Because of its commitment to the working professional, The college offers alternative delivery systems that are adaptable to practitioners' work schedules and locations. School programs anticipate and reflect the needs of practitioners to become more effective in their current positions, to fill emerging roles in education and related fields, and to be prepared to accept changing responsibilities within their own organizations.

Ahead of the Curve

At the Abraham S. Fischler College of Education, our mission requires us to stay "Ahead of the Curve"—in education, leadership, and services. We are dedicated to the enhancement and continuing support of all who desire, provide, or facilitate education and/or educational options throughout the world. The college fulfills this commitment to the advancement of education by serving as a resource for practitioners and supporting them in their professional self-development.

Our commitment to the value of the working professional is the basis for our alternative delivery systems that take education to the learner and adapt it to meet the career needs of the practitioner. Our programs anticipate and reflect the needs of practitioners to become more effective in their current positions, to fill emerging roles where education is needed, and to prepare them to accept changing responsibilities within their own organizations.

Consistent with the philosophical views of individual development, motivation, and leadership, FSE is also committed to prepare professional educators who possess both a high sense about their responsibilities as leaders in their society and who hold themselves to high ethical standards. It is also devoted to the formation of humanistic educators able to successfully meet the needs of people in a culturally and globally diverse society.

National Council of Accreditation for Teacher Education (NCATE) Program Approvals

The following Abraham S. Fischler College of Education programs have been reviewed during the initial NCATE unit review (October 2011) and/or through the NCATE SPA (Specialized Professional Association) review.

Bachelor of Science in Education

Specialization	Name of NCATE SPA Recognition
Elementary Education (Nevada and Florida with ESOL and Reading endorsements)	Association for Childhood Education International (ACEI) Website: *ncate.org/ProgramStandards/ACEI/ACEIstandards.doc*
Exceptional Student Education (Nevada and Florida with ESOL endorsement)	Council for Exceptional Children (CEC) Website: *ncate.org/ProgramStandards/CEC/CECStandards.doc*
Prekindergarten/Primary Education with ESOL endorsement (Florida)	National Association for the Education of Young Children (NAEYC) Website: *naeyc.org/caep/files/caep/NAEYC%20Initial%20and%20 Advanced%20Standards%2010_2012.pdf*
Secondary English Education (Florida with ESOL endorsement)	In process
Secondary Mathematics Education (Florida)	In process

State Disclosures

The following states require these disclosures:

Arizona

Nova Southeastern University is licensed to operate in Arizona by the Arizona State Board for Private Postsecondary Education.

California

Any questions or problems concerning this institution which have not been satisfactorily answered or resolved by the institution should be directed to the Bureau for Private Postsecondary and Vocational Education, 1027 Tenth Street, Fourth Floor, Sacramento, California 95814; (916) 445-3427.

Nevada

Nova Southeastern University's Master of Science in Speech-Language Pathology Program, Undergraduate and Graduate

Teacher Education Programs, and the National Ed.D. Program for Educational Leaders are licensed by the Nevada Commission on Postsecondary Education.

Meeting Facilities

Nova Southeastern University utilizes classroom facilities in accordance with local health, fire, and safety standards. All facilities are selected on the basis of their conduciveness to learning.

Certification/Licensure

The requirements for certification/licensure differ from state to state. Some states do not grant initial certification/licensure unless transcripts are annotated as having met that state's approved program.

In Florida, students graduating from a state-approved program and who have passed all portions of the Florida Teacher Certification Exam (FTCE) with the appropriate Subject Area Examination applicable to the student's major are eligible for an initial professional certificate. Actual teacher certification is awarded by the Florida Department of Education, not NSU.

The State of Nevada's Department of Education has amended its rule regarding candidates pursuing initial certification. Rule **NRS 394.150** requires all students at the undergraduate **and** graduate levels to complete instruction in the United States and State of Nevada's constitutions. Students may fulfill this requirement by completing a course in Nevada law or by providing passing scores on an approved examination.

A state department of education (DOE) reserves the right to change requirements leading to certification/licensure at any time. Consequently, NSU reserves the right to change requirements in a state-approved program, with or without prior notice, to reflect changes mandated by the DOE.

For specific requirements and current information regarding teacher certification/licensure, please contact the appropriate department of education (DOE).

Florida Department of Education
Bureau of Educator Certification
Suite 201, Turlington Building
325 West Gaines Street
Tallahassee, Florida 32399-0400
Website: *fldoe.org/edcert*

Phone Service:
In-state toll-free number: 800-445-6739
Out-of-state number: 850-488-2317

Nevada Department of Education
Teacher Licensing Office
1820 East Sahara Avenue, Suite 205
Las Vegas, Nevada 89104
Website: *nvteachers.doe.nv.gov*

Phone Service:
(702) 486-6457 (voice mail)
(702) 486-6458 (8:00 a.m. to 5:00 p.m.)
(702) 486-6450 (fax)

Certification through Course-by-Course Analysis by the Florida Department of Education

Some courses are offered for students who already hold a bachelor's degree in fields other than education and who desire to obtain certification in specific content areas (see programs of study). Before registering for courses, individuals who are not already full-time students and who are seeking courses that may lead to certification can be admitted to NSU as non-degree-seeking students. Certification-only students assume full risk in interpreting the letter of eligibility needs. NSU recommends that certification-only students discuss anticipated course offerings with the Teacher Certification Office of the Florida Department of Education, the Nevada Department of Education, or the local school district certification officer, before registering for any courses.

Dress Code

Field Experiences and Clinical Practice (Internship)

All teacher candidates completing field experience and clinical practice (internship) are expected to abide by the dress code that is in place at the school/school district in which they are placed. Teacher candidates must dress professionally and appropriately for the college setting and/or any school related specific activity. Clothing that is in any way controversial, provocative, and/or revealing may not be worn. Teacher candidates are expected to follow good grooming habits and long hair should be worn in a manner where it will not impede the Pre-K–12 classroom students' view of the teacher candidate's face and mouth. Facial piercings (nose, tongue and eyebrow) and/or the exhibition of inappropriate tattoos are not permitted. If poor judgment is exercised in the manner of dress or grooming, the teacher candidate may be asked to leave campus by the college administrator, cooperating teacher, or university supervisor until such time that the situation has been remedied.

Form and Style Guidelines for Student Writing

The current edition of The Publication Manual of the American Psychological Association is the official style guide used for all written works at the Abraham S. Fischler College of Education. All students must adhere to the form and style requirements outlined by the APA style guide.

Undergraduate Programs in Education

The Abraham S. Fischler College of Education offers undergraduate programs in education including the Associate of Arts program with an emphasis in Early Childhood Education (A.A./ECE), the Undergraduate Teacher Education Program (UTEP), and the Bachelor of Science in Early Childhood Development.

Associate of Arts Program

A.A. in Early Childhood Education (A.A./ECE) Program

The Associate of Arts degree with an emphasis in Early Childhood Education has been designed to provide a highly supportive learning environment in which members of the early childhood community can develop the skills and knowledge needed to meet the current standards for advanced degrees in the field of early childhood education. The A.A./ECE program is not designed to lead to certification or licensure.

The A.A./ECE program is structured according to the national and state requirements for associate degree programs in early childhood education. The program is based on the competencies and guidelines established by the National Association for the Education of Young Children (NAEYC).

A.A. in Early Childhood Education Learning Outcomes

Early childhood educators enrolled in the A.A. program will do the following:

1. Develop the skills and knowledge necessary to meet the increased challenges and responsibilities faced in today's early childhood settings.
2. Learn how to incorporate the best teaching competencies and practices in their work environment.
3. Learn to recognize the diverse needs and learning styles of all children in today's multicultural early childhood settings.
4. Learn how to be responsive to the individual and unique needs of children with special needs.
5. Attain a greater assurance of job security and expand their potential for career advancement.
6. Increase their computer and technology skills.
7. Create a foundation for lifelong learning.

Instructional Delivery System

Courses are delivered in an online format through the university's learning management system. Online delivery provides access to coursework at times and places that are convenient for working professionals.

Program Completion Timeline

The formal instructional portion of the program is designed to be completed in two years.

Program Completion Requirements

To graduate, a student must (a) successfully complete all coursework and apply for degree conferral, (b) maintain a minimum 2.0 grade point average, and (c) meet all financial obligations to the University.

A.A. in Early Childhood Education Curriculum

The program of study is designed to meet the national guidelines and competencies recommended by the NAEYC for the preliminary preparation of early childhood educators. Professional courses are intended to develop knowledge and competencies in five key areas that include: (a) early child development, (b) curriculum, family, and community, (c) assessment, (d) special needs, and (e) professionalism.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* section in the Academic Policies and Procedures section of this catalog.

A.A. in Early Childhood Education Major Prerequisites (6 credits)

All incoming and current students who have not yet taken COMP 1500 and MATH 1040 are required to complete prerequisite courses of COMP 1000 and MATH 1000. Students may take a challenge exam, present appropriate transfer credits, or show evidence of standardized test scores to fulfill these prerequisites.

MATH 1000	Essential Mathematics (3 credits)
COMP 1000	Basic Writing (3 credits)

A.A. in Early Childhood Education Program Requirements (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross Cultural Studies (3 credits)

A.A. in Early Childhood Education Major Requirements (27 credits)

Required Courses (24 credits)

ECA 203	Foundations of Early Care and Education (3 credits)
EDEC 2405	Children with Special Needs (3 credits)
ECA 218	Child Observation, Record Keeping, and Assessment (3 credits)
ECA 241	Child Guidance (3 credits)
ECA 242	Foundations of Literacy Development (3 credits)
ECA 215	Creative Activities for Young Children (3 credits)
ECA 267	Literacy Development in Multilingual Communities (3 credits)

AND

Select one of the following courses:

ECA 252	Managing Early Literacy Environments (3 credits)
ECA 227	Developmental Curriculum: Language, Literature, and Social Studies (3 credits)

Capstone (3 credits)

ECA 285 Professional Behavior in Early Childhood (3 credits)

ECA Electives*

(These are optional courses that will not count toward fulfilling the program credit requirements.)

ECA 101	Introduction to Early Childhood Education: Professionalism, Safety, Health, and Learning Environment (CDA I) (3 credits)
ECA 112	Introduction to Early Childhood Education: Physical, Cognitive, Communication, and Creative Development (CDA II) (3 credits)
ECA 114	Introduction to Early Childhood Education: Families, Schools, and Communities (CDA III) (3 credits)
ECA 270	Administration of Child Care and Education Programs (3 credits)

* CDA courses (ECA 101, ECA 112, and ECA 114) and ECA 270 are elective and optional 3 credit courses, but may not be used towards degree credits. ECA 270 is designed for existing or aspiring administrators and directors. This course meets the training requirements for the Florida Child Care and Education Program Director Credential.

Total Credits Required for Degree Completion: 60 credits

Bachelor of Science Undergraduate Teacher Education Program (UTEP)

The Undergraduate Teacher Education Program (UTEP) at Nova Southeastern University offers Florida and Nevada state-approved majors that are proactively designed to address the current and future needs of classroom educators. The aim of UTEP is to prepare developing professionals with knowledge of content and pedagogy, professional dispositions, and skills for entry into the teaching profession.

Conceptual Framework

In order to provide quality programs that prepare effective educators, the Abraham S. Fischler College of Education uses a conceptual framework (SUNRISE) that includes the following elements and characteristics.

Standards-based instructional and leadership programs that link theory to practice with the
Use of data for evaluation, ethical decision-making, and intervention for the
Needs and accommodations for diverse students who provide
Reflective and ethical practice based on meaningful field and clinical experiences as part of
Innovative and convenient postsecondary delivery systems with a
Shared responsibility for quality education programs and professional advocacy with stakeholders with an
Emphasis on technology and best practices for dynamic learning environments

Undergraduate Teacher Education Program Goals

The Undergraduate Teacher Education Program remains committed to the following goals.

1. Provide a quality, nationally accredited, state-approved, teacher preparation program that incorporates best practices of teacher preparation.
2. Continue to ensure and enhance the quality and the consistency of program delivery on all campuses, and online.
3. Implement Teacher Candidate Meetings to provide up-to-date information on the state-approved teacher education program procedures, particularly those related to teacher candidates' attainment of the teacher education standards.
4. Continue to provide instructional and supervisory support for teacher candidates during their field experiences and clinical practice to ensure that they are implementing best practices.
5. Provide adequate resources for adjunct and full-time faculty members to improve the quality of instruction and provide opportunities for professional development. Success in this area is also dependent upon communication between full-time faculty members and adjunct instructors at the campuses.
6. Continue to work with school districts and communities to assess their needs and identify opportunities toward delivery of specially designed academic programs.
7. Remain responsive to the state, professional, federal, and international demands related to teaching.

Matriculation Requirements

Each semester, the Undergraduate Teacher Education Program reviews the academic transcripts of all students enrolled in a state-approved teacher education major. Upon meeting the conditions of matriculation into the Undergraduate Teacher Education Program, students will be declared teacher candidates and will receive a letter of notification indicating their matriculation status by the teacher candidate's junior year (60 credits). It is the student's responsibility to work with his or her academic advisor to meet the matriculation requirements.

1. Florida and Nevada students must comply with the admission requirements established by the Nova Southeastern University Office of Undergraduate's Admissions. Upon admission, students matriculate in a state-approved education major and declare themselves as intended teacher candidates.
2. Florida students must earn a grade of C or better in COMP 1500, 3 credits above COMP 1500, MATH 1040, and MATH 1050 or their equivalents. Secondary Mathematics Education major students are required to register for MATH 1200.

3. Nevada students must earn a grade of C or better in COMP 1500, 3 credits above COMP 1500, MATH 1040, and MATH 1050 or their equivalents.
4. Florida and Nevada students must earn a cumulative GPA of 3.0 or higher.
5. Florida students must submit documentation that the testing requirement (General Knowledge Test [GKT] or equivalent sections of Praxis I) has been met before registration of education courses in the teacher candidate's junior year (60 credits). Per the Florida Statutes the College Level Academic Skills Test (CLAST) may no longer be used to meet the general knowledge testing requirement.
6. Nevada students must submit documentation that the testing requirement of the Praxis I has been met before accumulating 24 credits at NSU.
7. All teacher candidates who wish to enter a Pre-K-12 classroom are required to obtain a security clearance (fingerprint/background check) from their respective school district. Obtaining and maintaining security clearance is the teacher candidate's professional responsibility. Security clearance should be obtained as required by the local school district. Security clearance obtained through private sectors will not be allowed as proof of clearance. Directions for obtaining security clearance can be found on the Office of Placement Services website at *education.nova.edu/students/current-students/gtep/office-of-placement-services.html.*
8. Students who fail to meet any of the seven matriculation criteria are required to submit a prerequisite override form through their academic advisor to continue registration of courses. The director of undergraduate enrollment and recruitment will review all prerequisite override forms. Students who fail to abide by the terms and conditions of the prerequisite override form may be denied subsequent registration until the conditions are met.

Testing Requirements

Florida

The Florida Department of Education requires passing the General Knowledge Test (GKT) as a requirement for admission into any state-approved teacher education program. The appropriate GKT sections are reading, English Language Skills, Mathematics, and Essay. Nova Southeastern University's Undergraduate Teacher Education Program is a state-approved teacher education program; therefore, the testing requirements apply. Florida teacher candidates are required to pass the Professional Education Test and the Subject Area Examination subtests of the Florida Teacher Certification Examinations (FTCE) in order to begin the clinical practice (internship). It is the teacher candidate's responsibility to register and pass the Florida Teacher Certification Examination GKT, Professional Education Test, and the Subject Area Examination to complete program requirements. GKT test scores remain valid for 10 years after the date on which they were passed. Teacher candidates who have GKT scores older than 10 years must retake the test prior to beginning their clinical practice (internship). Students are recommended to consult with their academic advisor regarding testing requirements.

Nevada

Nevada students are required to pass the academic skills sections of the Praxis (or California Basic Educational Skills Test [CBEST]) before accumulating 24 credits at NSU. The appropriate Praxis academic I skills sections are Reading, Writing, and Mathematics. In addition, Nevada teacher candidates are required to pass the Praxis subtests for Principals of Learning and Teaching (PLT) and subject area skills prior to the clinical practice (internship). Students are recommended to consult with their academic advisor regarding testing requirements.

Matriculation into the Major

Florida students majoring in a state-approved teacher education program must pass all sections of the GKT. Nevada students must pass all sections of the Praxis academic skills examination before accumulating 24 credits at NSU in order to matriculate. (For additional information, please review the section Matriculation Requirements for UTEP Students). Upon matriculating into the state-approved teacher education program, students will subsequently be referred to as teacher candidates.

Prior to Clinical Practice (Internship)

Florida teacher candidates must pass the GKT, Professional Education Test, and Subject Area Examination to be accepted into the clinical practice (internship). It is recommended that the Professional Education Test is taken upon completion

of all courses with an EDUC or EDEC prefix. In addition to passing the GKT, Subject Area Examination and Professional Education Test, acceptance into the clinical practice (internship) is dependent on skill level mastery as evidenced by the completion of the key assessments/critical tasks (please see the section Assessment System for more information).

Assessment System

The requirements of the Florida and Nevada state-approved teacher education programs provide learning opportunities for teacher candidates to acquire and document mastery of teacher education standards including but not limited to the Interstate Teacher and Support Consortium (InTASC) Standards, Florida Educator Accomplished Practices (FEAPs), and National Council for the Accreditation of Teacher Education (NCATE) standards. Mastery of the standards prepares teacher candidates for entry into the profession and to be successful educators in their future classrooms. The courses within the various Undergraduate Teacher Education Program (UTEP) majors have been designed to facilitate teacher candidates' attainment of the standards, and candidates document their attainment by the completion of key assessments/critical tasks.

As teacher candidates complete the key assessments/critical tasks in their coursework, their performance is graded as "does not meet", "meets", or "exceeds" standards using a rubric that identifies the criteria and gradations of quality for the assessments/tasks. At the completion of the course, the course instructor records the grades on the key assessments/critical tasks in ASSESS, the online Teacher Preparation Program Assessment System. Teacher candidates who fail to meet or exceed the standards set for the key assessments/critical tasks must remediate their skill acquisition in order to achieve mastery of the standards. Remediation occurs at the course level with the instructor, and the teacher candidate subsequently revises the key assessments/critical tasks no later than one term after the completion of the course. The teacher candidate resubmits the key assessments/critical tasks for re-grading by the instructor who, in turn, updates the information in ASSESS. Successful remediation of key assessments/critical tasks changes the grade in ASSESS to "meets" or "exceeds" but does not change the course grade.

Teacher candidates' progress through the program is monitored by full-time faculty using the ASSESS system. Teacher candidates must complete the required key assessments/critical tasks and their progress is monitored at two checkpoints by the Office of Placement Services. The first checkpoint occurs when the teacher candidate applies for entrance into the clinical practice (internship). The teacher candidate must successfully attain standards prior to the clinical practice (internship) in order to qualify for the clinical practice (internship). The second checkpoint occurs when the teacher candidate applies for degree conferral. The teacher candidate must successfully attain standards during or prior to the clinical practice (internship) in order to qualify for degree conferral. The teacher candidate must submit the reports to the Coordinator of Clinical Experiences with a copy to the Director of Placement Services for review. Failure to pass the checkpoints prevents progression to the clinical practice (internship) and/or degree conferral.

Degree Completion Requirements

Teacher candidates graduating from a Florida state-approved teacher education program must pass all parts of the Florida Teacher Certification Examination as noted in the previous Testing Requirements section. Official scores for the various sections of the FTCE must be submitted prior to the anticipated graduation date to ensure degree conferral. Teacher candidates graduating from the Nevada state-approved teacher education program must pass all parts of the Praxis examination as noted in the previous Testing Requirements section. Official scores for the various sections of the Praxis must be submitted prior to the anticipated graduation date to ensure degree conferral.

In addition to passing examination scores, evidence of skill acquisition/mastery of the required teacher education standards must be reflected in the key assessments/critical tasks grades in ASSESS as "meets" or "exceeds" standards as described in the Assessment System section.

Teacher candidates are required to maintain a 2.5 grade point average or higher to progress through the program and qualify for degree conferral.

Security Clearance

The Florida Department of Education requires candidates to pass a background security clearance and provide fingerprints

prior to receiving certification, an endorsement, or employment.

For additional information, candidates are encouraged to review the Florida Statutes, Sections 1002.39, 1002.395, 1012.315, 1012.32, and 1012.56, which can be found at *leg.state.fl.us/statutes/*.

Course Load Policy

Students/teacher candidates enrolled in the Undergraduate Teacher Education Program at NSU are full-time students/teacher candidates if they are registered and complete 12 or more credits (four or more courses) per 16-week semester. Teacher candidates will not be permitted to take more than 18 credits during a 16-week semester.

Registration Requirements

Students in the state-approved bachelor's degree programs who intend to be teacher candidates should meet with their academic advisor to register for the upcoming term. This registration appointment ensures students sufficient time to review curricular requirements regularly with their academic advisor. Courses in the education major must be taken in sequence according to the course prerequisites. All general education courses should be successfully completed prior to taking any education courses.

Students/teacher candidates are encouraged to start the registration process for an upcoming term several months in advance to ensure enough time to meet with their academic advisor and prepare for the first day of the term. Some courses in the education major have a pre-class assignment due during the first class meeting. Pre-class assignments can be obtained in the course syllabus located at *fcas.nova.edu/coursewizard/*. Students/teacher candidates are expected to have prepared properly for the first class session by having completed the pre-class assignment. Attendance is mandatory for all class sessions. Lack of an appointment time with an academic advisor will neither prevent any late registration holds that may apply, nor will it negate the requirements of the pre-class assignment or attendance in class for the first session.

Teacher Candidate Meetings

The Undergraduate Teacher Education Program requires all teacher candidates to attend Teacher Candidate Meetings, which are held biannually (fall and winter semesters) at the main campus as well as at all NSU regional campuses. The purpose of these meetings is to keep all teacher candidates informed of Undergraduate Teacher Education Program policies, state department of education updates, the Assessment System process, and field experiences and clinical practice (internship) procedures. In addition, these meetings allow teacher candidates to ask questions of full-time faculty members and representatives from the Office of Placement Services on issues concerning their respective majors. Teacher candidates who are completing their major online will attend the Teacher Candidate meeting in online format.

Field Experiences

Field experiences have long been recognized as a critical component of teacher preparation programs. These experiences enable teacher candidates to apply theory and effective practices in actual classrooms and acquire competencies necessary for successful teaching.

Nova Southeastern University is committed to providing quality field experiences for all students/teacher candidates majoring in education as an integral part of teacher candidate training. Underlying this commitment is the philosophy that field experiences provide a vital link between educational theory and practice. When a transfer of learning occurs from the university classroom to a real-life setting, the connection significantly contributes to the professional development of the teacher candidate. Consequently, all participants are enriched by these experiences. All field experiences are required to be conducted in PK-12 classrooms under the leadership of a cooperating teacher with clinical educator training and with a minimum of three years successful training experience.

The Florida Department of Education requires that all students majoring in a state approved teacher education program participate in a variety of field experiences. Field experiences must begin early in the program and culminate with the clinical practice (internship). During these experiences, students should be given the opportunity to demonstrate their

understanding of the NCATE standards, InTASC Principles, Florida Educator Accomplished Practices, and Subject Area Competencies and Skills. Students will be provided with guidance and feedback in the field experience setting.

Education courses in Nova Southeastern University's Undergraduate Teacher Education Program curriculum may require up to a (10) hour field experience component. The field experiences vary depending on the competencies and course requirements. A supervised field experience occurs in a designated course specific to each major. If it is determined by the university supervisor that remediation is needed as a result of the supervised field experience, follow-up supervision will take place in subsequent courses. All questions about the field experience should be directed to the Office of Placement Services at (954) 262-7900 or (800) 986-3223 ext. 27900.

Clinical Practice (Internship)

Clinical practice (internship) is the final course of the NSU Undergraduate Teacher Education Program. This 12-week course includes seminar meetings and 12 weeks of teaching in an area school. Teacher candidates will be placed at a school site by the internship coordinator in collaboration with school district placement specialists. Teacher candidates will gradually assume full responsibility for teaching the class to which they are assigned. The clinical practice (internship) is offered each academic year in the fall and winter semesters and must be completed as part of the NSU program. Since it is the final course for the degree, it cannot be transferred from another institution, nor can experience be substituted to satisfy this requirement. The Florida Board of Education's Administrative Rule 6A-4.002 does not permit full-time administrative or teaching experience to be a substitution for the internship for purposes of initial certification.

Students must earn a B or higher in the clinical practice (internship) for program completion. The clinical practice (internship) final grade is derived from three sources: the cooperating teacher's final evaluation, the university supervisor's final evaluation, and the internship seminar grade.

Internship Application

It is the teacher candidate's responsibility to complete and submit the internship application before the deadline. Students can fill out the internship application online at *apps.fischlerschool.nova.edu/internship/internshipform.aspx*.

Fall semester deadline—February 1
Winter semester deadline—August 1

After the application is received, the applicant's file is reviewed for completion of all requirements. Teacher candidates will receive a copy of a completed letter of eligibility with an internship audit indicating their internship status (conditionally approved or denied). Once all internship requirements are fulfilled, teacher candidates must attend the mandatory Internship Orientation Meeting. Teacher candidates who fail to attend the Internship Orientation Meeting will be ineligible to enter the internship.

Internship dates are published in the Academic Calendars section of the catalog. If a teacher candidate does not meet the entrance requirements listed below, the internship application will be denied until all requirements are met.

Internship Qualifications

Teacher candidates are considered eligible for the internship if they have met the following criteria:

- Completion of appropriate credits (including all general education requirements, all program requirements, and all courses required for the major, except the internship);
- A minimum overall GPA of 2.5;
- Passing of all specified testing requirements; and
- Completion of the key assessments with a passing grade of B- or higher in coursework.

Teacher candidates should refer to the Internship Handbook for a complete explanation of policies and procedures covering the internship program. All questions about the internship program should be directed to the Office of Placement Services at (954) 262-5364.

Georgia: Pre-service Certificate (*gapsc.com/Certification/TieredCertification/preService.aspx*)—Effective July 1, 2015, Georgia pre-service candidates who are seeking certification in Georgia, and who will be completed Field Experiences or Student Teaching activities in Georgia, are required to have a Pre-Service certificate, which is valid for up to five years. The candidate must be fully admitted into the program, have a successful criminal record check, and complete the GACE Educator Ethics Program Entry assessment (GACE Test Code 350). Candidates who enrolled prior to July 1, 2014, are not required to complete this assessment.

Georgia: Induction Certificate (*gapsc.com/Certification/TieredCertification/induction.aspx*)—Effective July 1, 2014, Georgia candidates who have fewer than three years of teaching experience within the last five years, are required to have an Induction certificate. The induction period lasts for three years and this certificate is available to employees of a Georgia school. Candidates who are completing programs in states other than Georgia, but who are completing student teaching/clinical practice in Georgia (Georgia Induction Pathway 2), must have passed the GACE content assessment, the Georgia Educator Ethics Assessment—Program Exit (Test Code 360), the edTPA, and a course in identifying and educating exceptional children. Candidates who meet all other requirements but are not employed by a Georgia school may apply to receive a Georgia Certificate of Eligibility.

Undergraduate Programs of Study

The Abraham S. Fischler College of Education offers the following academic programs:

Bachelor of Science degree with the following majors:

Early Child Development
Elementary Education—ESOL/Reading Endorsement (Florida)
Elementary Education (Nevada approved program)
Exceptional Student Education/ESOL (Florida)
Exceptional Student Education (Nevada)
Prekindergarten/Primary Education/ESOL (Florida)
Secondary English Education/ESOL (Florida)
Secondary Mathematics Education (Florida)

Minors:

Education Professional Training Option
Physical Education

Early Childhood Credential Coursework:

Child Development Associate (CDA)
Florida Department of Children and Families Director Credential
Early Childhood Education Certificate

Add-On Endorsements:

Driver Education Add-On Endorsement (9 credits)

Majors in Education

Early Child Development Major

The Bachelor of Science in Early Child Development is intended to provide professional training for students interested in working in the field of education and human services with special interest in the variety of careers and professions related to working with young children, their families, and communities. The major emphasis of the Early Child Development program is in the early childhood years (birth to age 8). Additional study through electives and an emphasis area allows students to customize their degrees to meet their interests and professional needs. The Bachelor of Science in Early Child Development program is not designed to lead to certification or licensure.

Early Child Development

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Early Child Development Program Requirements (6 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross Cultural Studies (3 credits)
ECA 203	Foundations of Early Care and Education (3 credits)

Early Child Development (Birth – Age 8) Major Requirements (69 credits)

Lower Division (21 credits)

Block I

EDEC 2405	Children with Special Needs (3 credits)
ECA 215	Creative Activities for Young Children (3 credits)
ECA 241	Child Guidance (3 credits)
ECA 242	Foundations of Literacy Development (3 credits)

Block II

ECA 218	Child Observation, Record Keeping, and Assessment (3 credits)
ECA 252	Managing Early Literacy Environments (3 credits) *OR* ECA 227 Developmental Curriculum: Language, Literature, and Social Studies (3 credits)
ECA 267	Early Development in Multilingual Communities (3 credits)

Upper Division (48 credits)

Block III

ECDP 3321	Child Development: Prenatal, Infancy, and Toddler Years (Birth-Age 3) (3 credits)
ECDP 3334	Child Development during the Preschool and Primary Age Years (Ages 4-8). (3 credits)
ECDP 3338	Diversity and Multiculturalism in Early Child Development (3 credits)
ECDP 3340	Psychosocial Development during the Preschool Years (3 credits)
EDEC 3420	Families of Children with Special Needs: Challenges and Opportunities (3 credits)

Block IV

ECDP 3345	Parent-Child Relationship during the Early Childhood Years (3 credits)
ECDP 3349	Fatherhood: Cross-Cultural Perspectives (3 credits)
EDEC 4320	Cultural Diversity and Family-Community Development (3 credits)
ECDP 4423	Issues in Child Abuse and Neglect (3 credits)
EECP 3550	Child Guidance and Classroom Management (3 credits)

Block V

Emphasis (12 credits)

Students are required to select a total of 12 credits in any of the emphasis areas. The emphasis areas provide an opportunity for studying additional areas of interest and expertise, as well as obtaining professional preparation and knowledge in the field of early childhood education and Early Child Development.

Child Development Associate (9 credits)*
Developmental Curriculum (12 credits)
Early Childhood Director's Credential (12 credits)
Early Literacy (12 credits)
English for Speakers of Other Languages (ESOL) (12 credits)
Special Needs (12 credits)

EECP 4330	Health, Nutrition, Safety and Physical Development in Early Childhood (3 credits)
ECDP 4990	Advanced Senior Year Seminar (3 credits)

Open Electives (15 credits)

Total Credits Required for Degree Completion: 120 credits

* The curriculum for the Child Development Associate (CDA) area of emphasis includes 9 credits of CDA coursework and 3 credits of coursework from one of the other areas of emphasis.

Elementary Education—ESOL/Reading Endorsement (Florida) Major

Elementary Education—ESOL/Reading Endorsement (Florida) Major Curriculum

The Bachelor of Science in Elementary Education is a state-approved initial certification program in Florida that focuses on developing teacher candidates to enter the classroom, while emphasizing the teaching of elementary (grades K–6) students. This major provides future educators with a foundation in classroom management and methods of teaching elementary-level students. Course content is research based and infuses best practices in education and strategies for teaching English as a second language (ESOL). The program aligns directly with the Florida Department of Education's certification requirements for elementary education (grades K–6) and endorsement requirements for ESOL.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Elementary Education—ESOL/Reading Endorsement Program Requirements (Florida) (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Elementary Education—ESOL/Reading Endorsement Major Requirements (Florida) (63 credits)

Teacher candidates in the state-approved teacher education program in the elementary education major must also keep track of field experiences within the courses. A supervised field experience occurs in ELEM 4530.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)
ESOL 3340	Survey of TESOL for Teachers (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
ELEM 3530	Methods of Teaching Social Studies in the Elementary School (3 credits)
EDUC 3535	Educational Assessment (3 credits)
ELEM 3550	Methods of Teaching Science in the Elementary School (3 credits)
ELEM 4320	Elementary Classroom Management (3 credits)
ELEM 4340	Methods of Teaching Language Arts through Children's Literature in the Elementary School (3 credits)
ELEM 4350	Methods of Teaching Mathematics in the Elementary School (3 credits)
ELEM 4360	Methods of Teaching Literacy in the Elementary School (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
ELEM 4530	Integrating Art, Music, PE, and Health Education Across the Curriculum (3 credits)
ELEM 4540	Reading Assessment I (3 credits)
ELEM 4560	Methods of Teaching Reading Across the Elementary Curriculum (3 credits)
ESOL 4565	Second Language Learning (3 credits)
ELEM 4570	Internship/Seminar (12 credits)

Open Electives (24 credits)

Total Credits Required for Degree Completion: 120 credits

Elementary Education Major Curriculum—Nevada

The Bachelor of Science in Elementary Education is a state-approved initial certification program in Nevada that focuses on developing teacher candidates to enter the classroom, while emphasizing the teaching of elementary (grades K–6)

students. This major provides future educators with a foundation in classroom management and methods of teaching elementary-level students. Course content is research based and infuses best practices in education. The program aligns directly with the Nevada Department of Education's certification requirements for elementary education (grades K–6).

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the *General Education Program.* For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Elementary Education Program Requirements—Nevada (3–5 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
NLAW 1000	Nevada School Law OR EXAM (0–2 credits)
ESOL 2903	Cross Cultural Studies (3 credits)

Elementary Education Major Requirements—Nevada (69 credits)

Teacher candidates in the state-approved program in the elementary education major must also keep track of field experiences within the courses. A supervised field experience occurs in ELEM 4530.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
ELEM 3530	Methods of Teaching Social Studies in the Elementary School (3 credits)
ELEM 3532	Science Curriculum for Elementary Education Majors (3 credits)
EDUC 3535	Educational Assessment (3 credits)
ELEM 3550	Methods of Teaching Science in the Elementary School (3 credits)
ELEM 4320	Elementary Classroom Management (3 credits)
ELEM 4330	Mathematics Curriculum for Elementary Education Majors (3 credits)
ELEM 4340	Methods of Teaching Language Arts through Children's Literature in the Elementary School (3 credits)
ELEM 4350	Methods of Teaching Mathematics in the Elementary School (3 credits)
ELEM 4360	Methods of Teaching Literacy in the Elementary School (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
ELEM 4530	Integrating Art, Music, PE, and Health Education Across the Curriculum (3 credits)
ELEM 4540	Reading Assessment I (3 credits)
ELEM 4560	Methods of Teaching Reading across the Elementary Curriculum (3 credits)

ESOL Courses

ESOL 4901	Methods of Teaching ESOL (3 credits)
ESOL 4902	Curriculum and Materials Development (3 credits)
ELEM 4570	Internship/Seminar (12 credits)

Open Electives (18 credits)

Total Credits Required for Degree Completion: 120 credits

Exceptional Student Education/ESOL Major

Exceptional Student Education Major Curriculum—Florida

The Bachelor of Science in Exceptional Student Education is a state-approved initial certification program in Florida that focuses on preparing teacher candidates to enter the classroom, while emphasizing the teaching of students with multiple disabilities both within the inclusive classroom and/or in special educational settings. This major provides future educators with a foundation in the history of special education including current state and federal legislation, as well as preparation in classroom management, and methods of teaching reading, mathematics, and life skills to special needs students. Course content is research based and infuses best practices in education and strategies for teaching English as a second

language (ESOL). The program aligns directly with the Florida Department of Education's certification requirements for exceptional student education (grades K–12) and endorsement requirements for ESOL.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Exceptional Student Education Program Requirements—Florida (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Exceptional Student Education Major Requirements—Florida (69 credits)

Teacher candidates in the state-approved program in the exceptional student education major must also keep track of field experiences within the courses. A supervised field experience occurs in ESED 4550.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)
ESOL 3340	Survey of TESOL for Teachers (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
EDUC 3535	Educational Assessment (3 credits)
ESED 3540	Introduction to Language Development and Speech Disabilities (3 credits)
ESED 3561	Families, Professionals and Exceptionality (3 credits)
ESED 3570	Foundations of Learning Disabilities (3 credits)
ESED 4320	Classroom Management for Typical and Atypical Learners in the Multicultural Classroom (3 credits)
ELEM 4340	Methods of Teaching Language Arts Through Children's Literature in the Elementary School (3 credits)
ELEM 4350	Methods of Teaching Mathematics in the Elementary School (3 credits)
ELEM 4360	Methods of Teaching Literacy in the Elementary School (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
ESED 4530	Classroom Procedures for the Intellectually and Developmentally Disabled (3 credits)
ELEM 4540	Reading Assessment I (3 credits)
ESED 4550	Methods and Materials for Teaching SLD Learners (3 credits)
ELEM 4560	Methods of Teaching Reading across the Elementary Curriculum (3 credits)
ESOL 4565	Second Language Learning: Theory, Method, and Evaluation (3 credits)
ESED 4570	Internship/Seminar (12 credits)

Open Electives (18 credits)

Total Credits Required for Degree Completion: 120 credits

Exceptional Student Education Major Curriculum—Nevada

The Bachelor of Science in Exceptional Student Education is a state-approved initial certification program in Nevada that focuses on preparing teacher candidates to enter the classroom, while emphasizing the teaching of students with multiple disabilities both within the inclusive classroom and/or in special educational settings. This major provides future educators with a foundation in the history of special education including current state and federal legislation, as well as preparation in classroom management and methods of teaching reading, mathematics, and life skills to special needs students. Course content is research based and infuses best practices in education. The program aligns directly with the Nevada Department of Education's certification requirements for exceptional student education (grades K–12).

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Exceptional Student Education Program Requirements—Nevada (3–5 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
NLAW 1000	Nevada School Law OR EXAM (0–2 credits)
ESOL 2903	Cross Cultural Studies (3 credits)

Exceptional Student Education Major Requirements—Nevada (66 credits)

Teacher candidates in the state-approved program in the exceptional student education major must also keep track of field experiences within the courses. A supervised field experience occurs in ESED 4550.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
EDUC 3535	Educational Assessment (3 credits)
ESED 3540	Introduction to Language Development and Speech Disabilities (3 credits)
ESED 3561	Families, Professionals, and Exceptionality (3 credits)
ESED 3570	Foundations of Learning Disabilities (3 credits)
ESED 4320	Classroom Management for Typical and Atypical Learners in the Multicultural Classroom (3 credits)
ELEM 4340	Methods of Teaching Language Arts through Children's Literature in the Elementary School (3 credits)
ELEM 4350	Methods of Teaching Mathematics in the Elementary School (3 credits)
ELEM 4360	Methods of Teaching Literacy in the Elementary School (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
ESED 4530	Classroom Procedures for the Intellectually and Developmentally Disabled (3 credits)
ELEM 4540	Reading Assessment I (3 credits)
ESED 4550	Methods and Materials for Teaching SLD (3 credits)
ELEM 4560	Methods of Teaching Reading across the Elementary Curriculum (3 credits)
ESED 4570	Internship/Seminar (12 credits)

Open Electives (24 credits)

Total Credits Required for Degree Completion: 120 credits

Prekindergarten/Primary Education/ESOL Major (revised: see *Addendum K*)

The Bachelor of Science in Prekindergarten/Primary Education (age three-grade 3) with ESOL endorsement is a state-approved initial certification program in Florida that focuses on training teacher candidates to enter the classroom, while emphasizing the teaching of early childhood students by combining theoretical components with practical application. This major provides future educators with a foundation in classroom management and methods of teaching, as well as skills for working with children age three through grade three. Course content is research based and infuses best practices in education and strategies for teaching English as a second language (ESOL). An emphasis is placed on the appropriate uses of technology. The program aligns directly with the Florida Department of Education's certification requirements for prekindergarten/primary education (age three-grade 3) and endorsement requirements for ESOL.

Prekindergarten/Primary Education/ESOL Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Prekindergarten/Primary Education/ESOL Program Requirements (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Prekindergarten/Primary Education/ESOL Major Requirements (75 credits)

Teacher candidates in the state-approved program in the prekindergarten/primary education (age three through grade three) major must also keep track of field experiences within the courses. A supervised field experience occurs in EECP 4340.

ECA 203	Foundations of Early Care and Education (3 credits)
ECDP 3334	Child Development during the Preschool and Primary Age Years (3 credits)
EDEC 2405	Children with Special Needs (3 credits)
EDEC 3420	Families of Children with Special Needs: Challenges and Opportunities (3 credits)
EDEC 3530	Diagnosis, Assessment, and Evaluation of Young Children (3 credits)
EECP 3550	Child Guidance and Classroom Management (3 credits)
EDEC 4320	Cultural Diversity and Family-Community Development (3 credits)
EECP 4330	Health, Nutrition, Safety, and Physical Development in Early Childhood (3 credits)
EECP 4340	Developmentally Appropriate Practices for Teaching Literacy and Language Arts in Early Childhood Education (3 credits)
EECP 4345	Principles and Practices of Reading and Language Arts Assessment in Early Childhood Education (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
EECP 4520	Developmentally Appropriate Practices for Teaching Reading in Early Childhood (3 credits)
EECP 4530	Developmentally Appropriate Practices for the Integration of Creative Arts Across the Early Childhood Curriculum (3 credits)
EECP 4545	Developmentally Appropriate Practices for Integrating Math and Science in Early Childhood Education (3 credits)
EECP 4550	Developmentally Appropriate Practices for Teaching Social Studies in Early Childhood (3 credits)
EECP 4560	Integrating Literacy Throughout the Early Childhood Curriculum (3 credits)
ESOL 4901	Methods of Teaching ESOL (3 credits)
ESOL 4902	ESOL Curriculum and Materials Development (3 credits)
ESOL 4904	Linguistics for ESOL Educators (3 credits)
ESOL 4905	Testing and Evaluation in ESOL (3 credits)

Open Electives (21 credits)

Total Credits Required for Degree Completion: 120 credits

Secondary English Education/ESOL Major

The Bachelor of Science in Secondary English Education with ESOL endorsement is a state-approved initial certification program. The major provides a comprehensive set of pedagogical courses specifically designed for English instruction and assessment and a specialty component that includes a variety of English, literature, and speech communication courses that comprise the content of the secondary English education major. The courses are based on the Florida Standards and the current state-wide assessment in English (grades 6–12). Course content is research-based and infuses best practices in education and strategies for teaching English as a second language (ESOL).

Secondary English Education/ESOL Major Curriculum

General Education Requirements/ESOL (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Secondary English Education/ESOL Program Requirements (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Secondary English Education Major/ESOL Requirements (69 credits)

Teacher candidates in the state-approved teacher education program in the secondary English education major (grades 6–12) must also keep track of field experiences within the courses. A supervised field experience occurs in SECE 4370.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)

ESOL 3340	Survey of TESOL for Teachers (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
EDUC 3535	Educational Assessment (3 credits)
SECE 4320	Middle and Secondary Classroom Management (3 credits)
SECE 4370	Methods of Teaching Middle and Secondary English (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
SECE 4560	Methods of Teaching Middle and Secondary Reading (3 credits)
ESOL 4565	Second Language Learning (3 credits)
SEEN 4570	Internship/Seminar (12 credits)

English Specialty Courses

SPCH 1010	Public Speaking (3 credits)
LITR 2010	British Literature I (3 credits)
LITR 2020	American Literature I (3 credits)
LITR 2021	American Literature II (3 credits)
LITR 2030	World Literature I (3 credits)
LITR 2031	World Literature II (3 credits)
LITR 3060	History and Structure of the English Language (3 credits)
LITR 3040	Women in Literature (3 credits)
LITR 4520	African American Literature (3 credits)

Open Electives (18 credits)

Total Credits Required for Degree Completion: 120 credits

Secondary Mathematics Education Major

The Bachelor of Science in Secondary Mathematics Education is a state-approved initial certification program. The major provides a comprehensive set of methods courses specifically designed for Mathematics instruction and assessment and a specialty component with a variety of mathematics courses that comprise the content of secondary mathematics. The courses are based on the Florida Standards and the current state-wide assessment in mathematics at (grades 6–12). Mathematics certification is a generic certification that allows teachers to provide instruction at both the middle school and high school levels.

Secondary Mathematics Education Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Secondary Mathematics Education Program Requirements (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Secondary Mathematics Education Major Requirements (71 credits)

Teacher candidates in the state-approved teacher education program in the secondary mathematics education major (grades 6–12) must also keep track of field experiences within the courses. A supervised field experience occurs in SECE 4350.

EDUC 3330	Integrating Instructional Technology in the Classroom (3 credits)
ESOL 3340	Survey of TESOL for Teachers (3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3525	Practices of Instruction (3 credits)
EDUC 3535	Educational Assessment (3 credits)

SECE 4320	Middle and Secondary Classroom Management (3 credits)
SECE 4340	Methods of Teaching Middle & Secondary Mathematics I (3 credits)
SECE 4350	Methods of Teaching Middle and Secondary Mathematics II (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
SECE 4560	Methods of Teaching Secondary Reading (3 credits)
SECE 4460	Methods of Teaching Middle and Secondary Mathematics I (3 credits)
ESOL 4565	Second Language Learning (3 credits)
SEMA 4570	Internship/Seminar (12 credits)

Math Specialty Courses

MATH 1250	Trigonometry (3 credits)
MATH 2100	Calculus I (4 credits)
MATH 2200	Calculus II (4 credits)
MATH 2020	Applied Statistics (3 credits)
MATH 2250	Euclidean Geometry (3 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 3350	Number Theory (3 credits)

Open Electives (18 credits)

Total Credits Required for Degree Completion: 122 credits

Minors

Education Professional Training Option Minor

Nova Southeastern University's Education Professional Training Option (PTO) is approved by the Florida Department of Education (FDOE) as an alternative route to teacher certification for students majoring in the content areas of Biology, English, General Science, History, and Mathematics. Through the PTO coursework, students will receive preservice teacher training in the Florida Educator Accomplished Practices (FEAPS). Students who successfully complete the PTO will be eligible to obtain a professional license after successfully teaching for one year in a Florida public school district, passing the relevant Florida Teacher Certification Examination sub-tests, and any other requirements the FDOE deems necessary. Additionally, the required field experiences for each course must be completed within an elementary, middle, or high school. Students will be required to complete any security clearance processes required by the local school district.

Education Professional Training Option Requirements (21 credits)

All candidates pursuing the PTO will need to complete the following:

ESOL 3340	Survey of TESOL for Teachers (3 credits)
EDUC 3360	Educational Psychology (3 credits)
EDUC 3535	Educational Assessment (3 credits)
EDUC 4514	General Methods in Field Experiences (3 credits)
SECE 4320	Middle and Secondary Classroom Management (3 credits)
SECE 4560	Methods of Teaching Middle and Secondary Reading (3 credits)

Students must complete one 3 credit methods course that corresponds to their major from the following list:

SECE 3530	Methods of Teaching Middle and Secondary Social Studies (3 credits)
SECE 3550	Methods of Teaching Middle and Secondary Science (3 credits)
SECE 4350	Methods of Teaching Middle and Secondary Mathematics (3 credits)
SECE 4370	Methods of Teaching Middle and Secondary English (3 credits)

Physical Education Minor

The physical education minor is designed for individuals who wish to complete 19 credit hours of coursework towards the Florida Department of Education certification track in Physical Education for teaching physical education in the elementary, middle, and secondary schools. The course of study is designed to offer students the opportunity to advance their understanding of physical education. Students will have the ability to explore a variety of applications of physical education ranging from the teaching methods to the prevention and care of athletic injuries. In addition, they will learn about the organization and administration of physical education as a tool to promote and sustain physical education in the K–12 school.

Students must have a minimum of 30 credits and no more than 90 credits to enroll in the physical education minor. In addition, the required field experiences for each course with a PHED prefix must be completed in an elementary, middle, or high school. Students will be required to complete any security clearance processes required by the local school district.

Physical Education Minor Requirements (19 credits)

All students minoring in education will need to complete the following:

ATTR 1300	Emergency Care and First Aid (3 credits)
PHED 3200	Methods of Teaching Physical Education (3 credits)
PHED 3300	Physical Education Administration (3 credits)
PHED 3400	Physical Education Principles and Practices in Coaching (3 credits)
EXSC 3700	Kinesiology (3 credits)
EXSC 3710	Exercise Physiology with Lab (4 credits)

Razor's Edge Global Engagement Minor

The Razor's Edge Global Engagement Minor is a curricular and co-curricular minor that is designed to provide learning experiences inside the classroom as well as outside the classroom through involvement in global leadership and engagement activities on campus and at the local, state, national and international levels. The requirements for the minor in Global Engagement are only available to students admitted to the Razor's Edge Global Scholars Program offered by the Office of International Affairs. To complete the requirements for this minor, students must complete 10 credits from the required core courses and 6 credits from the elective courses.

Mandatory Core Courses (10 credits)

COMM 2300	Intercultural Communication (3 credits)
INST 1500	Global Issues (3 credits)
RAZG 1500	Global Leadership (1 credit)
RAZG 1501	Global Engagement (1 credit)
RAZG 1502	Multicultural and Diversity Issues (1 credit)
RAZG 1503	Global Engagement Portfolio (1 credit)

Elective Courses (6 credits from the following courses)

HIST 3400	U.S. Foreign Relations (3 credits)
HUMN 1200	Introduction to World Religions (3 credits)
LITR 2031	World Literature II (3 credits)
POLS 2300	International Relations (3 credits)

FOREIGN LANGUAGE* (3 or 6 credits)

*language level must be approved by program director

Razor's Edge Experiential Leadership Minor

The Razor's Edge Experiential Leadership minor is a curricular and co-curricular program that is designed to provide learning experience inside the classroom as well as outside the classroom through involvement and leadership initiatives

throughout campus. The requirements for the minor in Experiential Leadership are only available for students admitted into the Razor's Edge Leadership Program offered by the Office of Student Leadership and Civic Engagement. To complete the requirements for this minor, students must complete 16 total credits including 9 credits of the required core courses as well as 9 credits of leadership-based electives.

Mandatory Core Courses (7 credits)

RAZR 1000	Self Leadership (1 credit)
RAZR 2000	Connecting with Others (1 credit)
RAZR 3030	Applied Leadership (3 credits)
RAZR 3500	Leading Others (1 credit)
RAZR 4000	Leading Change (1 credit)

Leadership Electives (must complete 9 credits total from the following courses)

ATTR 4100	Athletic Training Administration (3 credits)*
COMM 2300	Intercultural Communication (3 credits)
COMM 3200	Principles of Public Relations (3 credits)
LED 4250	Self Leadership in Organization (3 credits)
MGT 3100	Managing Conflict and Change (3 credits)
MGT 4300	Managing Workplace Diversity (3 credits)
INST 1500	Global Issues (3 credits)
INB 4600	International Management (3 credits)
LED 4100	Great World Leaders (3 credits)
LED 4200	Current Issues in Leadership (3 credits)
LED 4300	Situational Leadership (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 4170	Organizational Behavior (3 credits)
PADM 2000	Organizational Behavior/Management (3 credits)
PHIL 2000	Moral Issues (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
POLS 1200	Introduction to Political Science (3 credits)
POLS 2300	International Relations (3 credits)
POLS 3500	Global Politics (3 credits)
PSYC 2330	Interpersonal Communication (3 credits)
SPCH 1010	Public Speaking (3 credits)
SPCH 3120	Speech Communication for the Professions (3 credits)
WRIT 3150	Business Writing (3 credits)

* This course serves as an elective substitute for Athletic Training majors during the designated semester of their program when overlapping with an elective year within Razor's

Razor's Edge Research Studies Minor

The Razor's Edge Research Studies minor is a curricular and co-curricular program that is designed to provide learning experiences inside the classroom as well as outside the classroom through involvement in firsthand research experiences, scientific inquiry and problem-solving activities and initiatives. The Razor's Edge Research Scholars will benefit from mentored research experiences with faculty researchers at NSU. The requirements for the minor in Research Studies are only available for students admitted into the Razor's Edge Research Scholars Program offered by the Office of Institutional and Community Engagement in cooperation with the Division of Student Affairs. To complete the requirements for this minor, students must complete 16 course credits, in sequence, as follows:

RAZR 1000R	Seminar in Research Design and Implementation I (3 credits)
RAZR 2000R	Seminar in Research Design and Implementation II (3 credits)
RAZR 3000R	Research Design and Statistical Analysis (3 credits)

RAZR Field Experiences (totaling 7 additional credits) will be distributed among the remaining semesters of the undergraduate program.

Add-on Endorsement

Driver Education Add-on Endorsement

The Driver Education courses offered at Nova Southeastern University provide the competencies to meet endorsement requirements for teaching high school students basic driver education skills using Florida Department of Education Driver Education requirements. The series of three courses lead to an endorsement in Driver Education. Participants will review driving rules and procedures associated with driving as well as how to implement these procedures using engaging instructional strategies. Teaching strategies to assist participants with classroom implementation will be used throughout the three courses in sequence. Sample teaching strategies and curriculum connections will also be included in the three courses.

EDUC 4910	Introduction to Driver's Education (3 credits)
EDUC 4911	Instructional Strategies and Methods for Teaching Advanced Driver Education (3 credits)
EDUC 4912	Administration and Supervision of Driver Education (3 credits)

College of Arts, Humanities, and Social Sciences

COLLEGE OF ARTS, HUMANITIES, AND SOCIAL SCIENCES

Dean's Message

Welcome to NSU's College of Arts, Humanities, and Social Sciences! In this exciting new academic year, as an inclusive learning community, we are building on existent strengths and vibrant successes, and are committed to furthering collaborative opportunities for cross-disciplinary learning, research, and practice to fulfill NSU's Vision 2020.

Understanding and betterment of human interrelations are a central theme of our multidisciplinary, multi-professional, and multicultural endeavors at the college. Our vigorous curricula have deep interdisciplinary roots. Our cutting-edge programs employ a variety of innovative models and technologies. In the course of addressing emergent challenges and complex social issues, we are building a creative bridge across theory, research, and practice drawn from different social sciences, arts, humanities, and helping professions. The CAHSS vitality is a tribute to our faculty, students, alumni, staff, and town-gown partners, in Florida and elsewhere. We are looking forward to working with you closely on campus, online, and in the communities.

Good luck with your intellectual life and career pathway!

Honggang Yang, Ph.D.
Dean and Professor,
College of Arts, Humanities, and Social Sciences

Mission Statement

NSU's College of Arts, Humanities, and Social Sciences (CAHSS) is committed to achieving inclusive excellence in teaching, research, and community service. CAHSS emphasizes multidisciplinary learning, and the development of skills and competencies necessary for success in our students' respective fields. It is dedicated to the improvement of life quality, and the pursuit of collaborative and equitable means to address human challenges. Our unique and talented students learn to become reflective scholars, creative artists, ethical practitioners and skilled professionals with a critical understanding of theory and method as well as an appreciation of the diversity, responsibility and privilege inherent in global citizenship.

Introduction to the College

The College of Arts, Humanities, and Social Sciences offers stimulating programs of study that challenge and engage students through inclusive excellence and academic innovation in teaching, research, and community outreach. The college consists of eight departments: the Department of Conflict Resolution Studies, the Department of Family Therapy, the Department of History and Political Science, the Department of Justice and Human Services, the Department of Literature and Modern Languages, the Department of Multidisciplinary Studies, the Department of Performing and Visual Arts, and the Department of Writing and Communication.

Undergraduate degree programs offered by the college include both Bachelor of Arts (B.A.) and Bachelors of Science

(B.S.) degrees in 20 majors. Undergraduate students may choose to complement their major course of study with one of the 30 minors housed in the college or one of the minors housed in other NSU colleges. The college also offers four Doctoral degree programs, ten Master's degree programs, ten Graduate Certificate programs, and two graduate minors.

To earn a bachelor's degree from Nova Southeastern University, students in the College of Arts, Humanities, and Social Sciences must complete at least 120 credits, including major, minor, general education, and elective coursework. For complete graduation requirements, please see the Graduation Requirements section of this catalog.

Regular communication between students, faculty, and academic advisors is strongly encouraged to ensure that each student is successfully progressing toward graduation.

Undergraduate Programs

Undergraduate programs in the College of Arts, Humanities, and Social Sciences emphasize multidisciplinary learning that spans theory, research, and practice. The college's undergraduate curricula are designed to empower students to explore complex social issues, acquire knowledge, and develop skills necessary for success in their chosen fields.

Department of Conflict Resolution Studies

The Department of Conflict Resolution Studies (DCRS) is committed to academic excellence, cultural diversity, social responsibility, and reflective practice in the fields of sociology, anthropology, and conflict resolution. Through both undergraduate and graduate programs, we focus on the study of human behavior in societies, what social theories and research reveal about individuals, groups, institutions, and nations, and how parties achieve constructive agreements based on the principles of nonviolence, equity, dignity, and appreciation for human diversity. The department explores how people group themselves and behave in groups, and provides a learner-centered approach to practice and research to support improved social relations among individuals, groups, organizations, and nations. The academic environment in the department is multi-disciplinary, dynamic, and innovative, utilizing faculty expertise, student experience, learning technologies, and practitioners who are knowledgeable in peacebuilding skills and techniques.

Majors

Sociology Major

The sociology major focuses on the study of human behavior in social contexts. It examines the interactive dynamics of social institutions, organizations, and everyday life and studies how people group themselves (families, social groups, formal organizations, societies); how they behave in groups (collective action, social change, crime and delinquency); and how characteristics such as age, race, social class, and gender affect relationships with others and with organizations and institutions. The major combines humanistic and scientific perspectives to study urban and rural life, family patterns, social change, health care and illness, crime and violence, social class, technology and communications, social movements, and many other social issues and problems.

Sociology Major Learning Outcomes

The successful sociology graduate is expected to:

1. Demonstrate an understanding of the major theories and concepts that underlie the following core areas of sociology:
   a. Socialization and Social Interaction;
   b. Groups, Organizations, and Social Institutions;
   c. Stratification and Social Inequality;
   d. Global Cultural Perspectives;
   e. Qualitative and/or Quantitative Research Measurement, Design, and Methodology;
2. Describe and analyze the three major sociological approaches: Structural Functional, Social Conflict, and Symbolic Interaction;
3. Integrate and apply the major theories, principles, and concepts of sociology to address research and/or applied issues in the field of sociology using critical thinking skills, skeptical inquiry, and the sociological perspective;
4. Present written sociological information in a clear, concise manner that is consistent with professional standards.

Sociology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the General Education Program in the Academic Policies and Procedures section of this catalog.

Sociology Major Requirements (45 credits)

Required Courses (24 credits)

ANTH 1020	Introduction to Anthropology (3 credits)
MATH 2020	Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
SOCL 1020	Introduction to Sociology (3 credits)
SOCL 2510	Social Problems (3 credits)
SOCL 3000	Research Methods in the Social Sciences (3 credits)
SOCL 3250	Social Theory (3 credits)
SOCL 4880	Senior Seminar (3 credits)

Ethical/Moral Issues

Select 3 credits from the following courses:

PHIL 2000	Moral Issues (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
PHIL 3180	Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3200	Ethics and Sport (3 credits)
PHIL 3360	Environmental Ethics (3 credits)

Major Electives (21 credits)

Select 21 credits from any non-core SOCL courses. At least 12 of these credits must be at the 3000/4000 level.

Minors

Anthropology Minor

The anthropology minor is intended to acquaint students with the cross-cultural study of people and cultures through the diverse discipline of anthropology. The anthropology minor includes an overview of anthropological theory and research methods, of interdisciplinary approaches and cultural studies, as well as an examination of the four sub-fields of anthropology. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Anthropology Minor Requirements (18 credits)

Core Courses (12 credits)

ANTH 1020	Introduction to Anthropology (3 credits)
ANTH 2300	Cultural Anthropology (3 credits)
SOCL 1020	Introduction to Sociology (3 credits)
SOCL 3000	Research Methods in the Social Sciences (3 credits)

Minor Electives (6 credits)

Select 3 credits from the following courses:

SOCL 3500	Race and Ethnicity in the U.S. (3 credits)
SOCL 3600	Environmental Sociology (3 credits)

Select 3 credits from the following courses:

HIST 2130	Formation of Latin America (3 credits)
HIST 2300	Caribbean History (3 credits)
HIST 2400	African History (3 credits)
INST 1500	Global Issues (3 credits)

Sociology Minor

The sociology minor is intended to provide students with an overview of sociology. It covers social processes and change in a variety of arenas, including families, work, gender, and communities. This minor can be combined with any major and minor except the sociology major.

Sociology Minor Requirements (18 credits)

Core Courses (9 credits)

SOCL 1020	Introduction to Sociology (3 credits)
SOCL 2130	Family Relationships (3 credits)
SOCL 2510	Social Problems (3 credits)

Minor Electives (9 credits)

Students must select 9 credits in any sociology (SOCL) courses at the 3000/4000 level.

Department of Family Therapy

The Department of Family Therapy educates and trains students to become couple, marriage, and family therapists, with the ability to work with culturally and sexually diverse populations and marginalized groups in individual, couple, family, organizational and group settings. Our programs uphold professional standards in the field. The master's program requires a bachelor's degree for admission. At the master's level, students develop clinical excellence and prepare for careers as licensed marriage and family therapists. Students are prepared to assume professional positions in private practice, employee assistance programs, managed care and health care organizations, child care and school settings, family service agencies, faith based settings, and other clinical settings. There are two doctoral programs, both of which require a master's degree for admission. The Ph.D. program in family therapy strives to develop students who are prepared for scholarly leadership in the field of marriage and family therapy. The emphasis is on research, supervision, teaching, and advanced clinical practice. The Doctor of Marriage and Family Therapy (D.M.F.T.) program prepares students for advanced clinical practice. Students are trained for leadership positions directing clinical programs, in private practice, and providing training and supervision. All family therapy programs share a common relational/systemic focus, and a commitment to diversity and social justice issues.

Majors

Human Development and Family Studies Major

The human development and family studies major provides students with an interdisciplinary program of study that fosters critical, independent thinking and an empirical framework for understanding the development of individuals and families across the lifespan. It identifies factors that influence cognitive, emotional, social, and physical development through infancy, childhood, adolescence, adulthood, and later adulthood in the contexts of family, culture, and society. The major provides a foundation for students interested in working with individuals, couples, and families, in varied settings, ranging from public and nonprofit agencies, to business and governmental agencies. In addition, the major prepares students for graduate training in marriage and family therapy, law, sociology, human development, and/or the health professions.

Human Development and Family Studies Major Learning Outcomes

A successful human development and family studies graduate is expected to:

1. Explain the major theories, principles, and concepts that comprise the knowledge base of life-span development and family studies, in the following areas:
   a. Childhood, adolescence, adulthood, and aging;
   b. Family systems and relationships;
   c. Research methodology and analysis.
2. Integrate and apply the major theories, principles, and concepts of human development and family studies to evaluate research and applied issues in the field using critical thinking skills, skeptical inquiry, and deductive scientific reasoning;
3. Generate written information on topics in human development and family studies in a clear and concise manner consistent with the professional standards of the discipline.

Human Development and Family Studies Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Human Development and Family Studies Major Requirements (45 credits)

Required Courses (30 credits)

GERO 2000	Introduction to Gerontology (3 credits) *OR* PSYC 2390 Adulthood and Aging (3 credits)
HDFS 3000	Research Methods in Human Development and Family Studies (3 credits)
HDFS 4880	Senior Seminar in Human Development and Family Studies (3 credits)
PSYC 1020	Introduction to Psychology (3 credits) *OR* PSYC 1020H Introduction to Psychology Honors (3 credits)
PSYC 2350	Lifespan Human Development (3 credits)
PSYC 2360	Adolescent Psychology (3 credits)
PSYC 2370	Early Childhood Growth and Development (3 credits)
PSYC 2630	Ethical and Professional Developments (3 credits)
SOCL 2130	Family Relationships (3 credits)
SOCL 3800	Family Life Cycle (3 credits)

Application Courses (3 credits)

Select 3 credits from the following courses:

HDFS 4800	Community Practicum in Human Development and Family Studies (3 credits)
HDFS 4990	Independent Study in Human Development and Family Studies (3 credits)

Major Electives (12 credits)

Select 12 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

GERO 2030	Gerontology and the Law (3 credits)
HDFS 3200	Child Welfare, Law, and Social Policy (3 credits)
HDFS 3400	Legal Aspects of the Family (3 credits)
HDFS 3500	Children with Special Needs (3 credits)
HDFS 4900	Special Topics in Human Development and Family Studies (3 credits)
PSYC 2470	Loss, Grief, and Bereavement (3 credits)
PSYC 3280	Child and Adolescent Psychopathology (3 credits)

Department of History and Political Science

The Department of History and Political Science in the College of Arts, Humanities, and Social Sciences aims to help students develop a better understanding of their world through courses and degrees in academic disciplines focused on domestic and global affairs. Courses explore areas of study such as history, philosophy, legal studies, international studies, national security, and political science and are offered in the traditional classroom setting as well as online. Included among courses offered by the department are independent studies, internships, and study abroad programs.

Majors

History Major

The history major is designed to provide students with a background in American, European, world, and Latin American history, western civilization, constitutional history, and the intersections between history and culture. Graduates of the program will have studied one of the most interesting subjects available in a college curriculum: the human past. The program prepares student to be proficient in research, writing, debate, analysis, and interpretation of a myriad of historical events and patterns that cross boundaries of time and geography.

History Major Learning Outcomes

A successful history graduate is expected to:

1. Evaluate historical arguments;
2. Analyze complex historical texts and materials;
3. Identify the major periods and events of American history and either western or world history;
4. Identify and explain the cultural forces and influences associated with historical events.

History Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

History Major Requirements (39 credits)

Core Courses (6 credits)

HIPS 2900	Research Methods in History and Political Science (3 credits)
HIST 4999	Senior Seminar in History (3 credits)

Historical Surveys (12 credits)

Select 12 credits from the following courses:

HIST 1030	American History to 1865 (3 credits)
HIST 1040	American History Since 1865 (3 credits)

Select one of the following two-course sequences:

HIST 1090 Early Western History (3 credits) *AND* HIST 1110 Modern Western History (3 credits)
HIST 1150 Early World History (3 credits) *AND* HIST 1160 Modern World History (3 credits)

Intermediate Study (3 credits)

Select 3 credits from the following courses:

HIST 2130 Formation of Latin America (3 credits)
HIST 2140 Modern Latin America (3 credits)
HIST 2300 Caribbean History (3 credits)
HIST 2400 African History (3 credits)

Advanced Study (18 credits)

Select 18 credits from the following courses:

HIST 3010 Constitutional History I (3 credits)
HIST 3020 Constitutional History II (3 credits)
HIST 3130 Vietnam (3 credits)
HIST 3140 The Holocaust (3 credits)
HIST 3230 The Great Depression (3 credits)
HIST 3240 Irish History (3 credits)
HIST 3300 Contemporary U.S. History (3 credits)
HIST 3400 U.S. Foreign Relations (3 credits)
HIST 3430 Renaissance and Reformation Europe (3 credits)
HIST 3440 Enlightenment and Revolution in Europe (3 credits)
HIST 3450 History of American Immigration (3 credits)
HIST 3510 The Civil War and Reconstruction (3 credits)
HIST 4700 Genocide in the 20th Century and Beyond (3 credits)
HIST 4900 Special Topics in History (3 credits)
HIST 4950 Internship in History (3 credits)
HIST 4990 Independent Study in History (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

International Studies Major

The international studies major is designed for students who wish to pursue an interdisciplinary approach to the global environment and who wish to gain a deeper understanding of a particular region outside of the United States. Courses highlighting the art, culture, history, law, literature, and government of various regions will be offered. Students in this major develop critical thinking, close reading, and analytical writing skills. The international studies major prepares students for a wide variety of careers in such fields as politics, law, business, journalism, education, public relations, research, and government.

International Studies Major Learning Outcomes

The successful international studies graduate is expected to:

1. Analyze material relating to world art, culture, history, law, literature and/or government;
2. Synthesize subject matter from international history, culture, and politics;
3. Demonstrate competency in a foreign language.

International Studies Major Curriculum

In order to complete the international studies major, the student must submit to the chair of the Department of History and Political Science, in consultation with a full-time faculty member in the Department of History and Political Science, a written prospectus outlining his or her program of study. The student, the consulting faculty member, and the director must

sign the prospectus no later than the end of the first semester in which the student declares the major.

At least 18 credits must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

International Studies Major Requirements (39–51 credits, depending on foreign language)

Core Courses (12 credits)

HUMN 1200	Introduction to World Religions (3 credits)
INST 1500	Global Issues (3 credits)

Select 3 credits from the following courses:

HIST 1150	Early World History (3 credits)
HIST 1160	Modern World History (3 credits)

Select 3 credits from the following courses:

LITR 2030	World Literature I (3 credits)
LITR 2031	World Literature II (3 credits)

Subject Areas (18 credits)

Art, Literature, and Culture Subject Area (9 credits)

Select 9 credits from the following courses:

ARTS 3300	Myth and Art (3 credits)
HUMN 2300	Introduction to World Mythology (3 credits)
HUMN 2350	Introduction to Folklore (3 credits)
HUMN 2400	Introduction to Celtic Studies (3 credits)
HUMN 3800	Mexican Cult of Death in Myth and Literature (3 credits)
HUMN 4200	Asian Thought (3 credits)
LITR 3510	Irish Literature (3 credits)
LITR 3530	Caribbean Literature (3 credits)
LITR 3540	Latin American Literature (3 credits)
LITR 4510	King Arthur (3 credits)
SPAN 3240	Introduction to Spanish Literature (3 credits)
SPAN 3250	Introduction to Latin American Literature (3 credits)
SPAN 4900	Special Topics in Spanish (3 credits)

History, Law, and Government Subject Area (9 credits)

Select 9 credits from the following courses:

HIST 2130	Formation of Latin America (3 credits)
HIST 2140	Modern Latin America (3 credits)
HIST 2300	Caribbean History (3 credits)
HIST 2400	African History (3 credits)
HIST 3140	The Holocaust (3 credits)
HIST 3240	Irish History (3 credits)
HIST 3400	U.S. Foreign Relations (3 credits)
LGST 3400	Comparative Legal Systems (3 credits)
LGST 4410	International Law (3 credits)
PHIL 3670	Social and Political Philosophy (3 credits)
POLS 2010	Comparative Government (3 credits)

Foreign Language Requirement (12 credits)

Students must complete a requirement involving a language relevant to their area of concentration and interest. The minimum acceptable proficiency level must be equivalent to two years of college or university basic language instruction. This requirement can be met in a number of ways, not exclusive of the following:

1. Complete the equivalent of at least 12 foreign language credits at NSU;
2. Complete the equivalent of at least two years of college-level foreign language courses at a regionally accredited college or university prior to transfer to NSU;
3. Achieve a successful score on a pre-approved language proficiency exam.

International Travel Study Requirement (6 credits)

Students must complete a pre-approved international travel study experience equivalent to at least 6 credits (whether through an NSU-sponsored program or otherwise). This requirement can be met by using more than one study abroad experience.

Capstone Experience Requirement (3 credits)

INST 4800 Crossroads of the Transatlantic World (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Legal Studies Major

The legal studies major is designed for students interested in preparing for law school or other graduate study and for those who want to pursue a humanities major with a legal perspective. The courses in the major assist students in developing analytical and communication skills and an understanding of economic, political, and social contexts within which legal issues arise.

Legal Studies Major Learning Outcomes

A successful legal studies graduate is expected to:

1. Evaluate the elements of oral and written argument relevant to legal issues;
2. Explain the historical development of legal systems;
3. Analyze the economic, political and social contexts of legal decisions and legal systems;
4. Explain the philosophical issues that arise in law.

Legal Studies Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Legal Studies Major Requirements (48 credits)

Core Courses (33 credits)

HIST 1030	American History to 1865 (3 credits) *OR* HIST 1040 American History Since 1865 (3 credits)
HIST 1090	Early Western History (3 credits) *OR* HIST 1110 Modern Western History (3 credits) *OR* HIST 1150 Early World History (3 credits) *OR* HIST 1160 Modern World History (3 credits)
HIST 3010	Constitutional History I (3 credits)
HIST 3020	Constitutional History II (3 credits)
LGST 2500	Introduction to Legal Studies (3 credits)
LGST 3400	Comparative Law (3 credits)
LGST 4000	Legal Research and Trial Advocacy (3 credits)
LGST 4410	International Law (3 credits)
POLS 1010	American Government and Politics (3 credits)
POLS 2010	Comparative Government (3 credits)

SPCH 2020 Argument and Debate (3 credits)

Philosophy Menu (9 credits)

Philosophy: Logic

Select 3 credits from the following courses:

PHIL 1400 Introduction to Logic (3 credits)
PHIL 2400 Symbolic Logic (3 credits)

Philosophy: Value Inquiry

Select 3 credits from the following courses:

PHIL 3010 Ethical Issues in Communication (3 credits)
PHIL 3180 Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3200 Ethics and Sport (3 credits)
PHIL 3360 Environmental Ethics (3 credits)
PHIL 3660 Philosophy of Law (3 credits)
PHIL 3670 Social and Political Philosophy (3 credits)

Philosophy: Systematic Area of Philosophy

Select 3 credits from the following courses:

PHIL 3220 Philosophy of Science (3 credits)
PHIL 3510 Ancient Philosophy (3 credits)
PHIL 3520 Modern Philosophy (3 credits)
PHIL 4100 Metaphysics (3 credits)
PHIL 4200 Epistemology (3 credits)

Advanced Major Electives (6 credits)

Select 6 credits from the following courses:

LGST 3350 Environmental Law and Policy (3 credits)
LGST 4100 The First Amendment (3 credits)
LGST 4200 Crime and the Constitution (3 credits)
LGST 4270 Judicial Politics and Process (3 credits)
LGST 4310 Individual Rights and the Law (3 credits)
LGST 4420 War Crimes (3 credits)
LGST 4900 Special Topics in Legal Studies (3 credits)
LGST 4950 Internship in Legal Studies (3 credits)

Philosophy Major

The philosophy major is designed to provide students with a background in the history and problems of philosophy. Students in this major develop critical thinking, close reading, and analytical writing skills. A philosophy major prepares students for graduate study in philosophy and a wide variety of careers in such fields as education, law, business, and government.

Philosophy Major Learning Outcomes

A philosophy graduate is expected to:

1. Distinguish philosophical from non-philosophical forms of inquiry;
2. Explain important debates in the history of philosophy;
3. Critically evaluate arguments for philosophical positions.

Philosophy Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Philosophy Major Requirements (36 credits)

Core Courses (18 credits)

PHIL 1010	Introduction to Philosophy (3 credits)
PHIL 1400	Introduction to Logic (3 credits) *OR* PHIL 2400 Symbolic Logic (3 credits)
PHIL 3510	Ancient Philosophy (3 credits)
PHIL 3520	Modern Philosophy (3 credits)
PHIL 4100	Metaphysics (3 credits) *OR* PHIL 4200 Epistemology (3 credits)
PHIL 4900	Special Topics in Philosophy (3 credits)

Major Electives (18 credits)

Select 18 credits from the following courses that are not used as required courses:

PHIL 1400	Introduction to Logic (3 credits)
PHIL 2000	Moral Issues (3 credits)
PHIL 2400	Symbolic Logic (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
PHIL 3180	Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3200	Ethics and Sport (3 credits)
PHIL 3220	Philosophy of Science (3 credits)
PHIL 3360	Environmental Ethics (3 credits)
PHIL 3660	Philosophy of Law (3 credits)
PHIL 3670	Social and Political Philosophy (3 credits)
PHIL 4100	Metaphysics (3 credits)
PHIL 4200	Epistemology (3 credits)

No more than two of the following courses may be applied to the major:

PHIL 2000	Moral Issues (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
PHIL 3180	Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3200	Ethics and Sport (3 credits)
PHIL 3360	Environmental Ethics (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Political Science Major

The political science major is designed to provide students with an understanding of political concepts and the organization and functioning of political systems. The curriculum focuses on the nature of both the American political system (the context within which it operates, the forces that seek to influence it, and the consequences for our nation) and international political systems (global perspectives on political issues, the dynamics of international relations, and the functioning of global institutions and international alliances). Students in the major will develop critical thinking, close reading, and analytical research and writing skills.

Political Science Major Learning Outcomes

A political science graduate is expected to:

1. Explain the processes of the American political system, including the functions of and interactions among the different branches of the federal government;

2. Explain the processes of political systems outside the U.S., including variation in the structure and role of governments of different nations and the role of international relations;
3. Apply political philosophy and theory to issues of U.S. and international politics;
4. Utilize appropriate political science research methods in preparing written arguments about political issues.

Political Science Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Political Science Major Requirements (39 credits)

Core Courses (21 credits)

HIPS 2900	Research Methods in History and Political Science (3 credits)
POLS 1010	American Government and Politics (3 credits)
POLS 1200	Introduction to Political Science (3 credits)
POLS 2010	Comparative Government (3 credits)
POLS 2100	State and Local Government (3 credits)
POLS 2300	International Relations (3 credits)
POLS 3100	Political Theory (3 credits) *OR* PHIL 3670 Social and Political Philosophy (3 credits)

American Government and Politics Electives (6 credits)

Select 6 credits from the following courses:

LGST 4270	Judicial Politics and Process (3 credits)
POLS 3200	The Congress (3 credits)
POLS 3400	The Presidency (3 credits)
POLS 3600	Voting and Elections (3 credits)

International Government and Politics Major Electives (6 credits)

Select 6 credits from the following courses:

LGST 3400	Comparative Legal Systems (3 credits)
LGST 4420	War Crimes (3 credits)
POLS 3500	Global Politics (3 credits)
POLS 4100	European Union (3 credits)

Major Electives (6 credits)

Select 6 credits from the following courses:

HIST 3010	Constitutional History I (3 credits)
HIST 3020	Constitutional History II (3 credits)
HIST 3400	U.S. Foreign Relations (3 credits)
LGST 4100	The First Amendment (3 credits)
LGST 4310	Individual Rights and the Law (3 credits)
POLS 4200	Latin American Politics (3 credits)
POLS 4300	Middle Eastern Politics (3 credits)
POLS 4900	Special Topics in Politics and Public Affairs (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Minors

African Diaspora Studies Minor

The African Diaspora studies minor is an interdisciplinary program of study focusing on the history, literature, societies, and cultures of peoples in the African Diaspora, including Diaspora cultures in the United States of America, the Caribbean, Europe, and Africa. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

African Diaspora Studies Minor Requirements (15–16 credits)

Core Course (3 credits)

HIST 2400	African History (3 credits)

Select 12 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

DANC 3550	World Dance (3 credits)
FILM 3100	Black Cinema (3 credits)
HIST 2300	Caribbean History (3 credits)
HUMN 3610	The Harlem Renaissance (3 credits)
LITR 3520	African-American Literature (3 credits)
LITR 3530	Caribbean Literature (3 credits)

History Minor

The history minor provides a broad overview of U.S., European, Latin American, and world history and reinforces effective writing and analytical skills. Combined with any major program of study, the history minor offers students an opportunity to improve their critical thinking and writing, a plus for any profession, and also widens students' perspectives about historical events of the world from antiquity to the present. This minor can be combined with any major and minor except the history major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

History Minor Requirements (15 credits)

Students must complete 15 credits in any history (HIST) courses, 9 credits of which must be at the 3000/4000 level.

International Law Minor

The international law minor is designed for those students who seek a broad understanding of the relationships between the legal systems of different nations as well as regulations, agreements, and treaties maintained between specific nations or by international organizations. This minor can be combined with any major and minor except the legal studies major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

International Law Minor Requirements (15 credits)

INST 1500	Global Issues (3 credits)
LGST 3400	Comparative Legal Systems (3 credits)
LGST 4410	International Law (3 credits)
POLS 2010	Comparative Government (3 credits)
Any 3000/4000-level LGST course (3 credits)	

International Studies Minor

The international studies minor provides a broad international perspective for students who plan careers in business,

government, medical and psychological services, the legal profession, or education. The courses in this minor allow students to expand their concept of social and ecological responsibility in the global arena. This minor can be combined with any major and minor except the international studies major. A minimum of 12 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

International Studies Minor Requirements (18 credits)

Students must complete 18 credits from the following areas. Nine (9) credits must be at the 3000/4000 level, and a minimum of 6 credits must be in non-Western courses.

Core Courses (3 credits)

Select 3 credits from the following courses:

HUMN 1200	Introduction to World Religions (3 credits)
INST 1500	Global Issues (3 credits)

Subject Areas (15 credits)

Select 9 credits from either the Arts, Literature, and Culture subject area or from the History, Law, and Government subject area, and select 6 credits from the other subject area:

Arts, Literature, and Culture Subject Area

ARTS 3300	Myth and Art (3 credits)
HUMN 2300	Introduction to World Mythology (3 credits)
HUMN 2350	Introduction to Folklore (3 credits)
HUMN 2400	Introduction to Celtic Studies (3 credits)
HUMN 3800	Mexican Cult of Death in Myth and Literature (3 credits)
HUMN 4200	Asian Thought* (3 credits)
LITR 2030	World Literature I (3 credits)
LITR 2031	World Literature II (3 credits)
LITR 3510	Irish Literature (3 credits)
LITR 3530	Caribbean Literature (3 credits)
LITR 3540	Latin American Literature* (3 credits)
LITR 4510	King Arthur (3 credits)
SPAN 3240	Introduction to Spanish Literature (3 credits)
SPAN 3250	Introduction to Latin American Literature* (3 credits)
SPAN 4900	Special Topics in Spanish Literature (3 credits)

History, Law, and Government Subject Area

HIST 1150	Early World History* (3 credits)
HIST 1160	Modern World History* (3 credits)
HIST 2130	Formation of Latin America* (3 credits)
HIST 2140	Modern Latin America* (3 credits)
HIST 2300	Caribbean History* (3 credits)
HIST 2400	African History* (3 credits)
HIST 3140	The Holocaust (3 credits)
HIST 3240	Irish History (3 credits)
HIST 3400	U.S. Foreign Relations (3 credits)
LGST 3400	Comparative Legal Systems (3 credits)
LGST 4410	International Law (3 credits)
PHIL 3670	Social and Political Philosophy (3 credits)
POLS 2010	Comparative Government (3 credits)

* Non-Western courses

Irish Studies Minor

The Irish studies minor is an interdisciplinary program of study focusing on the history, literature, societies, and cultures of Ireland, including the Republic of Ireland, Northern Ireland, and the Irish Diaspora. This minor can be combined with any

major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Irish Studies Minor Requirements (15 credits)

Select 9 credits from the following courses:

HIST 3240	Irish History (3 credits)
HIST 4900	Special Topics in History, when taught as an Irish history topic (3 credits)
HUMN 2400	Introduction to Celtic Studies (3 credits)
LITR 3510	Irish Literature (3 credits)

Travel Study Requirement (3–6 credits)

In addition, students must take one or two travel study courses in Ireland or Northern Ireland, preferably after completing at least one of the above core NSU courses. These travel study courses may include any of the following subjects and would be offered as Special Topics courses:

Irish Art and Architecture
Irish Film
Irish Language (Gaelic)
Irish Literature and Politics
Transatlantic Currents: Ireland and America in the Modern Era

Qualifying travel study credit may also be earned through participation in pre-approved programs offered through partner institutions.

Latin American and Caribbean Studies Minor

The Latin American and Caribbean minor provides a broad interdisciplinary base for students planning careers involving Latin American and Caribbean peoples. Students can complete the minor as a means of enhancing their ability to work and live in an increasingly interdependent, multicultural hemisphere. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Latin American and Caribbean Studies Minor Requirements (15 credits)

Core Courses (6 credits)

HIST 2130	Formation of Latin America (3 credits) OR HIST 2140 Modern Latin America (3 credits)
HIST 2300	Caribbean History (3 credits)

Minor Electives (9 credits)

Select 9 credits from the following courses:

HUMN 3800	Mexican Cult of Death in Myth and Literature (3 credits)
HUMN 4400	Issues in Latin American Development and Sustainability (3 credits)
LITR 3530	Caribbean Literature (3 credits)
LITR 3540	Latin American Literature (3 credits)
POLS 4200	Latin American Politics (3 credits)
SPAN 3250	Introduction to Latin American Literature (3 credits)

Legal Studies Minor

The legal studies minor is designed to prepare students in any major for law school. The minor emphasizes skills required for admission into law school and success once there. This minor can be combined with any major and minor except the legal studies major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Legal Studies Minor Requirements (15 credits)

HIST 3010	Constitutional History I (3 credits)

HIST 3020	Constitutional History II (3 credits)
LGST 4000	Legal Research and Trial Advocacy (3 credits)
PHIL 1400	Introduction to Logic (3 credits) *OR* PHIL 2400 Symbolic Logic (3 credits)
POLS 1010	American Government and Politics (3 credits)

Philosophy Minor

The philosophy minor provides students with a broad overview of philosophical issues and problems, as well as reinforcing effective writing and analytical skills. This minor can be combined with any major and minor except the philosophy major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Philosophy Minor Requirements (15 credits)

Students must complete 15 credits in any philosophy (PHIL) courses, at least 9 credits of which must be at the 3000/4000 level and no more than one of the following:

PHIL 2000/3010/3180/3200/3360

Department of Justice and Human Services

The Department of Justice and Human Services, within the College of Arts, Humanities, and Social Sciences, is dedicated to providing the highest level of excellence in educational experiences to current and future human services and criminal justice professionals. The Department offers the Bachelor of Science degree in four majors:

B.S. Criminal Justice
B.S. Human Services Administration
B.S. Recreational Therapy
B.S. Paralegal Studies

The Department of Justice and Human Services also offers minors in Criminal Justice and in Paralegal Studies, as well as a Post-Baccalaureate Certificate in Paralegal Studies.

Majors

Criminal Justice Major

The criminal justice major prepares students for academic and professional careers in criminal justice and related fields. Utilizing a comprehensive, multidisciplinary approach, through scholarship, research, and training, students develop an understanding of the dynamic interplay between theory and practice in the criminal justice system. Further, students develop an understanding of and appreciation for the complex relationship between the three components of the criminal justice system—law enforcement, the courts, and corrections. Courses in the B.S. in Criminal Justice are offered both on-site at NSU's main campus and online, providing students with greater flexibility in attending classes.

Criminal Justice Major Learning Outcomes

A successful criminal justice graduate is expected to:

1. Demonstrate an understanding of the major theories, principles, and concepts that govern each of the following core areas of criminal justice:
   a. Law;
   b. Law enforcement;
   c. Corrections;
   d. The court system;
   e. Crime causation;
   f. Research methods and statistics.
2. Integrate and apply the major theories, principles, and concepts of criminal justice to analyze and evaluate research and/or applied issues in the field of criminal justice using critical thinking skills, skeptical inquiry, and, where applicable, the scientific approach;
3. Produce criminal justice information in a clear, concise manner, consistent with relevant professional standards.

Criminal Justice Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Criminal Justice Major Requirements (54 credits)

Core Courses (45 credits)

CRJU 1100	Introduction to Criminal Justice (3 credits)
CRJU 1200	Criminal Law (3 credits)
CRJU 2000	Constitutional Issues (3 credits)
CRJU 2220	Criminology (3 credits)
CRJU 2400	Court Systems and Procedures (3 credits)
CRJU 2500	Ethical Dilemmas and Decisions in Criminal Justice (3 credits)
CRJU 2600	Multiculturalism and Crime (3 credits)
CRJU 3100	Juvenile Delinquency (3 credits)
CRJU 3220	Policing (3 credits)
CRJU 3250	Interviewing, Interrogation, and Report Writing (3 credits)
CRJU 3300	Corrections in America (3 credits)
CRJU 3400	Criminal Investigations (3 credits)
CRJU 4000	Victimology (3 credits)
CRJU 4500	Research Methods in Criminal Justice (3 credits)
CRJU 4880	Senior Seminar (3 credits)

Major Electives (9 credits)

Select 9 credits from the following courses:

CRJU 3500	Probation, Parole, and Community Corrections (3 credits)
CRJU 3600	Comparative Criminal Justice—Spain (3 credits)
CRJU 3700	The CSI Effect: Media and Criminal Justice (3 credits)
CRJU 4200	Terrorism and Homeland Security (3 credits)
CRJU 4400	Police Organizational Behavior and Management (3 credits)
CRJU 4600	Gangs in America (3 credits)
CRJU 4900	Special Topics in Criminal Justice (3 credits)
CRJU 4950	Internship in Criminal Justice (3 credits)
PSYC 2450	Forensic Psychology (3 credits)
PSYC 3270	The Psychology of Criminal Behavior (3 credits)

Human Services Administration Major (revised: see *Addendum D*)

The Bachelors of Science in Human Services Administration program is designed to provide students with an understanding of administration, public policy, ethics and practice in the field of Human Services Administration, in addition to a working knowledge of vulnerable and underrepresented populations. This program is suited to individuals who have the desire to enhance the quality of life for individuals and families in need through the development and administration of agencies involved in service delivery.

The B.S. in Human Services Administration will provide an excellent foundation for students who intend to pursue careers in human services administration, the aviation industry, other related professions, or graduate studies in areas such as health administration, public administration, social work, and business administration.

Multiple enrollment opportunities exist as courses are offered both on-site at NSU's main campus and online providing students with greater flexibility in attending classes. The program is designed to take knowledge and skill preparation to the next level by providing real life scenarios on the many fundamental trends and issues facing professionals within the human services field today.

Human Services Administration Major Learning Outcomes

A successful human services administration graduate is expected to:

1. Demonstrate knowledge and application of the leadership dynamics of administrators, managers, and directors in the field of human services administration as they relate to client support, family participation, and collaborative community partnerships;

2. Demonstrate knowledge of social issues and an understanding of how common Evidenced-Based Practices are used within Human Services organizations to enhance the well-being of vulnerable populations, including assessment, rehabilitation, and family intervention practices;
3. Articulate and define the character and qualities of human services organizations unique to the community and to the community members they serve;
4. Identify the importance and functions of human resources and supervision for human services administration;
5. Demonstrate an understanding of current concepts and trends in management and their application within the field of human services;
6. Identify, evaluate, and apply legal aspects and implications for human services administration;
7. Articulate the principles of program planning and evaluation as these impact human services organizations;
8. Demonstrate the ability to communicate effectively both orally, in writing, and with the use of technology such as Blackboard and Microsoft Office applications (i.e., Word, Powerpoint);
9. Demonstrate the ability to integrate personal experiences in human services organizations with current research and emerging human service administrative issues (at the conclusion of the field placement experiences).

Human Services Administration Major Curriculum

The Bachelor of Science in Human Services Administration requires successful completion of 120 credit hours including 30 credit hours of General Education, 54 credit hours of major (core) courses, which include two 3-credit field placements and 36 hours of elective courses. The elective courses may be selected to count towards specific concentrations, which consist of 12-18 credits each.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Human Services Administration Major (54 credits)

Core Courses (54 credits)

HS 1100	Social Issues and Human Services Delivery Systems (3 credits)
HS 1200	Introduction to Human Services Administration (3 credits)
HS 1300	Interpersonal Assessment Skills in Human Relations (3 credits)
HS 1400	Counseling and Assessment in Human Services (3 credits)
MGT 2050	Principles of Management (3 credits)
ECN 2025	Principles of Macroeconomics (3 credits)
ACT 2200	Financial Accounting (3 credits)
MGT 3020	Business Communications (3 credits)
PADM 1000	Introduction to Public Administration (3 credits)
MATH 2020	Applied Statistics (3 credits)
HS 3300	Ethical and Professional Issues in Human Services (3 credits)
HS 3315	Human Services and Cultural Diversity (3 credits)
HS 3990	Supervised Experience in Human Services I* (3 credits)
HS 4100	Rehabilitation Principles and Case Management (3 credits)
HRM 4160	Human Resource Management (3 credits)
HS 4200	Accountability in Human Services Administration (3 credits)
HS 4250	Program Planning and Evaluation (3 credits)
HS 4995	Supervised Experience in Human Services II* (3 credits)

* These field placement courses allow the development of skills through hands-on experience. Field placements will consist of 10–12 hours per week within a human services agency within the community and are designed to enable the student, under the direction and guidance of on-site and faculty supervisors, to apply what has been learned to a real world work experience.

Electives (36 credits)

Select 12 credits from any combination of courses listed as major electives or under the following concentrations.

Select an additional 24 credits of open electives from any courses, including those listed under the following concentrations.

Major Electives

HRM 4300	Managing Workplace Diversity (3 credits)
MGT 4170	Organizational Behavior (3 credits)
PSYC 2630	Ethical and Professional Issues in Mental Health (3 credits)
HS 2100	Administration of Recreational and Leisure Services (3 credits)
PADM 3000	Public Policy (3 credits)
PADM 3200	Public Budgeting (3 credits)
GERO 2030	Gerontology and the Law (3 credits)
PSYC 2470	Grief, Loss, and Bereavement (3 credits)

Concentrations (12 or 18 credits)

Students may choose to select one of the following concentrations:

*Basics in Aviation Concentration** (12 credits)*

HS 3500	Introduction to Human Factors in Aviation (3 credits)
HS 3510	Systems Analysis of the Impact of Human Factors on Decision-Making in Aviation (3 credits)
HS 3520	Strategic Forecasting of and Evaluation of Human Performance Factors in Aviation (3 credits)
HS 3530	Integration of Technical Foundations of Flight Management (3 credits)

*Professional Development in Aviation Concentration** (18 credits)*

HS 3500	Introduction to Human Factors in Aviation (3 credits)
HS 3510	Systems Analysis of the Impact of Human Factors on Decision-Making in Aviation (3 credits)
HS 3520	Strategic Forecasting of and Evaluation of Human Performance Factors in Aviation (3 credits)
HS 3530	Integration of Technical Foundations of Flight Management (3 credits)
HS 3540	Application of Fundamental Competencies in Commercial Aviation (3 credits)
HS 3550	Leadership Principles and Effective Communication in Flight Instruction (3 credits)

Advocacy/Case Management Concentration (12 credits)

HS 3410	Case Management Methods (3 credits)
HS 3420	Advocating for Individuals with Special Needs (3 credits)
HS 3430	Special Topics in Advocacy (3 credits)
HS 3440	Assessment and Treatment Planning (3 credits)

Gerontology Concentration (12 credits)

GERO 2000	Introduction to Gerontology (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
HS 3230	Cultural Competence in Aging Services (3 credits)
HS 3240	Long-term Care and Services to the Aging (3 credits)

Health Administration Concentration (12 credits)

BHS 3110	Health Care Ethics (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3161	Concepts of Health Care Finance (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)

Nonprofit Management, Philanthropy, and Grantsmanship Concentration (12 credits)

HS 3120	Grant Writing and Management (3 credits)
HS 3130	Nonprofit Leadership (3 credits)
HS 3140	Fundraising and Philanthropy (3 credits)
HS 3150	Strategic Planning in Human Services (3 credits)

Social Work Concentration (12 credits)

SOCL 2000	Introduction to Social Work (3 credits)
HS 3330	Human Behavior and the Social Environment (3 credits)
HS 3340	Interviewing and Assessment (3 credits)

HS 3350 Social Work Practice (3 credits)

Substance Abuse Studies Concentration (12 credits)

PSYC 2020 Foundations of Clinical and Counseling Psychology (3 credits)
PSYC 2575 Introduction to Substance Abuse Studies (3 credits)
PSYC 3575 Treatment of Substance Abuse (3 credits)
PSYC 3800 Current Psychotherapies (3 credits)

** The Basics in Aviation and Professional Development in Aviation with a comprehensive understanding of the human factors associated with flight. These factors include problem solving skills, decision-making, communication, attention, stress management and physical condition. The Basics in Aviation Concentration allows students to gain the training necessary to become professional aviators and have the opportunity to obtain a Federal Aviation Administration (FAA) Private Pilot License and Instrument Rating Certificate. Within the Professional Development in Aviation concentration, students have the opportunity to obtain a commercial pilot license, multi-engine rating, and flight instructor certification. Admission for flight instruction is subject to comprehensive medical exams.

By focusing on the knowledge, skills, and human factors such as critical thinking, problem solving, communication and effective emergency management, students are prepared with a comprehensive understanding of the various elements associated with flight. In addition, effective resource management and safety awareness are emphasized throughout this curriculum.

Paralegal Studies Major

The paralegal studies major is approved by the American Bar Association. A paralegal, as defined by the American Bar Association, is "a person qualified by education, training, or work experience, who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity, and who performs specifically delegated substantive legal work for which a lawyer is responsible." The goal of the program is to prepare students for entry-level paralegal positions in the common areas of law practice. Paralegals are nonlawyers, and therefore, are prohibited from the unauthorized practice of law. This program trains paralegals and is not a program for training lawyers or legal administrators. Students pursuing a Bachelor of Science degree in Paralegal Studies are required to submit a paralegal portfolio at an exit interview with the program coordinator prior to degree conferral.

Paralegal Studies Major Objectives

The objectives of the B.S. in Paralegal Studies program are to:

1. Provide students with a broad-based education in both liberal arts and paralegal studies;
2. Provide paralegal courses that enable students to obtain substantive legal knowledge, develop analytical skills, and apply the knowledge they have learned to tasks routinely performed by paralegals;
3. Be responsive in course offerings to the needs of paralegals and attorneys;
4. Ensure that students are familiar with the ethical guidelines for paralegals;
5. Provide students with the opportunity to utilize software that is used in most offices dealing with law-related issues;
6. Familiarize students with the paralegal profession and the opportunities that are available to them upon completion of the program.

Paralegal Studies Major Learning Outcomes

A successful paralegal studies graduate is expected to:

1. Explain the basic theories, doctrines, concepts, and associated principles that comprise the knowledge base of law, with specific emphasis on torts, contracts, wills and trusts, civil procedure, litigation, family law, business organizations, real estate, and criminal law;

2. Use legal research and critical thinking skills to categorize, organize, prioritize, and evaluate complex legal issues;
3. Prepare documents (e.g., memos, case briefs, correspondence, and pleadings) that meet professional legal standards.

Paralegal Studies Major Curriculum

LEGS courses offered online require proctored exams at approved sites.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Paralegal Studies Major Requirements (54 credits)

Core Courses (45 credits)

LEGS 1150	Introduction to Law and the Legal Profession (3 credits)
LEGS 2100	Legal Research and Writing I (3 credits)
LEGS 2200	Computer Applications for the Legal Profession (3 credits)
LEGS 3050	Criminal Law and Procedure (3 credits)
LEGS 3260	Real Estate Practice I (3 credits)
LEGS 3300	Torts and Civil Litigation (3 credits)
LEGS 3360	Wills, Trusts, and Estates I (3 credits)
LEGS 3400	Business Relations and Organizations (3 credits)
LEGS 3550	Family Law (3 credits)
LEGS 4110	Legal Research and Writing II (3 credits)
LEGS 4270	Real Estate Practice II (3 credits)
LEGS 4310	Advanced Litigation (3 credits)
LEGS 4370	Wills, Trusts, and Estates II (3 credits)
LEGS 4410	Corporate Regulation and Change (3 credits)
LEGS 4800	Advanced Practicum in Paralegal Studies (3 credits)

Major Electives (9 credits)

Select 9 credits from the following courses, a maximum of 6 credits of which can be in Special Topics courses, and a maximum of 6 credits of which can be in Internship courses:

LEGS 4050	Advanced Practices in Criminal Law (3 credits)
LEGS 4060	Debtor and Creditor Relations (3 credits)
LEGS 4470	Emerging Technologies and the Legal Profession (3 credits)
LEGS 4560	Elder Law (3 credits)
LEGS 4600	Pleadings and the Courts (3 credits)
LEGS 4700	Immigration Law (3 credits)
LEGS 4900	Special Topics in Paralegal Studies (3 credits)
LEGS 4950	Internship in Paralegal Studies (3 credits)

Recreational Therapy Major (revised: see *Addendum M*)

The Bachelor of Science in Recreational Therapy is designed to prepare professionals with the therapeutic and evaluation skills necessary to pursue certification as a therapeutic recreation specialist or seek employment in a multitude of settings.

The B.S. in Recreational Therapy trains students to be able to interact with clients, create and manage a therapeutic environment, and apply a working knowledge of best practices and issues related to the provision of services. There is an emphasis on training in clinical interventions that will assist individuals with illnesses or disabling conditions in improving or maintaining physical and emotional well-being.

The program is offered entirely online, giving students flexibility in managing demanding schedules, as well as having the opportunity to work in an easily accessible learning environment.

Recreational Therapy Major Learning Outcomes

A successful recreational therapy graduate is expected to:

1. Demonstrate an understanding of history, service models, theory/philosophy, ethics, credentials, professional conduct, evidence-based practice and professional development with recreational therapy practice.
2. Demonstrate competence in areas such as, screening, assessing and collecting comprehensive data and information regarding clients, and analyzing this information collected to determine the course of action when developing individualized treatment plans with clients.
3. Demonstrate competence in the planning and development of individualized treatment plans that identify objective, measurable, and functional outcome goals, as well as facilitate techniques and interventions, based on assessment data collected which reflect improvement in the diagnosed specific medical, psychiatric or other disabling condition.
4. Identify and implement appropriate evidence-based treatment interventions and programs to restore, remediate, or rehabilitate client functioning within a therapeutic recreation setting.
5. Utilize specific skills used in facilitating client treatment success in recreational therapy practice.
6. Be able to conduct evaluation procedures and research to determine the effectiveness of treatment interventions and programs used in obtaining client treatment goals and outcomes within the therapeutic recreation environment.
7. Demonstrate the basic skills necessary when managing their own practice or organizations such as organization and delivery of health care and human services, facility planning, financial planning, and providing clinical supervision and education to staff and students.
8. Demonstrate an understanding of human anatomy and physiology, human development, and psychological and social behavior, as knowledge of these areas serve to guide treatment and client outcomes.
9. Demonstrate the ability to integrate skills learned within the program and be able to display positive clinical, professional, and leadership skills (at the conclusion of the field placement experiences).

Recreational Therapy Major Curriculum

The Bachelor of Science in Recreational Therapy requires the completion of 120 credit hours, including 30 credits in general education, 54 credits of major (core) courses within the major (includes 6-credits of supervised field experience), one 12 credit concentration within the program, and 24 credits of open electives. In addition, the open elective courses may be selected to count toward an additional 12-credit concentration(s) of their choice, which will be recorded on the student's transcripts.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Recreational Therapy Major (54 credits)

Core Courses (54 credits)

BHS 3110	Health Care Ethics (3 credits)
LED 3000	Introduction to Leadership (3 credits)
HS 1300	Interpersonal Assessment Skills in Human Relations (3 credits)
HS 2100	Administration of Recreational and Leisure Services (3 credits)
HS 3330	Human Behavior and the Social Environment (3 credits)
HS 4100	Rehabilitation Principles and Case Management (3 credits)
HS 4250	Program Planning and Evaluation (3 credits)
PSYC 2350	Life Span Human Development (3 credits)
RT 1100	Recreational Therapy: Theory and Foundations (3 credits)
RT 1200	Recreational Therapy with Physically Disabled Individuals (3 credits)
RT 1400	Current Trends in Recreational Therapy (3 credits)
RT 2000	Recreational Therapy: Processes and Techniques (3 credits)
RT 2100	Recreational Therapy for Individuals with Mental Illness (3 credits)
RT 2200	Multicultural Issues in Therapeutic Recreation Settings (3 credits)

RT 3050	Clinical Assessment and Evaluation in Recreational Therapy (3 credits)
RT 3250	Human Anatomy and Physiology (3 credits)
RT 4100	Field Placement in Recreational Therapy I* (3 credits)
RT 4200	Field Placement in Recreational Therapy II* (3 credits)

* These field placement courses allow the development of skills through hands-on experience. Field placements will consist of 15 hours per week, over two semesters (totaling at least 480 hours), within a therapeutic recreation services agency within the community, and are designed to enable the student, under the direction and guidance of on-site and faculty supervisors, to apply what has been learned to a real world work experience.

Concentrations (12 credits)

Students are required to select one of the following concentration areas of study. However, they may also select courses as electives to count toward an additional 12-credit concentration(s) of their choice.

Child Life and Development

PSYC 2300	Behavior Modification (3 credits)
PSYC 2360	Adolescent Psychology (3 credits)
PSYC 2370	Early Childhood Growth and Development (3 credits)
RT 3100	Recreational Therapy Services for Children and Adolescents (3 credits)

Adult Therapeutic Services

GERO 2000	Introduction to Gerontology (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
BHS 4110	Health Care and Aging (3 credits)
RT 3200	Recreational Therapy Services for Older Adults (3 credits)

Health and Recreation Management

MGT 2050	Principles of Management (3 credits)
MGT 4170	Organizational Behavior (3 credits)
HRM 4300	Managing Workplace Diversity (3 credits)
RT 3300	Supervision in a Therapeutic Recreation Setting (3 credits)

Electives (24 credits)

Students can select 24 credits of open electives from any courses, including the following suggested courses:

PSYC 2010	Cognitive Processes (3 credits)
PSYC 3520	Principles of Learning (3 credits)
PSYC 3920	Sensation Perception (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)
EXSC 3700	Kinesiology (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3190	Patient Education in Health Care (3 credits)
HS 3240	Long-term Care and Services to the Aging (3 credits)
GERO 2030	Gerontology and the Law (3 credits)
PSYC 2470	Grief, Loss, and Bereavement (3 credits)

Minors

Criminal Justice Minor

The criminal justice minor provides students with an overview of the criminal justice system, including its three components—law enforcement, the courts, and corrections. In this course of study, students explore criminal law and procedure, constitutional rights of defendants, victimization, correctional theory and practice, and policing. This minor is recommended for students interested in criminology, criminal defense or prosecution, and law enforcement-related fields. This minor can be combined with any major and minor except the criminal justice major.

Criminal Justice Minor Requirements (18 credits)

Core Courses (9 credits)

CRJU 1100	Introduction to Criminal Justice (3 credits)
CRJU 1200	Criminal Law (3 credits)
CRJU 2220	Criminology (3 credits)

Minor Electives (9 credits)

Select 9 credits from the following courses:

CRJU 3100	Juvenile Delinquency (3 credits)
CRJU 3220	Policing (3 credits)
CRJU 3300	Corrections (3 credits)
CRJU 3400	Criminal Investigations (3 credits)
CRJU 3500	Probation, Parole, and Community Corrections (3 credits)
CRJU 3600	Comparative Criminal Justice – Spain (3 credits)
CRJU 3700	The CSI Effect: Media and Criminal Justice (3 credits)
CRJU 4000	Victimology (3 credits)
CRJU 4200	Terrorism and Homeland Security (3 credits)
CRJU 4400	Police Organizational Behavior and Management (3 credits)
CRJU 4500	Research Methods in Criminal Justice (3 credits)
CRJU 4600	Gangs in America (3 credits)
CRJU 4880	Senior Seminar (3 credits)
CRJU 4900	Special Topics in Criminal Justice (3 credits)

Paralegal Studies Minor

The paralegal studies minor is designed to expose students to the most common areas of law encountered in a legal and business context. The minor is not designed to encompass the entire range of skills needed in the paralegal profession. It is not a program for training paralegals and is not approved by the American Bar Association. The minor is an enhancement for those students pursuing other law-related careers or business careers and who desire to understand the federal and state legal systems to broaden their legal knowledge and skills. This minor can be combined with any major and minor except the paralegal studies major and paralegal studies post-baccalaureate certificate.

Paralegal Studies Minor Requirements (18 credits)

LEGS courses offered online require proctored exams at approved sites.

Core Courses (6 credits)

LEGS 1150	Introduction to Law and the Legal Profession (3 credits)
LEGS 2100	Legal Research and Writing (3 credits)

Minor Electives (12 credits)

Select 12 credits from the following courses:

LEGS 3050	Criminal Law and Procedure (3 credits)
LEGS 3260	Real Estate Practice I (3 credits)
LEGS 3300	Torts and Civil Litigation (3 credits)
LEGS 3360	Wills, Trusts, and Estates I (3 credits)
LEGS 3400	Business Relations and Organizations (3 credits)
LEGS 3550	Family Law (3 credits)

Certificate Program

Post-Baccalaureate Certificate in Paralegal Studies

The Post-Baccalaureate Certificate in Paralegal Studies program is approved by the American Bar Association. A paralegal, as defined by the American Bar Association, is "a person, qualified by education, training or work experience, who is employed or retained by a lawyer, law office, corporation, governmental agency, or other entity, and who performs specifically delegated substantive legal work for which a lawyer is responsible." The goal of the program is to prepare students for entry-level paralegal positions in the common areas of law practice. Paralegals are nonlawyers and therefore are prohibited from the unauthorized practice of law. This program trains paralegals and is not a program for training lawyers or legal administrators.

Students in this post-baccalaureate certificate program are required to submit a paralegal portfolio at an exit interview with the program coordinator prior to certificate conferral. LEGS courses offered online require proctored exams at approved sites. The American Bar Association requires that a minimum of 12 credits of coursework be taken in a traditional, ground-based format (i.e., not online). This certificate program cannot be combined with any major or minor because it is a post-baccalaureate program. Students pursuing a Post-Baccalaureate Certificate in Paralegal Studies are required to submit a paralegal portfolio at an exit interview with the program coordinator prior to conferral of certificate.

Students admitted to the Post-Baccalaureate Certificate in Paralegal Studies program may transfer up to 12 credits of "legal specialty" courses taken at an American Bar Association approved program. A course considered for transfer must have been taken no longer than five years prior to entry into the Paralegal Studies Post-Baccalaureate Certificate program, must be substantially similar to an existing NSU paralegal studies course, must have been passed with a grade of "C" or higher, and must be approved by the paralegal studies program coordinator.

Paralegal Studies Post-Baccalaureate Certificate Learning Outcomes:

A successful paralegal studies post-baccalaureate certificate graduate is expected to:

1. Explain the basic theories, doctrines, concepts, and associated principles that comprise the knowledge base of law, with specific emphasis on torts, contracts, wills and trusts, civil procedure, litigation, family law, business organizations, real estate, and criminal law;
2. Demonstrate basic legal research and critical thinking skills used to categorize, organize, prioritize, and evaluate legal issues;
3. Prepare documents (e.g., memos, case briefs, correspondence, and pleadings) that meet professional legal standards.

Paralegal Studies Post-Baccalaureate Certificate Requirements (30 credits)

LEGS 1150	Introduction to Law and the Legal Profession (3 credits)
LEGS 2100	Legal Research and Writing (3 credits)
LEGS 2200	Computer Applications for the Legal Profession (3 credits)
LEGS 3050	Criminal Law and Procedure (3 credits)
LEGS 3260	Real Estate Practice I (3 credits)
LEGS 3300	Torts and Civil Litigation (3 credits)
LEGS 3360	Wills, Trusts, and Estates I (3 credits)
LEGS 3400	Business Relations and Organizations (3 credits)
LEGS 3550	Family Law (3 credits)
Any 4000-level LEGS course (3 credits)	

Federal Disclosures: Visit *cahss.nova.edu/certificates/paralegal-studies/* for details on this certificate program, including occupations the program prepares students to enter; on-time graduation rates; expected program lengths; tuition and fees; typical costs for books, supplies, room and board; post-completion job placement rate; and students' median loan debt.

Department of Literature and Modern Languages

The Department of Literature and Modern Languages offers coursework and degree programs related to literature, humanities, film, gender studies, and foreign languages. The department is committed to the study of language, literature, popular culture, and the interdisciplinary liberal arts.

Majors

English Major

The English major is designed to provide students with a background in British, American, and world literatures, literary criticism and theory, popular culture, and rhetoric and composition. Students in this major develop critical thinking, close reading, and analytical and creative writing skills. The English major prepares students for a wide variety of careers in such fields as education, publishing, law, business, and government.

English Major Learning Outcomes

A successful English graduate is expected to:

1. Produce written arguments about literary texts;
2. Identify literary periods, authors, and genres;
3. Analyze literary texts as creative expressions, and historical and cultural artifacts.

English Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

English Major Requirements (45 credits)

Literature Core Courses (27 credits)

LITR 2010	British Literature I (3 credits)
LITR 2011	British Literature II (3 credits)
LITR 2020	American Literature I (3 credits)
LITR 2021	American Literature II (3 credits)
LITR 2030	World Literature I (3 credits)
LITR 2031	World Literature II (3 credits)
LITR 3060	History and Structure of the English Language (3 credits)
LITR 4050	Literary Criticism and Theory (3 credits)
LITR 4760	Major Authors (3 credits)

Any "Popular Literature and Culture" course (3 credits)

LITR 2110	Detective Fiction (3 credits)
LITR 2120	Science Fiction and Fantasy Literature (3 credits)
LITR 2130	Contemporary Memoir (3 credits)

Any two "Literary Area Studies" courses (6 credits)

LITR 3510	Irish Literature (3 credits)
LITR 3520	African-American Literature (3 credits)
LITR 3530	Caribbean Literature (3 credits)
LITR 3540	Latin American Literature (3 credits)

Any two "Literary Genres" courses (6 credits)

LITR 3620	Studies in Poetry (3 credits)
LITR 3630	Studies in the Novel (3 credits)
LITR 3640	Studies in Drama (3 credits)

Major Elective (3 credits)

Any 3000/4000-level LITR course (3 credits)

OR

Any of the following courses:

FILM 3050	Literature and Film (3 credits)
HUMN 3400	The Beat Generation (3 credits)
HUMN 3610	The Harlem Renaissance (3 credits)
HUMN 3800	Mexican Cult of Death in Myth and Literature (3 credits)
HUMN 4310	The Vampire (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Minors

English Minor

The English minor provides a broad overview of American, British, and world literatures and reinforces effective writing and analytical skills. Combined with any major program of study, the English minor offers students an opportunity to improve their critical thinking and writing, a plus for any profession, and also widens students' perspectives about literary texts of the world from antiquity to the present. This minor can be combined with any major and minor except the English major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

English Minor Requirements (15 credits)

Students must complete 15 credits in any literature (LITR) courses, 9 credits of which must be at the 3000/4000 level.

Film Studies Minor

The film studies minor provides a broad overview of the study of film, focusing on genre, history, and aesthetics. Students learn how to analyze the elements of film, to recognize historical trends in film, and to comprehend the social contexts of film. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Film Studies Minor Requirements (15 credits)

Students must complete 15 credits in any film (FILM) courses, 9 credits of which must be at the 3000/4000 level.

Folklore and Mythology Minor

The folklore and mythology minor provides students with an overview of the ways that various artistic features of a culture tell the story of where it has been and where it is going. The folklore and mythology minor deepens students' understanding of how a culture's storytelling contributes to its evolution. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Folklore and Mythology Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

Select 3 credits from the following courses:

HUMN 2300	Introduction to World Mythology (3 credits)
HUMN 2350	Introduction to Folklore (3 credits)

Select 12 credits from the following courses:

ARTS 3300	Myth and Art (3 credits)
COMM 3100	Gendered Images Pop Culture (3 credits)
HUMN 1200	Introduction to World Religions (3 credits)
HUMN 2300	Introduction to World Mythology (3 credits)
HUMN 2350	Introduction to Folklore (3 credits)
HUMN 2400	Introduction to Celtic Studies (3 credits)
HUMN 3300	Native American Myth and Storytelling (3 credits)
HUMN 3800	Mexican Cult of Death in Myth and Literature (3 credits)
HUMN 4100	Death and Dying (3 credits)
HUMN 4200	Asian Thought (3 credits)
HUMN 4310	The Vampire (3 credits)
LITR 4510	King Arthur (3 credits)

Gender Studies Minor

The gender studies minor examines the relationship between biological differences and social inequality, explores the construction of sexual identity, and analyzes the variations in gender systems that have occurred across cultures over time. Students explore the methods and concepts of gender studies in a variety of academic disciplines including film studies, law, literature, philosophy, psychology, and sociology. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Gender Studies Minor Requirements (15 credits)

At least 9 credits in the minor must be at the 3000/4000 level.

Core Course (3 credits)

GEST 2050	Introduction to Gender Studies (3 credits)

Minor Electives (12 credits)

Select 6 credits from the following courses:

ARTS 3020	Women in the Arts (3 credits)
COMM 3100	Gendered Images in Popular Culture (3 credits)
FILM 3040	Women and Film (3 credits)
GEST 4900	Special Topics in Gender Studies (3 credits)
LITR 3040	Women and Literature (3 credits)
LITR 4060	Critical Theories and Gender (3 credits)

Select 6 credits from the following courses:

PSYC 2110	Human Sexuality (3 credits)
PSYC 3360	Psychology of Gender (3 credits)

PSYC 3750	Gender and Counseling (3 credits)
SOCL 3110	Gender, Sexuality and the Family (3 credits)
SOCL 4010	Lesbian, Gay, Bisexual, and Transgender Cultures (3 credits)

Humanities Minor

The humanities minor provides intellectual challenge and personal development for students who are intrigued by artistic, social, and ethical questions and who wish to study the relationships among liberal arts disciplines. Combined with a major in a specialized field, the humanities minor prepares individuals to meet the challenges of the contemporary world. This minor can be combined with any major and minor except the humanities major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Humanities Minor Requirements (15 credits)

Students must complete 15 credits in any humanities (HUMN) courses, 9 credits of which must be at the 3000/4000 level.

Medical Humanities Minor

The medical humanities minor is designed to give students an overview of the ways that the medical arts and sciences intersect and interact with various disciplines in the humanities, in such ways as art and medicine, bioethics, the history of medicine, literature and medicine, music and medicine, medicine in the performing arts, medicine and philosophy, and medicine and law. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Medical Humanities Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

HUMN 2200	Introduction to Medical Humanities (3 credits)
HUMN 4100	Death and Dying (3 credits)
LITR 3500	Literature and Medicine (3 credits)
PHIL 3180	Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3220	Philosophy of Science (3 credits)
PSYC 2470	Loss, Grief, and Bereavement (3 credits)

Spanish Minor

The Spanish minor provides students with focused study in Spanish language and literature, as well as focused study of culture in Spanish-speaking countries around the world. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Spanish Minor Requirements (15 credits)

Students must complete 15 credits in any Spanish (SPAN) courses, 9 credits of which must be at the 3000/4000 level.

Department of Multidisciplinary Studies

The Department of Multidisciplinary (DMS) is committed to academic excellence by creating self-reflective, critical thinkers who possess the ability to recognize and understand multiple perspectives and who seek unique and thoughtful ways to address social issues and concerns. DMS strives to meet the needs of students in the current workplace environments by affording students the opportunity to engage in substantial study in different curricular disciplines. The department places an emphasis on critical thinking, analysis, and writing. DMS offers a Bachelor of Science in Applied Professional Studies, a Bachelor of Science in General Studies, a Master of Arts in Cross-disciplinary Studies, a Master of Science in College Student Affairs, a Graduate Certificate in College Student Personnel Administration, and a Graduate Certificate in Qualitative Research. DMS is also home to Deciding Majors, undergraduates in the process of deciding their major course of study.

Majors

Applied Professional Studies Major (revised: see *Addendum C*)

The applied professional studies (APS) major is available only to students enrolled in the non-traditional program. It offers a program for adults who have gained significant professional experience and who have earned a large number of college credits toward their particular career goal. The program allows students to select a course of study that best fits their career plans. A student's prior learning and credits earned represent concentration I. Courses earned in the APS major comprise concentration II. The APS major may be offered to students in all locations, subject to course availability. Acceptance into this major is determined by the appropriate department chair.

Applied Professional Studies Major Learning Outcomes

A successful applied professional studies graduate is expected to:

1. Explain the integration of information from both concentrations;
2. Identify the fundamental theories and principles underlying concentration II;
3. Demonstrate a comprehensive understanding of the fundamental theories and principles underlying concentration II.

Applied Professional Studies Major Curriculum

A minimum of 30 upper division (3000 and higher) credits must be included in the total required 120 credits. Students may apply an unlimited number of prior learning credits toward their applied professional studies degree; a minimum of 30 credits must be completed at NSU. Students majoring in applied professional studies may demonstrate learning competencies for one of their concentrations through NSU coursework, transfer courses from other institutions, prior learning, or testing (e.g., DANTES and CLEP). Specific requirements are:

1. General Education Framework: 30 credits
2. Major Requirements:
   a. Concentration I (18 credits prior to entering the major)
   b. Concentration II (number of credits depends on the concentration)
3. Open Electives 33–48 credits (depending on the concentration)

Total Degree Requirements: 120 credits

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the General Education Program in the Academic Policies and Procedures section of this catalog.

Admission to the Applied Professional Studies Major

Eligibility for the Applied Professional Studies Major

To be eligible for the applied professional studies major, students must:

1. Have completed a minimum of 45 credits prior to applying to the applied professional studies major.
2. Have completed an 18-credit concentration before applying to the applied professional studies major.

Admission Criteria for the Applied Professional Studies Major

In addition to the documents described in the *Required Documentation* in the Admissions section of this catalog, applicants to the applied professional studies major must complete and provide a portfolio containing the following documents. The assistance of an academic advisor should be sought for advice in the preparation of these documents.

1. A letter of intent in which the student:
   a. Identifies his/her career goals;
   b. Identifies his/her prior coursework and approved prior learning experiences that comprise concentration I;
   c. Provides a rationale for considering concentration I as a coherent body of work;
   d. Identifies concentration II and explains how concentrations I and II integrate into an academic program focused on his/her career goals;
2. Copies of transcripts with the 18-credits that comprise concentration I highlighted;
3. One or more documents such as academic papers, projects, work products, letters of recommendation, written reviews of prior course work, written reviews of relevant professional experience, etc., that demonstrates the student's competency in concentration I. For the teaching and learning concentration, two letters of recommendation are required. One letter must be from a principal, vice principal, or senior teacher who can attest to the applicant's performance as a classroom teacher. The school seal or stamp must be affixed in order for the document to be considered official. The second letter of recommendation can be from any colleague of the student's choice.

The portfolio is submitted to the academic advisor for review by the director of the appropriate academic unit.

Applied Professional Studies Concentrations

Students choose one of the following concentrations after consultation with their academic advisor. Not all concentrations are offered at every location.

Biological and Physical Sciences Concentration

Program Requirements (8 credits)

Select 8 credits from the following courses:

BIOL 1500	Biology I/Lab (4 credits)
BIOL 1510	Biology II/Lab (4 credits) *OR* BIOL 1510H Biology II/Lab Honors (4 credits)
CHEM 1300	General Chemistry I/Lab (4 credits) OR CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab (4 credits) OR CHEM 1310H General Chemistry II/Lab Honors (4 credits)

Core Course (3 credits)

BIOL 4901	APS Capstone Course in Biological and Physical Sciences (3 credits)

Major Electives (24–28 credits)

Select seven 2000 or higher level courses. Three courses must be at the 3000-level or higher. At least three of the

courses must be courses that include laboratory. This selection is from the following prefixes: BIOL, CHEM, PHYS, MBIO, ENVS, SCIE.

Computer Studies Concentration

Major Prerequisites (or equivalents) (6 credits)

MATH 1200	Precalculus Algebra (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Core Courses (26–27 credits)

CSIS 1800	Introduction to Computer Science (3 credits)
CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 4901	APS Capstone Directed Independent Study (3 credits)

Select 6–7 credits from the following courses:

CSIS 3020	Web Programming and Design (3 credits)
CSIS 3500	Network and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 4890	Special Topics in Computer Information Systems (3 credits)

Information Technology Concentration

Core Courses (24 credits)

CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
TECH 1110	Technology in Information Age (3 credits)
TECH 2150	Introduction to Internet Resources (3 credits)
TECH 4901	APS Capstone Course in Information Technology (3 credits)

Select 12 credits from the following courses:

CSIS 3500	Network and Data Communication (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
TECH 2130	Business Applications of Microcomputers (3 credits)
TECH 3000	Multimedia Design (3 credits)
TECH 3010	Principles of Web Site Design (3 credits)

Pre-Optometry Studies Concentration

The APS degree with a concentration in pre-optometry studies is available only to admitted students in the Pre-Optometry Program offered by the College of Optometry. To complete this bachelor's degree program, students must complete the pre-optometry studies concentration along with a course in mathematics (MATH 1030, MATH 1040, MATH 1200, or MATH 1250) and a communications course (SPCH 1010, SPCH 3120, WRIT 3150, or WRIT 3160) to total 32.5 credits at NSU. OPT and OPTC courses can be viewed in the catalog of the College of Optometry.

Core Courses (26.5 credits)

BIOL 4901	APS Capstone Course in Biological and Physical Sciences (3 credits)
OPT 1011	Histology and Embryology (1 credit)
OPT 1233	Biochemistry (3 credits)
OPT 1323	Microbiology (3 credits)
OPT 2422	Ocular Anatomy (3 credits)
OPTC 1134	Gross Anatomy/Head and Neck (4 credits)
OPTC 2023	General Neuroanatomy (2.5 credits)
OPTC 2144	General Physiology (4 credits)
PHYS 3300	Fundamentals of Optics (3 credits)

Psychological Studies Concentration

Acceptance into this major is determined by the director of the Division of Social and Behavioral Sciences.

Major Prerequisites (or equivalents) (9 credits)

MATH 2020	Applied Statistics (3 credits) OR MATH 2020H Applied Statistics Honors (3 credits)
PSYC 1020	Introduction to Psychology (3 credits)
PSYC 2900	Quantitative Psychology (3 credits)

Core Courses (24 credits)

PSYC 2100	Biological Bases of Behavior (3 credits)
PSYC 2160	Social Psychology (3 credits)
PSYC 2350	Life-Span Human Development (3 credits)
PSYC 3000	Psychological Research Methods (3 credits)
PSYC 3210	Personality (3 credits) OR PSYC 3260 Abnormal Psychology (3 credits)
PSYC 3520	Principles of Learning (3 credits)
PSYC 4901	APS Capstone Course in Psychology/Substance Abuse Studies (3 credits)

One 3000/4000-level PSYC course, selected with assistance from academic advisor (3 credits)

General Studies Major

The general studies major is a multidisciplinary degree program that allows students to maximize their educational experience by customizing their study around their individual areas of interest. The major affords students the opportunity to engage in substantial study in different curricular domains. The major is comprised of two concentrations.

General Studies Major Learning Outcomes

A successful general studies graduate is expected to:

1. Articulate the rationale behind the choice of concentrations comprising the major;
2. Analyze and articulate relevant theories and principles underlying disciplines in the two areas of concentration in the major;
3. Synthesize the theories and principles from disciplines in the two areas of concentration in the major into a unified, coherent project.

General Studies Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

General Studies Major Requirements (34 credits)

Core Requirements (4 credits)

GNST 2901	Workshop in General Studies (1 credit)
GNST 4901	Capstone in General Studies (3 credits)

Concentration Areas (30 credits)

Select two areas of concentration.

Select one of the following areas of concentration. At least 15 credits must be at the 3000/4000 level.

Humanities—undergraduate courses offered by the College of Arts, Humanities, and Social Sciences, Department of History and Political Science, Department of Literature and Modern Languages, and Department of Writing and Communication.

Math, Science, and Technology—undergraduate courses offered by the Halmos College of Natural Sciences and Oceanography, and the College of Engineering and Computing.

Performing and Visual Arts—courses offered by the College of Arts, Humanities, and Social Sciences, Department of Performing and Visual Arts.

Social and Behavioral Sciences—undergraduate courses offered by the College of Arts, Humanities, and Social Sciences, Department of Conflict Resolution Studies and College of Psychology.

Select one of the following areas of concentration, or select a second area of concentration from the list above. No more than one concentration can be taken from a single area from the list above. * At least 15 credits must be at the 3000/4000 level.

Health Care Sciences—courses offered by the College of Health Care Sciences

Education—courses offered by the Abraham S. Fischler College of Education

Business—courses offered by the H. Wayne Huizenga College of Business and Entrepreneurship

Human Service, Health, and Justice—undergraduate courses offered by the College of Arts, Humanities, and Social Sciences, Department of Justice and Human Services.

Pre-Nursing Major Curriculum (50 credits)

This unique curriculum is designed for students who wish to apply to NSU's Entry Bachelor of Science in Nursing program, and complete the program's admission prerequisite courses at the university. Successful completion of these prerequisite courses does not guarantee admission to the B.S.N. program. Additional requirements, beyond course prerequisites, are needed for B.S.N. applicants to be eligible for admission. Admission prerequisites are subject to change at any time. Students must contact NSU's College of Nursing for the applicable B.S.N. program admission requirements.

BIOL 1400	Introductory Cell Biology (3 credits)
BIOL 2210	Human Anatomy and Physiology/Lab (4 credits)
BIOL 2350	Human Nutrition (3 credits)
BIOL 2400	Applied Microbiology (3 credits)
CHEM 1100	Fundamentals of Chemistry (3 credits)
COMP 1500	College Writing (3 credits) OR COMP 1500H College Writing Honors (3 credits)
COMP 2000	Advanced College Writing (3 credits) OR COMP 2000H Advanced College Writing (3 credits)
MATH 1040	Algebra for College Students (3 credits)
MATH 2020	Applied Statistics (3 credits) OR MATH 2020H Applied Statistics Honors (3 credits)
NUR 2000	Basic Concepts of Baccalaureate Nursing Education (3 credits)
NUR 2500	Basic Concepts of Professional Nursing (3 credits)
NUR 3005	Mathematical Applications for Nursing Practice (2 credits)
PHS 4904	Advanced Anatomy & Physiology for Health Professions (4 credits)
PSYC 1020	Introduction to Psychology (3 credits) OR PSYC 1020H Introduction to Psychology Honors (3 credits)
PSYC 2350	Life-Span Human Development (3 credits)

Any ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, SPAN, THEA, WRIT or foreign language (3 credits)

Department of Performing and Visual Arts

The mission of the Department of Performing and Visual Arts (PVA) is to provide quality education that fosters creative growth and professional development in a liberal arts environment. PVA is a major part of the cultural fabric of NSU, and we foster advancement in artistic and academic creativity, scholarship, exhibition, performance and research. PVA aspires to provide leadership and serve as a major cultural resource for the university and a collaborative community.

Pathways to creative careers are launched in Bachelor of Arts programs in art and design (studio or graphic design concentrations), arts administration, dance, music (commercial music or performance concentrations), and theatre (acting for stage and screen, musical theatre, or design and technical production concentrations).

Majors

Art and Design Major

The art and design major is designed to provide students with a dynamic and comprehensive instructional program in the visual arts. Students may earn a B.A. in Art and Design with concentrations in studio art or graphic design. The art and design degree program prepares students for careers as freelance artists or for employment with public and private organizations in various industries.

Art and Design Major Learning Outcomes

The successful art and design graduate is expected to:

1. Effectively apply visual design and composition concepts to produce original art;
2. Identify major historical and contemporary art and design movements and artists;
3. Evaluate and discuss art and design using aesthetic theories;
4. Develop professional skills and standards in preparation for exhibition of works.

Art and Design Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Art and Design Major Requirements (46 credits)

Core Courses (22 credits)

ARTS 1200	Introduction to Drawing (3 credits)
ARTS 1700	Fundamentals of Color (3 credits)
ARTS 1800	Two-Dimensional Design (3 credits)
ARTS 2200	Digital Photography (3 credits)
ARTS 2800	Three-Dimensional Design (3 credits)
ARTS 3800	Art History I (3 credits)
ARTS 3850	Art History II (3 credits)
ARTS 4995	Senior Project (1 credit)

Concentrations (21 credits)

Select one of the following concentrations:

Graphic Design Concentration (21 credits)

ARTS 2410	Graphic Design I (3 credits)
ARTS 2450	Graphic Design II (3 credits)
ARTS 3200	Digital Photographic Design (3 credits)
ARTS 3450	Graphic Design III (3 credits)
ARTS 3650	Typography (3 credits)
ARTS 4250	Multimedia & Web Design (3 credits)
ARTS 4500	Professional Print Design (3 credits)

Studio Art Concentration (21 credits)

ARTS 1250	Life Drawing (3 credits)
ARTS 2100	Painting I (3 credits)
ARTS 3100	Painting II (3 credits)
ARTS 3200	Digital Photographic Design (3 credits)
ARTS 3500	Sculpture I (3 credits)
ARTS 3550	Ceramics I (3 credits)
ARTS 3700	Methods and Materials (3 credits)

Major Electives (3 credits)

Select 3 credits from the following courses:

ARTS 2600	Introduction to Arts Administration (3 credits)
ARTS 3020	Women in the Arts (3 credits)
ARTS 3040	Museum Studies and Gallery Practices (3 credits)
ARTS 4950	Internship in the Arts (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Arts Administration Major

The arts administration major is designed to give students a varied background in the arts and administrative skills needed to manage arts organizations. Students learn to identify administrative issues specifically related to arts organizations, demonstrate knowledge of the history of at least one area of performing or visual art, and apply arts administration management principles in a practical work environment within the arts industry. The arts administration major prepares students for careers in public and private arts organizations.

Arts Administration Major Learning Outcomes

The successful arts administration graduate is expected to:

1. Identify administrative issues specifically related to managing the arts industry;
2. Demonstrate knowledge of the history of at least one area of the performing and/or visual arts;
3. Apply arts administration management principles in a practical work environment within the arts industry.

Arts Administration Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Arts Administration Major Requirements (51 credits)

Core Courses (39 credits)

ACT 2200	Financial Accounting (3 credits)
ACT 2300	Managerial Accounting (3 credits)
ARTS 2410	Graphic Design I (3 credits)
ARTS 2450	Graphic Design II (3 credits) *OR* ARTS 4250 Multimedia & Web Design (3 credits)
ARTS 2600	Introduction to Arts Administration (3 credits)
ARTS 3600	Advanced Arts Administration (3 credits)
ARTS 4950	Internship in the Arts (3 credits) *OR* DANC 4950 Internship in Dance (3 credits) *OR* MUSC 4950 Internship in Music (3 credits) *OR* THEA 4950 Internship in Theatre (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 4170	Organizational Behavior (3 credits)
SPCH 3120	Speech Communication for the Professions (3 credits)
THEA 2060	Technical Theatre (3 credits)
THEA 3500	Stage and Production Management (3 credits)
WRIT 3150	Business Writing (3 credits)

Applied Practicum (6 credits)

Select 6 credits from the following courses:

ARTS 3040	Museum Studies and Gallery Practices (3 credits)
DANC 2101	Dance Laboratory I (1 credit)
DANC 2102	Dance Laboratory II (1 credit)
DANC 2103	Dance Laboratory III (1 credit)
MUSC 3301	Ensemble I (1 credit)
MUSC 3302	Ensemble II (1 credit)
MUSC 3303	Ensemble III (1 credit)
THEA 2101	Theatre Laboratory I (1 credit)
THEA 2102	Theatre Laboratory II (1 credit)
THEA 2103	Theatre Laboratory III (1 credit)

Performing/Visual Arts History (6 credits)

Select 6 credits from the following courses:

ARTS 3850	Art History II (3 credits)
DANC 3200	Dance History (3 credits)
MUSC 3250	Musicology II (3 credits)
THEA 3250	Theatre History II (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Dance Major

The dance major helps students develop in several areas: technical proficiency, historical and cultural perspectives, personal artistry, and production skills. The program also provides students with an understanding of how dance fits into a larger, global context. Students in the major learn the behind-the-scenes process of putting a show together and get the opportunity (in choreography and dance composition courses) to develop their unique voices as artists. The dance major prepares graduates for careers in dance performance, choreography, and dance education, as well as advanced study in graduate programs.

Dance Major Learning Outcomes

The successful dance graduate is expected to:

1. Exhibit proficiency in various dance techniques and styles;
2. Identify and evaluate historical, cultural and stylistic forms of dance;
3. Demonstrate personal artistry in the creation of dance performances;

4. Explain the movement of the body in relation to dance.

Dance Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Dance Major Requirements (50 credits)

Core Courses (47 credits)

DANC 2101	Dance Laboratory I (1 credit)
DANC 2102	Dance Laboratory II (1 credit)
DANC 2103	Dance Laboratory III (1 credit)
DANC 2104	Dance Laboratory IV (1 credit)
DANC 2201	Ballet II (3 credits)
DANC 2400	Jazz Dance II (3 credits)
DANC 2600	Modern Dance II (3 credits)
DANC 3100	Dance Improvisation (3 credits)
DANC 3200	Dance History (3 credits)
DANC 3500	Global Dance Perspectives (3 credits)
DANC 3550	World Dance (3 credits)
DANC 3600	Modern Dance III (3 credits)
DANC 3700	Solo Dance Composition (3 credits)
DANC 3900	Advanced Studio Technique (3 credits)
DANC 4000	Dance Composition (3 credits)
DANC 4300	Dance Choreography (3 credits)
DANC 4950	Internship in Dance (3 credits)
THEA 2060	Technical Theatre (3 credits)
THEA 4930	Senior Seminar (1 credit)

Major Electives (3 credits)

Select 3 credits from the following courses:

ARTS 2600	Introduction to Arts Administration (3 credits)
THEA 3050	Costuming and Makeup (3 credits)
THEA 3500	Stage and Production Management (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Music Major

The music major blends traditional music education with the technological and professional requirements of today's job market. The curriculum is compact, with areas of focus in vocal performance, piano performance, instrumental performance, and commercial and popular music. The music core builds fundamental skills in analytical thinking through theoretical study and develops written communication ability within broad historical contexts. The emphases focus on problem solving and adaptability in production and performance.

Music Major Learning Outcomes

The successful music graduate is expected to:

1. Demonstrate proficiency in music theory with a 75% degree of accuracy in sight-reading, aural dictation, and score analysis;

2. Identify historical trends of style and genre, and explain them through an understanding of artistic and cultural forces;
3. Perform accurately and musically with technical adeptness.

Music Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Music Major Requirements (44 credits)

Core Courses (29 credits)

ARTS 1500	Music Through History (3 credits)
MUSC 1200	Piano I (3 credits)
MUSC 1250	Piano II (3 credits)
MUSC 1960	Commercial Music Theory (3 credits)
MUSC 2900	Introduction to Music Industry (3 credits)
MUSC 2960	Creating Commercial Music (3 credits)
MUSC 3301	Ensemble I (1 credit)
MUSC 3302	Ensemble II (1 credit)
MUSC 3303	Ensemble III (1 credit)
MUSC 3304	Ensemble IV (1 credit)
MUSC 3600	Music of World Cultures (3 credits)
MUSC 4950	Internship in Music (3 credits)
THEA 4930	Senior Seminar (1 credit)

Concentration (15 credits)

Select one of the following concentrations:

Commercial and Popular Music Concentration (15 credits)

Select 15 credits from the following courses:

ARTS 2600	Introduction to Arts Administration (3 credits)
MUSC 1300	Beginning Guitar Class (3 credits)
MUSC 1500	Beginning Voice (3 credits)
MUSC 2600	Music Production I (3 credits)
MUSC 4100	Composition/MIDI (3 credits)
THEA 2060	Technical Theatre (3 credits)
THEA 3070	Lighting and Sound Design (3 credits)

Instrumental Performance Concentration (15 credits)

Select 15 credits from the following courses:

MUSC 1300	Beginning Guitar Class (3 credits)
MUSC 2421	Basic Applied Instrument I (2 credits)
MUSC 2422	Basic Applied Instrument II (2 credits)
MUSC 2423	Basic Applied Instrument III (2 credits)
MUSC 2424	Basic Applied Instrument IV (2 credits)
MUSC 4421	Advanced Applied Instrument I (2 credits)
MUSC 4422	Advanced Applied Instrument II (2 credits)

Piano Performance Concentration (15 credits)

Select 15 credits from the following courses:

MUSC 1500	Beginning Voice (3 credits)
MUSC 2411	Basic Applied Piano I (2 credits)
MUSC 2412	Basic Applied Piano II (2 credits)
MUSC 2413	Basic Applied Piano III (2 credits)

MUSC 2414 Basic Applied Piano IV (2 credits)
MUSC 4411 Advanced Applied Piano I (2 credits)
MUSC 4412 Advanced Applied Piano II (2 credits)

Vocal Performance Concentration (15 credits)

Select 15 credits from the following courses:

MUSC 2401 Basic Applied Voice I (2 credits)
MUSC 2402 Basic Applied Voice II (2 credits)
MUSC 2700 Musical Theatre Performance I (2 credits)
MUSC 3701 Advanced Musical Theatre Performance I (2 credits)
MUSC 4401 Advanced Applied Voice I (2 credits)
MUSC 4402 Advanced Applied Voice II (2 credits)
THEA 2000 Voice and Movement (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Theatre Major

The theatre major is a rigorous, ensemble-based degree program within a liberal arts setting. Students focus on all areas of theatre, including the following: acting for stage and screen, directing, design, dramaturgy, musical theatre, and technical theatre. The program promotes creativity, innovation, critical thinking, entrepreneurship, and community engagement through theatre performance and production. Students learn how to communicate effectively; identify the historical periods and styles of theatre; demonstrate knowledge of and skill in aspects of technical theatre, such as costuming, lighting, set design, and construction; demonstrate skill in public performance; direct theatrical scenes or productions; and understand the role of drama in culture. The theatre major prepares students for graduate school; jobs in the arts and entertainment industry; and a variety of careers that employ experienced critical thinkers, communicators, and innovative collaborators.

Theatre Major Learning Outcomes

A successful theatre graduate is expected to:

1. Identify the historical, cultural, and stylistic aspects of theatre;
2. Exhibit skill in technical theatre and design;
3. Display performance skills in theatrical productions;
4. Direct theatrical scenes or productions.

Theatre Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* section in the Academic Resources and Procedures segment of this catalog.

Theatre Major Requirements (50 credits)

Core Courses (32 credits)

THEA 2020 Acting I (3 credits)
THEA 2030 Play Analysis (3 credits)
THEA 2060 Technical Theatre (3 credits)
THEA 2101 Theatre Laboratory I (1 credit)

THEA 2102 Theatre Laboratory II (1 credit)
THEA 2103 Theatre Laboratory III (1 credit)
THEA 2104 Theatre Laboratory IV (1 credit)
THEA 3050 Costume and Makeup (3 credits)
THEA 3200 Theatre History I (3 credits)
THEA 3250 Theatre History II (3 credits)
THEA 3500 Production and Stage Management (3 credits)
THEA 4100 Directing for the Stage (3 credits)
THEA 4930 Senior Seminar (1 credit)
THEA 4950 Internship in Theatre (3 credits)

Concentrations (18 credits)

Select one of the following concentrations:

Acting for Stage and Screen Concentration (18 credits)

Required Courses (9 credits)

THEA 2000 Voice and Movement (3 credits)
THEA 3020 Acting II (3 credits)
THEA 3060 Scene Design (3 credits) *OR* THEA 3070 Lighting and Sound Design (3 credits)

Select 9 credits from the following courses:

ARTS 1400 The Theatre Arts (3 credits)
THEA 1500 Comedy and Improvisation (3 credits)
THEA 2025 Performance for Film and Television (3 credits)
THEA 3025 Audition Techniques (3 credits)

Design and Technical Production Concentration (18 credits)

Required Courses (9 credits)

ARTS 1400 The Theatre Arts (3 credits)
THEA 3060 Scene Design (3 credits)
THEA 3070 Lighting and Sound Design (3 credits)

Select 9 credits from the following courses:

ARTS 1200 Introduction to Drawing (3 credits)
ARTS 2410 Graphic Design I (3 credits)
ARTS 2600 Arts Administration (3 credits)
MUSC 2600 Music Production I (3 credits)
THEA 4900 Special Topics in Theatre (3 credits)

Musical Theatre Concentration (18 credits)

Required Courses (9 credits)

THEA 2000 Voice and Movement (3 credits)
THEA 3020 Acting II (3 credits)
THEA 3060 Scene Design *OR* THEA 3070 Lighting and Sound Design (3 credits)

Select 9 credits from the following courses:

DANC 1400 Jazz Dance I (3 credits)
DANC 2101 Dance Lab I (1 credit)
DANC 2102 Dance Lab II (1 credit)
MUSC 1800 Music Theory I (3 credits)
MUSC 2401 Basic Applied Voice I (2 credits)
MUSC 2402 Basic Applied Voice II (2 credits)
MUSC 2700 Musical Theatre Performance I (2 credits)
MUSC 3701 Advanced Musical Theatre Performance I (2 credits)
THEA 3025 Audition Techniques (3 credits)
THEA 4900 Special Topics in Theatre (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM,

HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Minors

Arts Administration Minor

The arts administration minor is designed to help prepare students for management in the arts industry. It gives students an overview of the application of specific administrative issues to the arts: communication, public relations, writing, development, policy, education, planning, outreach, and management for arts organizations. This minor can be combined with any major and minor except the arts administration major.

Arts Administration Minor Requirements (18 credits)

ARTS 2600	Introduction to Arts Administration (3 credits)
ARTS 3600	Advanced Arts Administration (3 credits)
COMM 3200	Principles of Public Relations (3 credits)
MGT 2050	Principles of Management (3 credits)
WRIT 3150	Business Writing (3 credits)
Any 3000/4000-level ARTS, MUSC, or THEA course (3 credits)	

Dance Minor

The dance minor provides students with both technical dance skills and general knowledge of dance as an art form. Through studio practice in technique and creative-based classes, students gain a foundation in dance training and an appreciation for dance as an art form. Core courses provide the student with an increased understanding of the development of dance in a larger global context. This minor can be combined with any major and minor except the dance major.

Dance Minor Learning Outcomes

A successful dance minor is expected to:

1. Identify historical and cultural forms of dance;
2. Demonstrate knowledge of dance concepts through performance;
3. Evaluate dance as an art form.

Dance Minor Requirements (18 credits)

Students must complete 18 credits from the following courses, 9 credits of which must be at the 3000/4000 level.

Core Courses (6 credits)

DANC 3200	Dance History (3 credits)
DANC 3500	Global Dance Perspectives (3 credits)

Minor Electives (12 credits)

Select 12 credits from the following courses:

DANC 1200	Ballet I (3 credits)
DANC 1400	Jazz Dance I (3 credits)
DANC 1500	Contemporary Dance Techniques (3 credits)
DANC 1600	Modern Dance I (3 credits)
DANC 2101	Dance Lab I (1 credit)
DANC 2102	Dance Lab II (1 credit)
DANC 2103	Dance Lab III (1 credit)

DANC 2104	Dance Lab IV (1 credit)
DANC 2400	Jazz Dance II (3 credits)
DANC 2600	Modern Dance II (3 credits)
DANC 3100	Dance Improvisation (3 credits)
DANC 3550	World Dance (3 credits)
DANC 3600	Modern Dance III (3 credits)
DANC 3900	Advanced Studio Technique (3 credits)
DANC 4000	Dance Composition (3 credits)
DANC 4300	Dance Choreography (3 credits)
THEA 2060	Technical Theatre (3 credits)

Graphic Design Minor

The graphic design minor combines historical knowledge of the design discipline with contemporary problem-solving technical skills. Students gain in-depth experience using industry-standard computer software while acquiring an understanding of graphic design principles and formats. The graphic design minor serves as an excellent complement to many majors, including marketing, business administration, and communication studies. This minor better prepares students for their future careers by offering them marketable skills, enabling them to become more viable in today's competitive job market. This minor can be combined with any major and minor except the art major.

Graphic Design Minor Requirements (18 credits)

Core Courses (12 credits)

ARTS 1800	Two-Dimensional Design (3 credits)
ARTS 2410	Graphic Design I (3 credits)
ARTS 2450	Graphic Design II (3 credits)
ARTS 3650	Typography (3 credits)

Select 6 credits from the following courses:

ARTS 3200	Digital Photographic Design (3 credits)
ARTS 3450	Graphic Design III (3 credits)
ARTS 4250	Multimedia and Web Design (3 credits)
ARTS 4500	Professional Print Design (3 credits)

Music Minor

The music minor introduces students to music theory, musicology, and performance. The skills acquired through the music minor are a professional asset for students pursuing careers in fields including education, theatre, speech-language pathology, speech communication, and therapy. This minor can be combined with any major and minor except the music major.

Music Minor Requirements (18 credits)

Students must complete 18 credits from the following courses, 9 credits of which must be at the 3000/4000 level.

Core Courses (9 credits)

MUSC 1960	Commercial Music Theory (3 credits)
MUSC 3600	Music of World Cultures (3 credits)
MUSC 1200	Piano I (3 credits) *OR* MUSC 1300 Beginning Guitar Class (3 credits) *OR* MUSC 1500 Beginning Voice (3 credits)

Minor Electives (9 credits)

Select 9 credits from the following courses:

ARTS 1500	Music Through History (3 credits)

Any MUSC courses

Studio Art Minor

The studio art minor provides the opportunity to explore various artistic media, techniques, and processes in a studio setting. The program allows students to integrate creative and artistic practice with other academic or research pursuits, as this minor complements a variety of majors including those in the disciplines of theatre, science, arts administration, and education. This minor encourages the development of creative thinking, conceptualization, and visual literacy skills, enabling students to become versatile, valued prospects for future research or academic endeavors.

Studio Art Minor Requirements (18 credits)

Select 18 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

ARTS 1200	Introduction to Drawing (3 credits)
ARTS 1250	Life Drawing (3 credits)
ARTS 1700	Fundamentals of Color (3 credits)
ARTS 1800	2D Design (3 credits)
ARTS 2100	Painting I (3 credits)
ARTS 2200	Digital Photography (3 credits)
ARTS 2410	Graphic Design I (3 credits)
ARTS 2800	3D Design (3 credits)
ARTS 3040	Museum Studies and Gallery Practices (3 credits)
ARTS 3100	Painting II (3 credits)
ARTS 3200	Digital Photographic Design (3 credits)
ARTS 3500	Sculpture I (3 credits)
ARTS 3550	Ceramics I (3 credits)
ARTS 3700	Methods and Materials (3 credits)

Theatre Minor

The theatre minor offers students an opportunity to experience the tradition and experience of the theatre. It serves as an excellent complement to many majors, including English, communication studies, psychology, and humanities. This minor allows students to branch out from their subject of study and not only learn the tradition and techniques of the theatre, but also be better equipped to participate confidently in one or more of the co-curricular and extra-curricular experiences that will be generated by the theatre program. This minor can be combined with any major and minor except the theatre major.

Theatre Minor Requirements (18 credits)

Students must complete 18 credits from the following courses, 9 credits of which must be at the 3000/4000 level.

Core Courses (9 credits)

THEA 2020	Acting I (3 credits)
THEA 2060	Technical Theatre (3 credits)
THEA 3200	Theatre History I (3 credits) *OR* THEA 3250 Theatre History II (3 credits)

Select 9 credits from the following courses:

THEA 1500	Comedy and Improvisation (3 credits)
THEA 2000	Voice and Movement (3 credits)
THEA 2025	Performance for Film and Television (3 credits)
THEA 2030	Play Analysis (3 credits)
THEA 2101	Theatre Laboratory I (1 credit)
THEA 2102	Theatre Laboratory II (1 credit)
THEA 2103	Theatre Laboratory III (1 credit)
THEA 2104	Theatre Laboratory IV (1 credit)
THEA 3020	Acting II (3 credits)
THEA 3025	Audition Techniques (3 credits)
THEA 3050	Costuming and Makeup (3 credits)
THEA 3060	Scene Design (3 credits)

THEA 3070	Lighting and Stage Design (3 credits)
THEA 3500	Production and Stage Management (3 credits)
THEA 4100	Directing for the Stage (3 credits)
THEA 4900	Special Topics in Theatre (3 credits)

Department of Writing and Communication

The Department of Writing and Communication prepares students to become innovative thinkers capable of understanding complex communication situations and knowledgeable practitioners capable of working within diverse communities and media industries. Through instruction in creative and critical approaches to media arts and scholarship, undergraduate and graduate students learn to express ideas in verbal and visual forms while preparing for careers in areas such as new media, radio and television broadcasting, video production, film, journalism, public relations, education, professional writing, and more. The department also works with almost every undergraduate through Composition courses and the Writing Fellows program.

Majors

Communication Major

The communication major provides students with a blend of theory- and practice-oriented courses in journalism, digital media, and strategic communication. Students learn how to write and listen effectively, using various technologies and for diverse audiences, and they develop strong presentation skills, understand the role of communication in various settings, identify theories and models of communication, and are conversant in mass media concepts and practices including publicity and promotion. The communication major prepares students for a wide variety of internships and careers in such fields as journalism, television and radio broadcasting, education, public relations, and law.

Communication Major Learning Outcomes

A successful communication graduate is expected to:

1. Demonstrate the ability to create, design, and edit effective messages for diverse audiences using a variety of media
2. Articulate relevant professional standards in communication
3. Identify, analyze, and articulate significant theories and models of communication
4. Develop professional habits and skills through a variety of real world experiences in practicums and internships.

Communication Major Curriculum

At least 18 credits in the major must be at the 3000/4000 level.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Communication Major Requirements (56 credits)

Core Courses (32 credits)

COMM 1100A	Communication Practicum A (1 credit)
COMM 1100B	Communication Practicum B (1 credit)
COMM 2100	Mass Media (3 credits)
COMM 2300	Intercultural Communication (3 credits)
COMM 2900	Research Methods in Communication (3 credits)
COMM 3110	Communication Theory (3 credits)

COMM 3500	Media Regulation (3 credits)
COMM 3600	Persuasion (3 credits)
COMM 4950	Internship in Communication (3 credits)
HUMN 3010	Communication Traditions (3 credits)
SPCH 1010	Public Speaking (3 credits) *OR* SPCH 1010H Public Speaking Honors (3 credits)
SPCH 2000	Fundamentals of Human Communication (3 credits)

Concentrations (24 credits)

Select one of the following concentrations:

Digital Media Production Concentration (24 credits)

Select 24 credits from the following courses (9 credits must be at the 3000/4000 level):

ARTS 2410	Graphic Design I (3 credits)
ARTS 2450	Graphic Design II (3 credits)
COMM 2500	Introduction to Video Editing (3 credits)
COMM 2800	Introduction to Field Video Production (3 credits)
COMM 3700	Documentary Filmmaking (3 credits)
COMM 3710	Audio/Radio Production (3 credits)
COMM 3720	Advanced Video Editing (3 credits)
COMM 3800	Advanced Field Video Production (3 credits)
COMM 3900	Web, Mobile, and Interactive Design for Communication (3 credits)
COMM4900	Special Topics in Communication (3 credits)

Journalism Concentration (24 credits)

Select 24 credits from the following courses (9 credits must be at the 3000/4000 level):

COMM 2010	Introduction to Print Journalism (3 credits)
COMM 2200	Introduction to Broadcast Journalism (3 credits)
COMM 2800	Introduction to Field Video Production (3 credits)
COMM 3300	Multimedia Writing (3 credits)
COMM 3800	Advanced Field Video Production (3 credits)
COMM 3820	Sports Reporting and Writing (3 credits)
COMM 4100	Feature Writing (3 credits)
COMM 4400	Copy Editing (3 credits)
COMM 4900	Special Topics in Communication (3 credits)

Strategic Communication Concentration (24 credits)

Select 24 credits from the following courses (9 credits must be at the 3000/4000 level):

COMM 2040	Public Relations Writing (3 credits)
COMM 2400	Principles of Advertising (3 credits)
COMM 3200	Principles of Public Relations (3 credits)
COMM 3310	Organizational Communication (3 credits)
COMM 3400	Strategic Visual Communication (3 credits)
COMM 4020	Media Planning (3 credits)
COMM 4200	Public Relations Campaigns (3 credits)
COMM 4300	Social Media Theory and Practice (3 credits)
COMM 4900	Special Topics in Communication (3 credits)
SPCH 3120	Speech Communication for the Professions (3 credits)

The Bachelor of Arts degree requires at least 24 credits of coursework from the following disciplines: ARTS, DANC, FILM, HIST, HUMN, LITR, MUSC, PHIL, and THEA, as well as an intermediate degree of competency in a foreign language (generally, a minimum of 6 credits or another demonstration of competency).

Minors

Communication Minor

The communication minor enables students to learn how to write and listen effectively, as well as acquire skills in presentation, understand the role of communication in various settings, identify theories and models of communication, and be conversant in mass media concepts and practices.

This minor can be combined with any major and minor except the communication major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other major/minors/certificate programs.

Communication Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

COMM 2100	Mass Media (3 credits)
COMM 2300	Intercultural Communication (3 credits)
COMM 3110	Communication Theory (3 credits)
COMM 3500	Media Regulation (3 credits)
COMM 3600	Persuasion (3 credits)
SPCH 1010	Public Speaking (3 credits)
SPCH 2000	Fundamentals of Human Communication (3 credits)
SPCH 3120	Speech Communication for the Professions (3 credits)

Digital Media Production Minor

The digital media production minor focuses on developing a wide array of production skills. The courses are directly related to technology—including web, desktop, video, and audio.

This minor can be combined with any major and minor, including the communication major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Digital Media Production Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, at least 9 credits of which must be at the 3000/4000 level:

ARTS 2410	Graphic Design I (3 credits)
ARTS 2450	Graphic Design II (3 credits)
COMM 2500	Introduction to Video Editing (3 credits)
COMM 2800	Introduction to Field Video Production (3 credits)
COMM 3700	Documentary Filmmaking (3 credits)
COMM 3710	Audio/Radio Production (3 credits)
COMM 3720	Advanced Video Editing (3 credits)
COMM 3800	Advanced Field Video Production (3 credits)
COMM 3900	Web, Mobile, and Interactive Design for Communication (3 credits)

Journalism Minor

In this minor, students will gain experience with various mediums, including print, broadcast, and multimedia. These courses focus heavily on experiential-learning opportunities that develop students' writing and editing skills. This minor is geared toward student-portfolio development.

This minor can be combined with any major and minor, including the communication major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Journalism Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

COMM 2010	Introduction to Print Journalism (3 credits)
COMM 2200	Introduction to Broadcast Journalism (3 credits)
COMM 2800	Introduction to Field Video Production (3 credits)
COMM 3300	Multimedia Writing (3 credits)
COMM 3800	Advanced Field Video Production (3 credits)
COMM 3820	Sports Reporting and Writing (3 credits)
COMM 4100	Feature Writing (3 credits)
COMM 4400	Copy Editing (3 credits)

Strategic Communication Minor

The strategic communication minor focuses on advertising and public relations. The minor provides both a theoretical framework and the practical skills needed to work in these fields.

This minor can be combined with any major and minor, including the communication major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificates programs.

Strategic Communication Minor Requirements (15 credits)

Students must complete 15 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

COMM 2040	Public Relations Writing (3 credits)
COMM 2400	Principles of Advertising (3 credits)
COMM 3120	Speech Communication for the Professions (3 credits)
COMM 3200	Principles of Public Relations (3 credits)
COMM 3310	Organizational Communication (3 credits)
COMM 3400	Strategic Visual Communication (3 credits)
COMM 4020	Media Plannning (3 credits)
COMM 4200	Public Relations Campaigns (3 credits)
COMM 4300	Social Media Theory and Practice (3 credits)

Writing Minor

The writing minor provides a broad overview of various types of writing and reinforces techniques of analysis and expression. Students learn how to write in various genres by reading models of published authors and participating in writing course workshops. This minor focuses on analytical and professional writing skills, as well as creative writing. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Writing Minor Requirements (15 credits)

Students must complete 15 credits in any writing (WRIT) courses, 9 credits of which must be at the 3000/4000 level.

College of Engineering and Computing

COLLEGE OF ENGINEERING AND COMPUTING

Dean's Message

I would like to personally welcome you to the College of Engineering and Computing (CEC). Since the industrial revolution, engineers and scientists have been at the forefront of innovation and change in the world. Today, we face a dynamic, challenging world that calls for urgent solutions to balance both human needs and natural concerns. The demands for problem solving leaders with engineering and computational proficiencies have never been greater.

At CEC, we are educating today's engineers and computer scientists to be tomorrow's problem solving leaders. Through innovative curricula and research activities, our outstanding faculty engage students in a unique, interactive learning environment that facilitates academic excellence and prepares our students for their future careers while they earn a B.S., M.S., or Ph.D. degree. Companies seeking new sources of talent are looking at our college because of our commitment to our students and our program. They are not only looking for Science, Technology, Engineering, and Mathematics (STEM) skills but also for strong communication, teamwork, and life-long learning skills. At CEC, we will take your dedication and ambition to the next level of your life.

I encourage you to engage with your peers, our outstanding faculty members, and the activities that the university and college offer to strengthen your experience here at NSU.

My faculty and staff all look forward to welcoming you and providing strong support for reaching your goals.

Yong X. Tao, Ph.D., P.E.
Dean, College of Engineering and Computing

Mission Statement

The College of Engineering and Computing conducts basic and applied research and provides programs of study across the disciplines within engineering, computing, technology, information systems, and cybersecurity. The college's students learn to become reflective scholars and professionals with a critical understanding of theory and practice, and the training and qualifications necessary for advancement. The college strives to meet the needs of a diverse student population using advanced technologies and effective methods of on-campus and online delivery.

Introduction to the College

The College of Engineering and Computing (CEC) prepares students to meet the technological challenges of today. Drawing on 40 years of institutional experience in computing education and research, and 30 years of experience in innovative program delivery, CEC offers focused and flexible programs aligned to industry's most sought-after fields to help students reach their full potential. CEC has a distinguished faculty, evolving curricula, and an alumni network that integrates 40 years of graduates from computing disciplines at NSU. CEC has flexible online and campus-based formats for its five bachelor's, five masters, and three doctoral programs as well as for its certificate programs.

Undergraduate Programs

The five undergraduate programs offered by the College of Engineering and Computing span the breadth of jobs in the computing hardware, software, and information disciplines. Beginning Fall 2016, the college will offer a major in general engineering.

Each degree is a Bachelor of Science (B.S.) that prepares students equally well for the workplace as for graduate study. The graduate programs at the college are excellent opportunities for students to do research and acquire advanced knowledge in the discipline.

The five undergraduate programs are:

- B.S. Computer Engineering
- B.S. Computer Science
- B.S. General Engineering (pending approval by the Southern Association of Colleges and Schools Commission on Colleges, will begin fall 2016)
- B.S. Information Technology
- B.S. Software Engineering

Department of Computer Science

The Department of Computer Science offers bachelor's, master's, and doctoral programs in computer science. The curricula span traditional computer science theory as well as practical application to support students in further study, research, or professional careers in industry. Students may use dual/early admission for an accelerated path from bachelor's to master's, or master's to doctoral.

Major

Computer Science Major (revised: see *Addendum L*)

The computer science (CS) major prepares responsible, well-rounded graduates capable of designing, developing, and using software systems. They should understand critical aspects of software systems and associated ethical implications to society. The curriculum covers technical and professional requirements with electives to prepare students for professional careers and further study in the discipline of computer science. In this program, students get theoretical and applied current coverage of fundamental and advanced topics in software development and management, software and system design, operating systems, data communications, computer architecture, algorithms, and data structures. Students can also choose between many electives including security, various topics in applied mathematics, development of Web applications, and databases. The program incorporates mathematics and sciences including calculus, discrete mathematics, statistics, and a solid base in physical science with laboratories. Successful graduates will be equipped with the theoretical knowledge, practical experience, and background to work effectively in the field of computer science, and to successfully advance to graduate studies.

The CS curriculum is consistent with recommendations outlined under the Computer Science criterion specified by the Computer Accreditation Commission of Accreditation Board for Engineering and Technology, which is based on the recommendations of the national ACM/IEEE Joint Curriculum Task Force.

Computer Science Major Learning Outcomes

A successful computer science graduate is expected to:

1. Demonstrate understanding of the field of computing, both as an academic discipline and as a profession within the context of society;
2. Demonstrate understanding of the theoretical foundations of the field of computing;
3. Demonstrate knowledge of the essential elements of computer information systems and computer science;
4. Apply knowledge of computing and information systems to specific problems and produce solutions;
5. Demonstrate an appreciation for the ethical and societal issues associated with the computing field;
6. Demonstrate the capability for staying current and, more generally, for achieving ongoing self-education in the computing discipline;
7. Use current programming languages, software development tools, software systems, database systems, multimedia systems, and commonplace computing platforms.

Computer Science Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course

requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Computer Science Major Requirements (82 credits)

Core Courses (73 credits)

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 4500	Probability and Statistics (3 credits)
PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)
CSIS 1800	Introduction to Computer and Information Sciences (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
CSIS 3050	Assemblers and Assembly Language Programming (4 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 3400	Data Structures (4 credits)
CSIS 3460	Object Oriented Design (3 credits)
CSIS 3500	Networks and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 3810	Operating Systems Concepts (3 credits)
CSIS 4050	Computer Architecture (3 credits)
CSIS 4600	Systems Programming (4 credits)
CSIS 4610	Design and Analysis Algorithms (3 credits)

Capstone:

CSIS 4903	Capstone Project for Computer Science (3 credits) *OR*
CSIS 4953	Capstone Internship in Computer Science (3 credits)

Major Electives (9 credits)

Select 9 credits from the following courses:

Any 3000/4000-level CSIS, CENG, EENG and SENG courses not counted as core courses for the major

Certificate Program

Web Programming and Design Certificate

The web programming and design certificate program prepares students for employment as web programmers, website developers, web administrators, web masters, and web architects. It also provides supplemental training for computer science professionals and for students in other majors who desire expertise in web programming and design. Topics covered include programming, database systems, web programming, networking, multimedia, and computer graphics. This certificate program can be combined with any major and minor except the computer information systems major, computer science major, and APS major with a concentration in computer studies.

Web Programming and Design Certificate Requirements (30 credits)

CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3020	Web Programming and Design (3 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 3400	Data Structures (4 credits)
CSIS 4650	Computer Graphics (3 credits)
TECH 2150	Introduction to Internet Resources (3 credits)

TECH 3000 Multimedia Design (3 credits)

Federal Disclosures: Visit *cec.nova.edu/certificates/web-programming/* for details on this certificate program, including occupations the program prepares students to enter; on-time graduation rates; expected program lengths; tuition and fees; typical costs for books, supplies, room and board; post-completion job placement rate; and students' median loan debt.

Department of Engineering and Technology

The Department of Engineering and Technology offers all three (by fall 2016) undergraduate engineering degrees at NSU, plus a major and minor in information technology. At the graduate level, the department offers master's degrees in software engineering and in information technology, each designed for working professionals. Undergraduates will make use of lab facilities and participate on project teams. All students gain practical experience to complement rigorous critical thinking skills to be prepared for employment.

Majors

Computer Engineering Major

The Computer Engineering program combines electrical engineering and computer science principles and emphasizes the hardware and software interface of modern computing systems. The program aims to provide students with fundamental computer engineering knowledge in circuit design, computer science, embedded systems, and hardware design. Students gain first-hand experience by applying sound computer engineering principles to solve problems ranging from designing an interface for a mobile robot application, developing high end embedded computing systems, or the design and development of electronic circuits. Students learn to solve complex computer engineering problems and to evaluate their trade-offs and ethical impact on society, through innovative ideas, critical thinking, and cutting-edge research in disciplines related to computer engineering. Students develop the necessary skills to learn new technologies and to adapt to a dynamically changing work environment. The program prepares students to serve the community, the state of Florida, and the world by training and educating engineers with applied and hands-on skills.

Computer Engineering Major Learning Outcomes

A successful computer engineering graduate is expected to:

1. Apply knowledge of mathematics, science, computing, and engineering;
2. Design and conduct experiments; analyze and interpret data;
3. Design, implement, and test a computer-based system, component, process, or program to meet desired needs within realistic constraints specific to computer engineering;
4. Communicate effectively on multidisciplinary teams and to a range of audiences;
5. Identify, formulate, and analyze a problem using the appropriate engineering and computing requirements for obtaining its solution;
6. Gain knowledge of contemporary professional, ethical, social, legal, and security issues and responsibilities;
7. Understand the local and global impact of computing and engineering solutions on individuals, organizations, and society;
8. Recognize the need for and an ability to engage in continuing professional development and lifelong learning;
9. Use current techniques, skills, and tools necessary for computing and engineering practice;
10. Demonstrate comprehension of the tradeoffs involved in the modeling and design of computer-based systems by applying proper mathematical, algorithmic, and computer science and engineering principles;
11. Apply engineering principles in the design and implementation of software and/or computer systems of varying degrees of complexity.

Computer Engineering Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Computer Engineering Major Requirements (106–107 credits)

Mathematics (17 credits)

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 3400	Ordinary Differential Equations (3 credits)
MATH 4500	Probability and Statistics (3 credits)

Note: Six (6) credits of MATH may fulfill the General Education requirements.

Sciences (11–12 credits)

Any BIOL or CHEM course (3-4 credits)

PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)

Note: Six (6) credits of PHYS/BIOL/CHEM may fulfill the General Education requirements.

Information Technology (3 credits)

TECH 4350	Human Computer Interaction (3 credits)

Computer Science (38 credits)

CSIS 1800	Introduction to Computer Information Sciences (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3050	Assemblers and Assembly Language (4 credits, lab required)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 3400	Data Structures (4 credits)
CSIS 3460	Object Oriented Design (3 credits)
CSIS 3500	Networks and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 3810	Operating Systems Concepts (3 credits)
CSIS 4050	Computer Architecture (3 credits)

Computer Engineering (20 credits)

CENG 1600	Digital Logic/Lab (4 credits, lab required)
CENG 3720	Computer Systems Engineering (3 credits)
CENG 4710	Embedded Systems (4 credits, lab required)
CENG 4750	Very Large Scale Integration Design (4 credits, lab required)
CENG 4900	Senior Capstone Design (4 credits)
CENG 4910	Engineering Ethics Seminar (1 credit)

Core Electrical Engineering (11 credits)

EENG 2710	Electrical Circuits/Lab (4 credits)
EENG 3310	Signals and Systems (3 credits)
EENG 3710	Electronic Circuits/Lab (4 credits)

Major Electives (6 credits)

Any 3000/4000-level CSIS, CENG, MATH, or SENG courses not listed above

General Engineering Major

The general engineering major prepares graduates who demonstrate the background to understand a specific component but also has the technological breadth to analyze and understand how that component impacts the operational life cycle of the system and can address areas such as operations, performance, test, manufacturing, cost & schedule, training & support, and disposal. The program is distinctive from other engineering programs in that it incorporates hands-on project applications of engineering beginning in the first year and continuing throughout the program. Students develop the necessary skills to foster success in problem solving in a variety of fields within engineering and can also be found in health care, banking and finance, insurance, law, government, tourism, service, transportation, agriculture, and retail.

General Engineering Major Learning Outcomes

A successful computer engineering graduate is expected to:

1. Use their education to be successful in a technical career or graduate studies, demonstrating competence in applying classical methods and modern engineering tools;
2. Analyze technical, environmental, and societal issues related to engineering designs and technology systems;
3. Demonstrate commitment to the professional and ethical standards of engineering and recognize the importance of community and professional service;
4. Apply knowledge of math, science and engineering;
5. Design and conduct experiments/analyze and interpret data;
6. Design a system, component, or process;
7. Function on multi-disciplinary teams;
8. Identify, formulate, and solve engineering problems;
9. Demonstrate an understanding of professional and ethical responsibility;
10. Use the techniques, skills, and modern tools for engineering practice.

General Engineering Major Curriculum*

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

General Engineering Major Requirements (85 credits)

Students are required to complete 85 credit hours as part of the General Engineering Program, which includes substantial course work in mathematics and the sciences. The General Engineering major courses will include the following.

Mathematics (19 credits)

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2154	Engineering Linear Algebra and Differential Equations (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3200	Calculus III (4 credits)
MATH 4500	Probability and Statistics (3 credits)

Note: Six (6) credits of MATH may fulfill the General Education requirements.

Sciences (16 credits)

BIOL 1500	Biology I / Lab (4 credits)
CHEM 1300	General Chemistry I / Lab (4 credits)
PHYS 2400	Physics I / Lab (4 credits)
PHYS 2500	Physics II / Lab (4 credits)

Note: Six (6) credits of PHYS/BIOL/CHEM may fulfill the General Education requirements.

Core Courses (50 credits)

CENG 4910	Engineering Ethics Seminar (1 credit)
EENG 2710	Electrical Circuits/Lab (4 credits)
GENG 1000	Introduction to Engineering (1 credit)
GENG 1012	Engineering Graphics (3 credits)
GENG 1016	Introduction to Engineering Design (3 credits)
GENG 2000	Engineering Design and Project Management I (2 credits)
GENG 2022	Statics (3 credits)
GENG 2050	Computer Applications in Engineering (3 credits)
GENG 2070	Materials and Processes (3 credits)
GENG 2450	Dynamics (3 credits)
GENG 3000	Engineering Design and Project Management II (3 credits)
GENG 3012	Thermal and Fluid Systems (3 credits)
GENG 3024	Mechanics of Materials (3 credits)
GENG 3050	Sensors, Measurements, and Controls (3 credits)
GENG 3420	Engineering Economics (3 credits)
GENG 3800	Quality Control for Engineers (3 credits)
GENG 4010	Senior Capstone Design Project I (3 credits)
GENG 4020	Senior Capstone Design Project II (3 credits)

Concentrations

Students can take free electives, or draw from the following two concentrations:

Biomedical Engineering (15 credits)

BENG 2080	Foundations of Biomedical Engineering (3 credits)
BENG 4030	Biomechanics and Materials (3 credits)
BENG 4040	Physiological Systems and Modeling for Engineering I (3 credits)
BENG 4050	Physiological Systems and Modeling for Engineering II (3 credits)
BENG 4200	Biomedical Instrumentation (3 credits)

Industrial and Systems Engineering (15 credits)

IENG 3010	Principles and Methods of Industrial and Systems Engineering (3 credits)
IENG 3060	Systems Optimization (3 credits)
IENG 4010	Work Measurement and Human Factors (3 credits)
IENG 4020	Analysis of Production Systems and Facility Design (3 credits)
IENG 4065	Discrete System Modeling (3 credits)

* subject to revision before Fall 2016

Information Technology Major (revised: see *Addendum O*)

The information technology major prepares responsible, well-rounded graduates who understand critical aspects of information technology and their ethical impact on society. Through excellence in teaching, experiential learning, service, and scholarship, the curriculum provides a comprehensive and dynamic course of study for students interested in computer and information technologies. Students study IT in its widest sense as a means of communication and human/computer interaction as well as data management and forensics. The curriculum prepares IT students to serve the community, the state of Florida, and the world through training and education. Students garner theoretical and hands-on skills needed to solve complex computing and technological problems with their mastery of a range of technical disciplines including communications, computing, and databases.

Information Technology Major Learning Outcomes

A successful information technology graduate is expected to:

1. Apply knowledge of computing and mathematics appropriate to the discipline;
2. Analyze a problem and identify and define the computing requirements appropriate to its solution;
3. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs;
4. Display an understanding of professional, ethical, legal, security, and social issues and responsibilities by analyzing the local and global impact of computing on individuals, organizations, and society;
5. Communicate effectively with a range of audiences;
6. Effectively integrate IT-based solutions into the user environment;
7. Recognize the need for and an ability to engage in continuing professional development;
8. Use current techniques, skills, and tools necessary for computing practice;
9. Use and apply current technical concepts and practices in the core information technologies;
10. Identify and analyze user needs, and take them into account in the selection, creation, evaluation and administration of computer-based systems;
11. Identify best practices and standards and their applications.

Information Technology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Information Technology Major Requirements (64 credits)

Core Courses (55 credits)

MATH 1200 or higher Pre-calculus Algebra (3 credits)

CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits) *OR* TECH 2100 Introduction to Programming (4 credits)
CSIS 3500	Networks and Data Communication (3 credits)
CSIS 4010	Computer Security (3 credits)
CSIS 4530	Database Management (3 credits)
TECH 1111	Computer Applications (3 credits)
TECH 1800	Introduction to Information Technology (3 credits) *OR* CSIS 1800 Introduction to Computer Science and Computer Information Systems (3 credits)
TECH 2150	Introduction to Internet Resources (3 credits)
TECH 3000	Multimedia Design (3 credits)
TECH 3010	Principles of Web Design (3 credits)
TECH 3022	Integrative Programming and Technologies (3 credits)
TECH 3810	Computing Platforms (3 credits)
TECH 4055	Systems Architecture (3 credits)
TECH 4310	Web Services and Systems (3 credits)
TECH 4350	Human-Computer Interaction (3 credits)
TECH 4900	Directed Project in Information Technology (3 credits)* *OR* TECH 4950 Internship in Information Technology (3 credits)*

Major Electives (9 credits)

Select 9 credits from the following courses:

CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
CSIS 4500	Network Security (3 credits)
TECH 2130	Business Applications of Microcomputers (3 credits)
TECH 4500	Wireless Network Infrastructures (3 credits)
TECH 4710	Basic Computer Forensics (3 credits)
TECH 4890	Special Topics in Information Technology (3 credits)
TECH 4900	Directed Project in Information Technology (3 credits)*

TECH 4950 Internship in Information Technology (3 credits)*
TECH 4990 Independent Study in Technology (3 credits)

*Can be counted only once, either as a core course requirement or a major elective requirement.

Software Engineering Major

The software engineering major prepares responsible, well-rounded graduates who understand critical aspects of software engineering and their ethical impacts on society. The curriculum provides students with a broad understanding of current and evolving technologies in diverse areas including requirements engineering, systems architecture and design, advanced development methods, project management, and quality assurance. The program prepares students to serve the community, the state of Florida, and the world by training and educating engineers with advanced theoretical and hands-on skills. Students learn how to solve complex engineering problems through innovative ideas, critical thinking, and cutting-edge research in disciplines related to software engineering. The program aims to provide—through excellence in teaching, experiential learning, service, and scholarship—a comprehensive and dynamic course of study for students interested in computer-oriented technologies.

Software Engineering Major Learning Outcomes

A successful software engineering graduate is expected to:

1. Apply knowledge of mathematics, science, and software engineering principles;
2. Design and conduct experiments; analyze and interpret data;
3. Design a system, component, or process to meet desired needs within realistic economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability constraints;
4. Communicate effectively with a range of audiences in a variety of formats;
5. Identify, formulate, and solve software engineering problems;
6. Recognize professional and ethical responsibilities;
7. Recognize the impact of software engineering solutions in global, economic, environmental, and societal contexts;
8. Recognize the need for and an ability to engage in lifelong learning;
9. Gain knowledge of contemporary issues;
10. Use the techniques, skills, and modern software engineering tools necessary for software engineering practice.

Software Engineering Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Software Engineering Major Requirements (93 credits)

Mathematics and Basic Sciences (22 credits)

MATH 2100 Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200 Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3300 Introductory Linear Algebra (3 credits)
MATH 4500 Probability and Statistics (3 credits)
ANY BIOL/CHEM/PHYS course(s) with lab (8 credits)

Note: Six (6) credits of MATH and 6 credits of BIOL/CHEM/PHYS credits may fulfill the General Education requirements.

Computer Science and Information Systems (43 credits)

CSIS 1800 Introduction to Computer Information Sciences (3 credits)

CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3020	Web Programming and Design (3 credits)
CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 3400	Data Structures (4 credits)
CSIS 3460	Object Oriented Design (3 credits)
CSIS 3500	Networks and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 3810	Operating Systems Concepts (3 credits)
CSIS 4610	Design and Analysis Algorithms (3 credits)

Technology (3 credits)

TECH 4350	Human Computer Interaction (3 credits)

Software Engineering (16 credits)

SENG 4100	Software Development Processes and Quality (3 credits)
SENG 4110	Measurement and Verification of Software (3 credits)
SENG 4750	Software Construction Technologies and Methods (3 credits)
SENG 4800	Software Architecture, Modeling, and Analysis (4 credits)
SENG 4900	Senior Capstone Design (3 credits)

Major Electives (9 credits)

Any 3000/4000-level CSIS, CENG, MATH, or SENG courses not listed above

Minor

Information Technology Minor

The information technology minor is intended for students who wish to achieve knowledge in information technology. TECH courses in the minor are designed for students to tailor content and focus activities to their own areas of study or interest. TECH 4990 and CSIS 4900 involve original research and/or technology implementation. A generic template appropriate for TECH 4990 in any topic area is available from the department chair. This minor can be combined with any major and minor except the APS major with a concentration in information technology.

Information Technology Minor Requirements (18 credits)

Select 18 credits from the following courses, 9 credits of which must be at the 3000/4000 level:

TECH 1111	Computer Applications (or competency) (3 credits)
TECH 1800	Introduction to Information Technology* (3 credits)
TECH 2130	Business Applications of Technology* (3 credits)
TECH 2150	Introduction to Internet Resources* (3 credits)
TECH 3000	Multimedia Design (3 credits)
TECH 3010	Principles of Web Design (3 credits)
TECH 4350	Human Computer Interaction (3 credits)
TECH 4500	Wireless Network Infrastructures (3 credits)
TECH 4990	Independent Study in Information Technology** (3–6 credits) *OR* TECH 4900 Directed Project** (3–6 credits)

*Not available for students enrolled in the computer science major.

** Must be taken after 15 credits of TECH minor courses

Department of Information Systems and Cybersecurity

The Department of Information Systems and Cybersecurity offers master's and doctoral programs in computer/management information systems and in information security assurance. (Undergraduate minors in these subjects are also available.) Cybersecurity is a vital area for national defense, and the faculty in the department are particularly pleased that NSU is designated a National Center of Academic Excellence in Information Assurance/Cybersecuity by the National Security Agency and the Department of Homeland Security.

Minor

Information Assurance/Security Minor

The information assurance/security minor is intended for students in any major who wish to acquire more knowledge about computer and network security infrastructures and software. Topics covered include general surveys of computer and information security technologies, legal and ethical aspects of computer security, and related data structures and operating systems.

Information Assurance/Security Minor Requirements (18 credits)

CSIS 3023	Legal and Ethical Aspects of Computing (3 credits)
CSIS 3500	Network and Data Communication (3 credits)
CSIS 4010	Computer Security (3 credits)
CSIS 4500	Network Security (3 credits)

Select a minimum of 6 credits from the following courses:

CSIS 3050	Assemblers and Assembly Language Programming (4 credits)
CSIS 4030	Information Security Technologies (3 credits)
CSIS 4310	Distributed Data Processing (4 credits)
CSIS 4530	Database Management (3 credits)
MATH 3350	Number Theory (3 credits)
MATH 4350	Abstract Algebra I (3 credits)

College of Health Care Sciences

COLLEGE OF HEALTH CARE SCIENCES

Dean's Message

Welcome to the College of Health Care Sciences. As you peruse this catalog, it is our hope that the information contained within will provide the guidance needed to make informed decisions about your academic future. The variety of programs represented in the college offer tremendous opportunities for those seeking to fulfill their professional aspirations. The College of Health Care Sciences endeavors to train allied health professionals in the art of improving the quality of life in the community by providing the highest quality, state-of-the-art training and instruction to students. We train allied health professional to become an integral part of the healthcare team who are ready to innovate and effectuate constructive changes for the health care community.

If you have any suggestions about the services we provide, the university, or the community, please feel free to contact us.

Stanley H. Wilson, PT, Ed.D., CEAS
Dean, College of Health Care Sciences

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Health Professions Division Mission Statement

The mission of Nova Southeastern University Health Professions Division is to train primary care health practitioners in a multidisciplinary setting, with an emphasis on medically underserved areas.

The institutional premise is that health professionals should be trained in a multidisciplinary setting and, whenever possible, with integrated education. The university trains students in concert with other health profession students so that the various disciplines will learn to work together as a team for the good of the public's health. During their didactic work, students share campus facilities and, in some cases, have combined classes. In their clinical experiences, they work together in facilities operated by the university.

Furthermore, the division aims to educate health care practitioners who will eventually increase the availability of health care in areas of Florida that suffer from health care shortages. The division aims to alleviate some of these shortages by exposing the entire student body to the needs, challenges, and rewards of rural, underserved urban, and geriatric care. Existing curricula require all students to attend ambulatory care clerkships in rural or urban areas, or both, making Nova Southeastern University strongly oriented toward a pattern of training its students in areas geographically removed from the health center itself, and to the care of indigent and multicultural population groups.

In doing this, it developed training programs that address the primary care needs of the region's most medically underserved populations.

College of Health Care Sciences Mission Statement

The College of Health Care Sciences strives to provide professionals with the skills necessary for the diagnosis, treatment and prevention of disease and disability in order to assure optimum health conditions in the community and beyond. With an unwavering commitment to ethical practice and in support of the Nova Southeastern University Core Values, the College endeavors to advance research, scholarship, and the development of leadership skills utilizing traditional educational methods, distance learning, and innovative combinations of both to achieve its educational goals.

College of Health Care Sciences Vision Statement

The College of Health Care Sciences will be recognized as a local, national, and international leader in health-care education through excellence and innovation in teaching, scholarship, and service.

Introduction to the College of Health Care Sciences

The College of Health Care Sciences is committed to providing the highest quality education to students in a variety of health care disciplines. The College of Health Care Sciences offers eight undergraduate degrees.

Bachelor of Science—Athletic Training
Bachelor of Science—Cardiovascular Sonography

Bachelor of Science—Exercise and Sports Science
Bachelor of Science—Medical Sonography
Bachelor of Health Science—Online
Bachelor of Science in Respiratory Therapy (first professional program)
Bachelor of Science Respiratory Therapy (postprofessional program—online)
Bachelor of Science—Speech Language and Communications Disorders

Notice on Professional Examinations

Credits and degrees earned from colleges within the state of Florida that are licensed by the State Board of Independent Colleges and Universities do not automatically qualify the individual to participate in professional examinations in Florida. The established procedure requires the appropriate state professional board to review and recognize the colleges granting the degrees prior to scheduling examinations. Additional information regarding Nova Southeastern University Health Professions Division and its Colleges of Osteopathic Medicine, Pharmacy, Optometry, Health Care Sciences, Medical Sciences, Dental Medicine, and Nursing may be obtained by contacting the State Board of Independent Colleges and Universities, Department of Education, Tallahassee, Florida. Any student interested in practicing a regulated profession in Florida should contact the Department of Business and Professional Regulation, 2009 Apalachee Parkway, Tallahassee, Florida 32301.

HPD Library

The HPD Library is located on the first floor at the north end of the Terry Building Complex in the Library/Lab Building. The collection consists of more than 17,000 print volumes, 700+ electronic books, and 8,000+ active medical/health journal subscriptions in both print and digital formats. Many of the available electronic texts are required textbooks in various courses. In addition, more 210 medical/health databases are available 24/7 to meet the needs of the seven HPD colleges. All students have access to the full resources of all NSU libraries, both print and online. Medical/health databases include Medline, CINAHL, Clinical Key (which includes Procedures Consult and First Consult), Lexi-Comp, UpToDate, Web of Science, as well as many databases specific to individual programs. The Interlibrary Loan/Document Delivery Office will provide additional journal articles, books, and items not available digitally to any student at no cost. All resources are available through the HPD Library home page (*nova.edu/hpdlibrary*). In addition, free notary service is available during business hours.

Professional reference services are available via phone, text, email, or face to face. Seven professional librarians are available for help with searching, finding full-text journals, citation reference management, and research strategies. Each HPD college/program is assigned a subject specialist liaison librarian who works closely with faculty and offer assistance with specific class assignments.

Quiet study areas are designated in the library with a variety of seating options available, from large tables to individual carrels and comfortable seating. There are 48 individual/small group study rooms in the library and adjacent Assembly II Building. Rooms may be checked out for up to three hours. All rooms are equipped with white boards and Wi-Fi. A small teaching lab is available for group instruction and there is a large group study hall. Two 50-station computer labs are open when the library is open. In addition, a production studio is available for student use for video recording, and video editing.

A common area provides space for collaborative projects and is equipped with two Media:scape units or collaboration using multiple laptops with single or double monitor displays for group work. The library has both PC and Mac computers for student use, as well as iPads for short-term checkout, each loaded with 100 medical and production apps. Other library services include binding, faxing, and scanning services; earplugs; sports equipment for the student lounge; school supplies for sale; and coffee service.

Hours of operation for the HPD Library, Study Center rooms in Assembly II, and adjoining computers labs are: Monday-Thursday: 7:00 a.m.–midnight; Friday: 7:00 a.m.–9:00 p.m.; Saturday and Sunday: 10:00 a.m.-midnight. From September through May, the study rooms in the Assembly II building are open 24/7. For more information, please call (954) 262-3106.

Students also have check out privileges at other NSU libraries, including the **Shepard Broad Law center Library; the oceanographic Center Library; and the Alvin Sherman Library, Research, and Technology Center** (a joint-use facility with the Broward county Board of County Commissioners),

See the Libraries section of the student handbook for information about NSU's Alvin Sherman Library.

HPD Policies and Procedures

Acceptance of Professional Fees

The activities of students are not to be construed as the practice of medicine, optometry, pharmacy, audiology, occupational therapy, physical therapy, physician assistant, anesthesiologist assistant, cardiovascular sonography, medical sonography, respiratory therapy, nursing, dentistry, public health, nutrition/dietician, athletic training, or speech-language therapists. It is a violation of the law and contrary to the policy of this university for any unlicensed person to attempt to engage in the professional practice of health care. Students who are appropriately licensed in a profession may engage in that professional work to the extent provided by law.

AIDS Policy

The university has adopted the following AIDS policy: Nova Southeastern University Health Professions Division recognizes its responsibilities for the health and welfare its students and faculty and staff members, as well as its responsibilities to patients suffering from AIDS or harboring the human immunodeficiency virus (HIV). While the division does not subscribe to compulsory HIV testing either as a screening device or in individual cases, some rotation sites require this test and students must comply. As an institution of medical learning, the division provides each student knowledge to understand the AIDS problem, including AIDS testing, treatment, and counseling by community services. The division recommends universal precautions in all laboratory and clinical settings. The division reserves the right to alter this policy as new information on AIDS becomes available. Students should consult their physician for HIV testing or treatment immediately following exposure.

Background Checks

Accepted applicants and students are required to authorize the NSU Health Professions Division to obtain background check (s) as per adopted policy of March 2011. If the background check (s) reveal information of concern, which the NSU Health Professions Division may deem unfavorable, HPD will request that the individual provide a detailed written explanation of the information contained in this report, along with appropriate documentation (e.g., police reports). Students may also be required to authorize clinical training facilities that they are assigned to by the Health Professions Division to obtain a background check with the results reported to the clinical training facility.

Offers of admission will not be considered final until the completion of the background check(s), with results deemed favorable by the NSU Health Professions Division, and, where appropriate, by the clinical training facilities. If information received indicates that the student has provided false or misleading statements, has omitted required information, or in any way is unable to meet the requirements for completion of the program, then the admission may be denied or rescinded, the student may be disciplined or dismissed, or his or her enrollment terminated.

Acceptance to an NSU Health Professions Division program does not guarantee that a student with information of a concern will be accepted by clinical training facilities to which they may be assigned.

Following the initial background check (s), students will be asked annually to provide a certification relating to any convictions or guilty or no-contest pleas to any criminal offense other than traffic violations. Additionally, a Level 2 background check may be required of students completing certain rotations.

Certificate of Physical Examination

Students must have a certificate of physical examination completed by their physician. Forms will be provided to each matriculant as part of the admissions package or can be downloaded.

Students may request that the University Health Service perform these examinations. The University Health Service will make appointments in as timely a manner as possible. The appointments, once made, become an obligation of the student and must be kept.

These certificates (whether done privately or by the university) will be placed in an appropriate facility.

If the renewal date for physical requirements occurs during a term, **the student must renew prior to the beginning of the term in which the renewal date occurs.** Approved status must be valid for the entire semester in which the student enrolls. A student who experiences a health problem that may interfere with the ability to provide client care (e.g., surgery, fracture) must provide a release from their health care provider indicating the ability to participate fully in client care situations. "Light duty" is not permissible.

- A Nova Southeastern University Health Form will be included with acceptance materials. The completed, signed form must be presented according to the admissions department guidelines.
- Basic Life Support (BLS) certification must be valid prior to each term for the duration of the term.
- The student should carry a copy of their health/ hospitalization insurance card with them to the clinical agency, as well as their BLS card.

Core Performance Standards for Admission and Progress

The Nova Southeastern University Health Professions Division is pledged to the admission and matriculation of qualified students and wishes to acknowledge awareness of laws that prohibit discrimination against anyone on the basis of race, color, religion or creed, sex, pregnancy status, national or ethnic origin, non-disqualifying disability, age, ancestry, marital status, sexual orientation, unfavorable discharge from the military, veteran status, or political beliefs or affiliations.

Regarding those students with verifiable disabilities, the university will not discriminate against such individuals who are otherwise qualified, but will expect applicants and students to meet certain minimal technical standards (core performance standards) as set forth herein with or without reasonable accommodation. In adopting these standards, the university believes it must keep in mind the ultimate safety of the patients whom its graduates will eventually serve. The standards reflect what the university believes are reasonable expectations required of health professions students and personnel in performing common functions.

Interpersonal Communication

Candidates and students must be able to interact and communicate effectively with respect to policies, protocols, and process, with faculty, students, staff, patients, patient surrogates, and administration during the student's educational program. They must be able to communicate effectively and sensitively with patients. Communication includes not only speech, but also reading and writing. Candidates and students must also be able to communicate effectively and efficiently in all written forms with all members of the health care team. They must have interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

The holders of health care degrees must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. In order to carry out the activities described below, candidates for Health Professions Division degrees must be able to integrate consistently, quickly, and accurately all information received, and they must have the ability to learn, integrate, analyze, and synthesize data.

Candidates for degrees offered by the Health Professions Division must have, with or without reasonable accommodation, multiple abilities and skills including intellectual, conceptual, integrative, and quantitative abilities; interpersonal communication; mobility and strength; motor skills; hearing, visual, tactile, behavioral, and social attributes. Candidates for admission and progression must be able to perform these abilities and skills in a reasonably independent manner.

Intellectual, Conceptual, Integrative, and Qualitative Abilities

These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving—a critical skill—requires all of these intellectual abilities. Candidates and students must have critical thinking ability sufficient for good clinical judgment. This is necessary to identify cause-effect relationships in clinical situations and to develop plans of care. In addition, candidates and students should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. An individual is expected to be able to perform multiple tasks in a diverse, dynamic, highly competitive, and challenging learning environment. All individuals are expected to meet their program requirements on a satisfactory level as determined by HPD administration or the applicable college/program administration.

Motor Skills

Candidates and students should have sufficient motor function to execute movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required to some health care professionals are cardiopulmonary resuscitation, administration of intravenous medication, the application of pressure to stop bleeding, the opening of obstructed airways, and the ability to calibrate and use various pieces of equipment. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. Physical therapy and occupational therapy students must be able to position patients for treatment, as well as teaching the teaching the functions involving gross and fine movements. Pharmacy candidates and students must have sufficient motor skills to weigh chemical and pharmaceutical (including intravenous) solutions, prepare prescriptions, and carry out sterile procedures.

Strength and Mobility

Candidates and students must have sufficient mobility to attend to emergency codes and to perform such maneuvers as CPR when required. They must have the physical ability to move sufficiently from room to room and to maneuver in small places. Osteopathic medical students must have the ability to position patients for the administration and delivery of osteopathic manipulative treatment in a variety of settings and to position and move patients when required. Pharmacy students must be able to move about within a pharmacy setting and a patient's room. Physical therapy and occupational therapy students must be able to administer treatment in a variety of settings and positions and move patients when required.

Hearing

Candidates and students should have sufficient auditory ability to monitor and assess health needs. They must be able to hear information given by the patient in answer to inquiries; to hear cries for help; to hear features in an examination, such as the auscultatory sounds; and to be able to monitor equipment.

Visual

Candidates and students must have visual ability sufficient for observation and assessment necessary in patient care. It must be consistent in many cases with being able to assess asymmetry, range of motion, and tissue texture changes. Osteopathic Medicine, Optometry, and Physician Assistant students must have sufficient visual ability to use ophthalmologic instruments. It is necessary to have adequate visual capabilities for proper evaluation and treatment integration. Candidates and students must be able to observe the patient and the patient's responses including body language and features of the examination and treatment. Pharmacy students must be able to interpret prescriptions and medical orders, as well as to inspect medicine for deterioration or expiration.

Tactile

Candidates and students must have sufficient tactile ability for physical assessment. They must be able to perform palpation, functions of physical examination, and/or those related to therapeutic intervention. Pharmacy students must be able to measure and compound, sometimes transferring from container to container and to carry out sterile procedures. Dental students must be able to deliver appropriate treatment using high technology equipment such as dental drills and surgical instruments.

Behavioral and Social Attributes

Candidates and students must possess the emotional health required for full use of their intellectual abilities; the exercise of good judgment; the ability to take responsibility for their own actions with respect to policies, protocols, and process, with faculty, students, staff, patients, patient surrogates, and administration during the student's educational program; the

prompt completion of all responsibilities attendant to the diagnosis and care of patients; and the development of mature, sensitive, and effective relationships with the patients. Candidates and students must be able to physically tolerate taxing workloads, to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that will be assessed during the admissions and education process.

Sensory

Osteopathic students and physician assistants are required to have an enhanced ability to use their sensory skills. These enhanced tactile and proprioceptive sensory skills are essential for appropriate osteopathic evaluation and treatment of patients.

Dress Code

Students in the Health Professions Division must maintain a neat and clean appearance befitting those attending professional school. Therefore, attire should convey a professional appearance whenever the student is on the division campus and in classes or laboratory or on an experiential rotation or program.

The following constitute acceptable attire:

1. Identification badges will be issued at the One-Stop Shop in the Health Professions Division, in the Horvitz Administrative Building, or from the Office of Student Affairs for distance program students, and must be worn and visible at all times when the student is on campus or at a clinical rotation. Please note that ID badges are necessary for proper use of on-campus auditoriums, library and recreational facilities, offices, laboratories, and certain restricted parking areas. These badges are given to the students at no charge, except for replacement.
2. Students must wear their white consultation jackets with their names and appropriate college/program designation embroidered over or on the left breast pocket. A white jacket is to be worn daily over the prescribed attire, unless the student is in the College of Medical Sciences (where a professional dress code is still required at all times).
3. Shirt, tie, slacks, socks, and regular shoes for men, and for women it should be professional business dress, which includes slacks, pants, or skirt with blouse or dress and appropriate shoes or matching scrub sets, socks, and shoes.

Students **may not** wear the following:

- shorts
- cut-offs
- mini-skirts (higher than mid-thigh)
- jeans
- see-through clothing or halter-tops
- open-toed shoes—including beach/flip-flops, sandals, thong footwear, or plastic clogs with holes on sides or top (Croc type)
- T-shirts (as the outer shirt)
- jogging or exercise clothing
- hats or caps, unless of a religious nature

All individuals who work or study in the clinic environment must be proactive in reducing the potential for workplace foot injuries. No open-toed shoes are to be worn in the clinics. These guidelines apply on campus from 8:00 a.m.–5:00 p.m., Monday through Friday, and while on duty on rotations.

Students inappropriately dressed or groomed may be requested to leave the campus. In this circumstance, an unexcused absence will be recorded until the student returns properly attired. Questionable or disputed cases of dress or grooming shall be presented to the dean, whose decision shall be final. Repeated violations will be considered improper professional behavior and may result in disciplinary action. When a class requires special dress (such as the wearing of scrub suits in anatomy laboratory or shorts in clinical skills laboratories), it will be the only exception to the dress code allowed during that time.

The dress code is to be observed at all times including midterms and examination periods. Students are expected to consult their specific program handbooks for compliance with any program-specific, clinical rotation site-supplemental dress code policies.

Cardiovascular Laboratory Uniform Dress Code

Students in the didactic phase of the curriculum will be required to wear a uniform for training in the ultrasound teaching lab. Students also may be required to wear this uniform during end-of-rotation seminars within the clinical year. This uniform will include a gray, short-sleeved T-shirt, either plain or with the Cardiovascular program or NSU logo on the front. No logo or writing should be on the back of the T-shirt. Pants must be navy blue gym-type shorts with an elastic waistband and draw strings, either plain or with the program or NSU logo on the pant leg. All students must be prepared and able to remove the T-shirt for thoracic, cardiac, chest wall, and abdominal examination at any time during training in the ultrasound teaching lab. Therefore, females must wear a sports bra or similar under attire beneath the T-shirt. Athletic shoes and socks must be worn at all times in the lab, except as dictated by the instructor for specific training purposes. This uniform is permitted to be worn only in the ultrasound teaching lab. Upon leaving a lab session, unless immediately leaving the NSU campus for the day, the program specific white clinical jackets must be worn and students should change back into normal professional attire as described above.

Medical Sonography Laboratory Uniform Dress Code

During the laboratory sessions on-campus, students are required to wear proper program approved attire and lab coats. Besides, students must have available a pair of short pants and T-shirts which are loose-fitting enough to allow scanning. All students must be prepared and able to remove the T-shirt for thoracic, cardiac, chest wall, upper extremities, and abdominal examination as well as to roll short pants properly for lower extremities examinations at any time during training in the ultrasound teaching lab. In some labs such as cardiac training, female students will be expected to wear a sports bra and tank top. Athletic shoes and socks must be worn at all times in the lab, except as dictated by the instructor for specific training purposes. This uniform is permitted to be worn only in the ultrasound teaching lab. Upon leaving a lab session, unless immediately leaving the NSU campus for the day, the program specific white clinical jackets must be worn and students should change back into normal professional attire as described above.

Identification Badges

Students must wear identification badges at all times while on campus. ID badges are not transferable. ID badges are issued at the Division Badge Room. These badges are given to the students at no charge except for replacement.

Identification Requirements and Fieldwork Prerequisites

An affiliated clinical/ fieldwork teaching facility may also require a student to pass a state of Florida Department of Health screening before rotation. Other requirements, which may be held by the affiliated facility include, but are not limited to, fingerprinting, criminal background check, urinalysis for drugs and alcohol, and proof of immunization. If a student does not meet all requirements held by the affiliated facility before the first day of the scheduled placement, the student's placement will be canceled, or if the placement has begun, the student will be asked to leave.

Immunization Requirements

Students must complete a mandatory immunization form, which must be signed by a licensed health care provider. The form can be found at *nova.edu/smc*.

Students in the Health Professions Division may be required to upload proof of immunizations to multiple online portals to satisfy the requirements of their programs and the training facilities where they are assigned.

The following immunizations/vaccinations are required of student at the Health Professions Division based on the current Centers for Disease Control (CDC) recommendations for Health Care Personnel:

Basic Immunizations

Every student is required to have had an immunization for, or show evidence of immunity to, the following diseases before matriculating at Nova Southeastern University:

Hepatitis B

- Both of the following are required: three vaccinations and positive surface antibody titer. (Lab report is required.)
- If the series is in progress, evidence of at least one shot must be provided, and the renewal date will be set accordingly.
- If the titer is negative or equivocal, the student must repeat the series and provide repeat titer report.

Influenza Vaccination

Administered annually. (An annual, seasonal influenza vaccine is required by most clinical sites.)

Measles, Mumps and Rubella (MMR)

One of the following is required: Proof of two vaccinations, or positive antibody titer for measles (rubeola), mumps, and rubella. (Lab report is required.)

PPD Skin Test (2 Step)

One of the following is required: negative two-step test or negative blood test (such as QuantiFERON Gold Blood Test or T-Spot Test) or if positive PPD results, provide a chest X-ray and/or prophylactic treatment information within the past 12 months.

Tetanus Toxoid, Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap)

All students are required to have had a Tetanus Toxoid, Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap) booster prior to matriculation and must maintain immunity by continuing to remain current according to the CDC recommendations for health care personnel during their program. Due to the increased risk of pertussis in a health care setting, the Advisory Committee on Immunization practices highly recommends health care workers receive a one-time Tdap (ask your health care provider). Tdap is required, without regard to interval of previous dose of Tetanus-Toxoid (Td).

Varicella (Chicken Pox)

One of the following is required: Proof of two vaccinations or positive antibody titer. (Lab report is required.)

Arrangements: Students may request that the Student Medical Center or the NSU Clinic Pharmacy administer these immunizations. The Student Medical Center will make appointments in as timely a manner as possible. Students may call (954) 262-1270 to make an appointment. Once made, the appointment becomes the student's obligation and must be kept. For students at other NSU campuses, appointments may be scheduled with the NSU designated physician for their area.

HPD fee: The HPD general access fee covers a series of three Hepatitis B vaccines and an annual PPD screening. All other immunizations and health care services are the responsibility of the student.

Failure to comply: The university is not required to provide alternative sites for clinical practicum or rotations should immunization be a requirement for placement. Therefore, failure to comply with this policy may result in a student's inability to satisfy the graduation requirements in his or her program.

Relative to clinical rotation site requirements, students are expected to consult their specific college/program handbooks for compliance with any college/program specific requirements.

Netiquette

In a traditional classroom, students are reminded that behavior that disrupts the class or interferes with other students and their ability to learn is unacceptable. Any person engaged in disruptive behavior receives a written warning from the instructor. Students who continue to engage in disruptive behavior after this warning may be administratively withdrawn from the course.

Similarly, in an online course, any electronic postings, emails, or electronic messages that disrupt the class or interfere with learning goals and objectives are unacceptable. Electronic communication—the backbone of this online course—must be civil, respectful, and cordial at all times. Any posting that disrupts or interferes with learning will be removed, and the author of the posting will receive a written warning. A second disruptive posting will cause the author to be administratively withdrawn from the course.

Student Insurance Requirement

It is required that each Health Professions Division student including online M.P.H., athletic training undergraduate, exercise science, respiratory therapy (first professional), cardiovascular sonography, medicial sonography, and speech-language pathology students must carry adequate personal medical and hospitalization insurance. (Other online program students may not be required to submit proof of personal medical and hospitalization insurance; students should check with their program office.) It is strongly suggested that students and their families avail themselves of the insurance plan obtainable through the university. Information about the policy can be obtained by accessing the website at *novastudentinsurance.com*. Please note that students will see a charge for health insurance appear on their student account as part of the academic registration process annually.

For those students who already have health insurance coverage and do not need the NSU-endorsed insurance plan, this charge will be removed from their account once proof of coverage has been submitted by completing the online waiver. To complete the waiver form, go to *novastudentinsurance.com*. The online waiver is the only process by which insurance charges will be removed and coverage will be cancelled. Students who fail to complete the waiver form and provide proof of health insurance by the stated deadline will not be eligible to have charges removed and will continue to be enrolled in the insurance plan endorsed by NSU. Waivers must be completed each academic year.

In view of health care reform and the Affordable Care Act, as well as all forms of health care insurance, we wish to advise those students who have health care coverage from commercial carriers—or the marketplace health care exchanges from other states than Florida—to check with their carriers in order to be sure they have comprehensive health care coverage in the region of Florida where they will be attending classes or practicum rotations.

Visits to Other Institutions

Students in the Health Professions Division may not visit, in an official or presumably official capacity as a professional school student, any health-related institution (hospital, pharmacy, practitioner's office, clinic, etc.) or any health school without express permission of the dean. Visits to relatives or friends who are hospitalized are permitted, provided they are within visiting hours and all hospital rules are observed.

Department of Cardiopulmonary Sciences

The Department of Cardiopulmonary Sciences offers two B.S.R.T. program tracks. The post-professional track is for the practicing registered respiratory therapist to obtain their bachelor's degree in a completely online format. The first professional or entry- level track is for the student to obtain their B.S.R.T. through didactic and clinical training.

Computer Requirements

All students in the department are required to have access to a computer meeting the minimum requirements listed on the website at *https://www.nova.edu/publications/it-standards* below.

Majors

Bachelor of Science in Respiratory Therapy (revised: see *Addendum G*)

B.S.R.T. Mission Statement

The mission of NSU's Department of Cardiopulmonary Sciences is to advance the respiratory care profession through leadership in teaching, research, and service. We will provide a premiere health care education experience in a learning environment that cultivates critical thinking, inspires professional leadership, encourages and promotes research, and imparts a strong awareness of ethical standards and social diversity. By engaging all faculty and students in research and scholarly activity we intend to cultivate the knowledge, attitudes, and skills necessary to support not only national leadership for the respiratory care profession, but develop future educators and providers in professionally-related health care arenas.

Bachelor of Science in Respiratory Therapy—Program Goals

The goal of the respiratory therapy program is contained within the college mission, in that the program graduates students who serve as competent advanced level respiratory therapists and leaders who will provide benefit to the community and their professions.

The intellectual, moral, ethical, and professional competencies are explicitly stated in terms of three program objectives. Program objectives are as follows:

1. Demonstrate cognitive behaviors (knowledge) in the clinical setting to include recall, application, and analysis of information consistent with an advanced-level respiratory therapist.
2. Exhibit the psychomotor skills in the clinical setting necessary to perform as an advanced-level respiratory therapist.
3. Demonstrate caring and positive attitudes and professional behaviors (affective) in the clinical setting consistent with an advanced-level respiratory therapist.

Working toward its goals and objectives, the respiratory therapy program addresses NSU's larger mission to benefit the community and foster academic excellence.

Bachelor of Science in Respiratory Therapy—Program Learning Outcomes

Graduates of the Bachelor of Respiratory Therapy degree post-professional program will demonstrate command of the

following learning outcomes as evidenced by their participation in class, completion of class assignments, presentations, and projects.

Graduates will be able to:

1. Demonstrate knowledge of the physiological bases for all therapeutic interventions, advanced patient monitoring, assessment, and treatment, as well as diagnostic procedures in all areas of respiratory therapy practice.
2. Demonstrate critical thinking and problem-solving skills to physicians and other healthcare personnel in developing and carrying out various cardiopulmonary care strategies.
3. Demonstrate proficiency in establishing an evidence base for best practice through research and interpretation of the professional scientific literature.
4. Demonstrate knowledge of the ethical obligations and responsibilities of healthcare professionals and institutions.
5. Demonstrate knowledge of current issues and trends in healthcare, including public policy, access, quality improvement, legal, and ethical topics.
6. Demonstrate proficiency in oral and written communication.
7. Demonstrate knowledge of roles in respiratory education and management.
8. Apply knowledge successfully in practical and experiential arenas.

Bachelor of Science in Respiratory Therapy for the Practicing RRT—Post-Professional Program

The B.S.R.T. Post-Professional program is designed for Registered Respiratory Therapists with an A.S. degree from a regionally accredited institution. This degree allows Respiratory Therapists to further expand their expertise with advanced knowledge in a variety of areas. Delivered entirely online, through a combination of synchronous (real-time) and asynchronous instruction, the B.S.R.T. program is designed for students who are unable to be physically present, on campus, or for those with schedule or family constraints that make traditional college class schedules challenging.

Computer Literacy

Access to a computer will be required for all students to successfully complete the online courses in the Department of Cardiopulmonary Science. Each student is expected to acquire computer hardware and software appropriate for the program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and necessary for graduation.

Continuous Enrollment

Although continuous enrollment is not a requirement, the B.S.R.T. program strongly recommends students to enroll in two courses per semester, for the duration of their B.S.R.T. studies.

Online Student Center—Program and Course Communication

All students are required to visit the online student center at least once per week. All communication and programmatic information will be posted in the online student center. It is required that all B.S.R.T. post-professional students use the online student center when communicating with the program. All class communication must take place through the university's secure course management platform.

Bachelor of Science in Respiratory Therapy—Post-Professional Program Curriculum

- The program requires that all core coursework be completed through the NSU B.S.R.T. program. A minimum total of 120 credit hours, of which 30 credit hours must fulfill general education requirements, are required to graduate with the B.S.R.T. degree.

- All students are required to obtain a grade of C or better (greater than or equal to 74 percent) in every required core course.
- Students receiving a C-, D+, D, or F in a required core course will be required to retake the course at its next scheduled offering.
- The B.S.R.T.—Post-Professional Program is presented in a distance-learning format and requires no on-campus time.
- The coursework is professor-paced using Web-based delivery. The curriculum and coursework follow a standard 12-week semester calendar. The curriculum is designed to build upon the existing knowledge base of the Registered Respiratory Therapist while focusing on the overall health care picture. Leadership, evidenced- based practice, and education, are a selected few of the areas covered in the curriculum.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Block Grant (45 credits)

Students will be grants a 45 credit block grant for their registered respiratory therapist (RRT) credential and current licensure.

Generalist Track Major Requirements (45 credits)

Core Courses (39 credits)

RRT 3014	Advanced Patient Monitoring and Assessment (3 credits)
RRT 3015	Critical Care Pathophysiology for Respiratory Therapy (3 credits)
RRT 3016	Advanced Cardiopulmonary Physiology for Respiratory Therapy (3 credits)
RRT 3017	Outpatient Services in Respiratory Therapy (3 credits)
RRT 3018	Advanced Pharmacology in Respiratory Therapy (3 credits)
RRT 3020	Quality Improvement in Health Care (3 credits)
RRT 3021	Sleep Medicine (3 credits)
RRT 4005	Evidence-Based Practice (3 credits)
RRT 4006	Leadership and Management for Respiratory Care (3 credits)
RRT 4007	Education Principles in Health Care (3 credits)
RRT 4009	Legal and Ethical Considerations in Respiratory Care (3 credits)
RRT 4010	Case Management Theory and Process (3 credits)
BHS 4031	Statistics for Health Sciences (3 credits)

Health Professions Division Practical Coursework and Experiences (6 credits)

Select two courses from the following:

RRT 4502	Practicum (3 credits)
RRT 4505	Scientific Investigation I (3 credits)
RRT 4506	Internship (3 credits)
RRT 4507	Scientific Investigation II (3 credits)

Total Degree Requirement: 120 credits (minimum)

Optional Specialization in Management (15 credits)

Successful completion of the following courses, in addition to the requirements for the Bachelor of Science in Respiratory Therapy—Post-Professional Program Generalist Track, will grant a B.S.R.T. degree with the added specialization in management:

BHS 3155	Conflict Management in Health Care (3 credits)
BHS 3161	Health Care Finance (3 credits)
BHS 3162	Economics of Health Services (3 credits)
RRT 4103	Strategic Planning and Organizational Development for Health Care (3 credits)
RRT 4014	Operational Analysis and Quality Improvement (3 credits)

Bachelor in Science in Respiratory Therapy—First Professional Program

This program is designed for the First-Professional or entry-level student to obtain their B.S.R.T. through didactic and

clinical training. This program is a full-time two- year, on-campus program which requires the student to complete 41 prerequisite credits prior to matriculation.

Prerequisites/General Education Courses

Courses	*Credits*
Written Communication at or above 1500 level	6
Mathematics at or above 1040 level (one of which must be college algebra)	6
Humanities	6
Social and Behavioral Sciences	6
Human Anatomy and Physiology I and II with Lab	8
Microbiology with Lab	4
General Chemistry with Lab	4
Medical Terminology	1
Total Prerequisite/General Education Courses	**41**

Highly Recommended Courses

Courses	*Credits*
Genetics	3
Organic/Inorganic Chemistry with Lab	4
Physics	3

Bachelor of Science in Respiratory Therapy—First Professional Program Curriculum

- The program requires that all core coursework be completed though the NSU B.S.R.T. program. A minimum total of 120 credit hours, of which 30 credits must fulfill general education requirements.
- All students are required to complete 41 prerequisite courses prior to matriculation.
- All students are required to obtain a grade of C or better (greater than or equal to 74 percent) in every required core course.
- Students receiving a C-, D+, D, or F in a required core course will be required to retake the course at its next scheduled offering.
- The program is offered in a two year full-time on campus format with a lock step sequence.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Core Course Requirements (79 credits)

RCP 3002	Cardiopulmonary A & P with Lab (3 credits)
RCP 3003	Fundamentals of Respiratory Care with Lab (4 credits)
RCP 3004	Respiratory Care Basics and Assessments with Lab (4 credits)
RCP 4040	tatistics and Principles of Scientific Literature Evaluation (3 credits)
RCP 3501	Clinical I (2 credit)
RCP 3007	Pulmonary Disease (3 credits)
RCP 3008	Pharmacology for Respiratory Therapy (3 credits)
RCP 3009	Patient Monitoring with Lab (4 credits)
RCP 4009	Legal and Ethical Considerations in Respiratory Care (3 credits)
RCP 3502	Clinical II (3 credits)
RCP 3011	Mechanical Ventilation with Lab (4 credits)
RCP 3012	Cardiopulmonary Diagnostics and PFT with Lab (4 credits)

RCP 3013	Human and Infectious Disease (3 credits)
RCP 4501	Clinical III (4 credits)
RCP 4001	Neonatal/Pediatric Respiratory Care and Lab (4 credits)
RCP 4002	Cardiopulmonary Technology and Specialties (3 credits)
RCP 4003	Alternate Respiratory Disciplines (3 credits)
RCP 4100	Clinical Seminar I (2 credits)
RCP 4006	Leadership and Management in Respiratory Care (3 credits)
RCP 4005	Health Research and Evidence-Based Practice (3 credits)
RCP 4502	Clinical IV (6 credits)
RCP 4503	Clinical IV – Specialization (6 credits)
RCP 4101	Clinical Seminar II (2 credits)

Department of Health and Human Performance

The Department of Health and Human performance offers two bachelors of science programs. The Bachelor of Science in Athletic training and the Bachelor of Science in Sports and Exercise science. Both majors are offered on NSU main campus.

Computer Requirements

All students in the department are required to have a computer meeting the minimum requirements listed below.

- 1.5 GHz minimum processor
- 1 GB RAM
- Video and monitor capable of 1024 x 768 resolution or better
- CD-ROM or DVD drive
- Full duplex sound card and speakers
- DSL or CABLE modem
- Internet connection with private Internet service provider (ISP) for access from home to the Internet
- Windows XP or above or Macintosh with Virtual Machine and Windows
- Microsoft Office 2003 or newer with PowerPoint, Word and Excel minimum or compatible office suite
- Surge suppressor recommended
- DVD/RW or CD/RW

Recommended option: laptop computer with wireless Internet capability and wireless router

Majors

Athletic Training Major (revised: see *Addendum F*)

The athletic training major is designed to prepare students to become certified athletic trainers who specialize in injury and illness prevention, assessment, treatment, and rehabilitation for physically active people. The curriculum provides a balance between classroom instruction and clinical experience that prepares students to become competent allied health care professionals.

NSU's athletic training major, established in 2003, is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), effective March 2007. Athletic training students will graduate with a Bachelor of Science degree in Athletic Training and will be eligible to sit for the Board of Certification (BOC) examination. The athletic training major is designed to ensure that students who graduate from the program meet all requirements necessary to pass the BOC examination.

Athletic Training Program Goals

The athletic training program will:

1. Develop communication, critical thinking, and professional skills to prepare students for the allied health field of athletic training;

2. Meet the standards, guidelines, and requirements for accreditation and from governing organizations such as the National Trainers' Association (NATA), the Board of Certification (BOC), and the Commission on Accreditation of Athletic Training Education (CAATE);
3. Provide an effective and interactive learning environment as well as a solid educational foundation both in didactic and clinical experience settings. The program will utilize modern educational media and advanced technology regularly in the clinical and educational settings. It will expose students to hands-on experiences, clinical settings, and professionals representing a wide range of allied and medical health care professions. Students will receive clinical instruction by professionals representing other medical and allied health disciplines, such as medical doctors, physical therapists, physician assistants, occupational therapists, and osteopathic physicians;
4. Create an optimal learning community of faculty, clinical athletic trainers, and students that will provide quality health care for intercollegiate athletic programs and varied affiliated sites at all levels of sport, from grade school to professional sports teams;
5. Prepare program students to attain graduate or professional school placement, or entry-level employment within six months of graduating from the program. Additionally, program graduates will obtain state licensure and other necessary professional designations from the appropriate regulatory agencies in the states where they will be employed.

Athletic Training Major Learning Outcomes

A successful athletic training graduate is expected to:

1. Demonstrate the ability to prevent, evaluate, treat, rehabilitate, and document athletic related injuries in the field of athletic training;
2. Analyze and comprehend the physical, psychological, and emotional demands of physically active individuals and the sports medicine professionals involved in their care;
3. Develop the effective communication skills necessary for a successful allied health care career in athletic training;
4. Illustrate and differentiate the ethical practices as it relates to athlete/patient care.

Athletic Training Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* section in the Academic Resources and Procedures segment of this catalog.

Athletic Training Major Requirements (63 credits)

During the athletic training major's pre-professional phase (first two semesters), students must successfully complete (i.e., earn a C or better in) all introductory courses: ATTR 1100 Introduction to Athletic Training, ATTR 1200 Principles of Athletic Training, and ATTR 1300 Emergency Care and First Aid. During the pre-professional phase, students are also required to spend 100 hours observing certified athletic trainers in a variety of settings. Completion of the pre-professional phase (or the Pre-Athletic Training Program) does not guarantee admission into the athletic training major (professional phase). It is a competitive matriculation process.

Core Courses (63 credits)

ATTR 1100	Introduction to Athletic Training (1 credit)
ATTR 1200	Principles of Athletic Training (3 credits)
ATTR 1300	Emergency Care and First Aid (3 credits)
ATTR 1400	Health and Fitness (3 credits)
ATTR 2100	Injury Evaluation I (3 credits)
ATTR 2200	Injury Evaluation II (3 credits)
ATTR 2300	Sports Nutrition (3 credits)
ATTR 2400	Strength and Conditioning (3 credits)
ATTR 2610	Athletic Training Clinical I (3 credits)
ATTR 2620	Athletic Training Clinical II (3 credits)

ATTR 3100	General Medicine in Sports (3 credits)
ATTR 3300	Therapeutic Modalities/Lab (4 credits)
ATTR 3500	Rehabilitation of Athletic Injuries/Lab (4 credits)
ATTR 3630	Athletic Training Clinical III (3 credits)
ATTR 3640	Athletic Training Clinical IV (3 credits)
ATTR 4100	Athletic Training Administration (3 credits)
BIOL 1400	Introductory Cell Biology (3 credits)
BIOL 3312	Human Anatomy and Physiology/Lab (5 credits)
EXSC 3700	Kinesiology (3 credits)
EXSC 3740	Exercise Physiology with Lab (4 credits)

Athletic Training Major Phases

The NSU Athletic Training Education Program (ATEP) consists of three phases divided into four levels. Level I of the ATEP is the pre-professional phase (or Pre-Athletic Training Program). Levels II and III compose the professional phase (or the athletic training major). Level IV is the completion phase.

Students admitted into the athletic training major must first complete the Pre-Athletic Training Program. The Pre-Athletic Training Program includes successful completion (C or better) of six courses: ATTR 1100 Introduction to Athletic Training, ATTR 1200 Principles of Athletic Training, ATTR 1300 Emergency Care, ATTR 1400 Health and Fitness, BIOL 1400 Introduction to Cell Biology or equivalent, and BIOL 3312 Human Anatomy and Physiology/Lab or equivalent. In addition, each student must complete a minimum number of clinical experience hours, as part of the ATTR 1100 and ATTR 1200 courses, observing ATEP-Approved Preceptors (i.e., Certified Athletic Trainers) in a variety of settings.

Students in the Pre-Athletic Training Program are eligible to submit a professional portfolio as part of the ATTR 1200 course. Submission of the professional portfolio does not guarantee matriculation into the professional phase of the program (the athletic training major). Acceptance in the Professional Phase of the program will be based on students' scores in the following categories: overall cumulative 2.5 GPA, portfolio assessment, and a professional interview. Detailed information is available on the college's athletic training program Web page. Transfer students are eligible for this major but must complete all program requirements (ATEP Levels I through III) at Nova Southeastern University for degree completion. There are additional opportunities for the Level IV student to complete an internship in the area of sports medicine.

The NSU Athletic Training Education Program is nationally accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Upon the completion of this program, students will be eligible to sit for the Board of Certification (BOC) examination to become Certified Athletic Trainers (ATC). Additional student costs associated with the Athletic Training Education Program include but are not limited to transportation to the clinical sites off campus, professional rescuer (CPR) certifications, required background checks, etc.

Level I of ATEP: Pre-Professional Phase (Pre-Athletic Training Program) Requirements:

1. Successful completion (C or better) of ATTR 1100, ATTR 1200, ATTR 1300, ATTR 1400, BIOL 1400, and BIOL 3312 with lab
2. Athletic Training Student Portfolio; signed Technical Standards; and compliance with other accreditation documents as part of ATTR 1100 and ATTR 1200 course requirements
3. Completion of 100 clinical observation hours, supervised by an ATEP-Approved Preceptor as required by ATTR 1100 and ATTR 1200

Level II of ATEP: Professional Phase (Athletic Training Major) Requirements:

1. Successful completion (C or better) of ATTR 2100, ATTR 2200, ATTR 2300, ATTR 2400, ATTR 2610, ATTR 2620, and ATTR 3300 with lab
2. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications, as required for clinical experience hours
3. Completion of minimum of 300 clinical experience hours, supervised by an ATEP-Approved Preceptor as part of both ATTR 2610 and ATTR 2620 course requirements.

Level III of ATEP: Professional Phase (Athletic Training Major) Requirements:

1. Successful completion (C or better) of ATTR 3100, ATTR 3500 with lab, ATTR 3630, ATTR 3640, EXSC 3700, EXSC 3740, and ATTR 4100
2. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications, as required for clinical experience hours
3. Completion of a minimum of 300 clinical experience hours, supervised by an ATEP-Approved Preceptor, as required by ATTR 3630 and ATTR 3640

Level IV of ATEP: Completion Phase (Athletic Training Major) Requirements:

1. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications
2. Students are eligible for athletic training electives and an optional Internship (ATTR 4950) that will be supervised by an athletic training faculty member at an assigned clinical site off campus to be determined by the student.
3. Completion of degree requirements as outlined in the Graduation Requirements section of the Nova Southeastern University Undergraduate Student Catalog
4. Completion of registration for the Board of Certification Examination (BOC)

Exercise and Sport Science Major

The exercise and sport science major provides students with a foundation in the movement sciences, which promotes improvements in health, fitness, and/or performance for the physically active. The primary goal of this program is to prepare students to be evidence-based practitioners of exercise and human movement disciplines who think critically about the science behind their practice.

Students graduating from the exercise and sport science major will be able to seek employment as an exercise specialist, fitness and wellness coordinator, sport performance researcher, and strength and conditioning specialist, as well as enter professional graduate programs in exercise sciences and other fields, such as biomechanics, exercise physiology, and motor behavior.

Exercise and Sport Science Program Goals

The exercise and sport science program will:

1. Meet standards and guidelines from governing organizations such as the American College of Sports Medicine (ACSM), and the National Strength and Conditioning Association;
2. Prepare graduates to sit for professional certification examinations in exercise and fitness from the National Strength and Conditioning Association, American College of Sports Medicine, National Academy of Sports Medicine, and/or the American Council on Exercise;
3. Prepare graduates for post-graduation placement in graduate school, a professional school, or entry-level employment within six months of completing the degree program;
4. Develop competent scholars, researchers, physical activity, and sport specialists to meet the workforce needs of a global society;
5. Prepare graduates to enhance delivery of physical activity, sport, and rehabilitative services for all segments of society, including special populations such as children and the elderly; persons with disability, injury, and disease; and athletes.

Exercise and Sport Science Major Learning Outcomes

A successful exercise and sport science graduate is expected to:

1. Demonstrate critical thinking skills related to the areas of physical activity, movement sciences, and sport through practical experiences;

2. Obtain knowledge of content area specific to chosen career goals, such as strength and conditioning specialist, coaching, and corporate fitness and wellness, through didactic and internship experiences;
3. Demonstrate the importance of the physical, psychological, and emotional demands of physically active individuals through didactic and practicum experience.

Exercise and Sport Science Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* section in the Academic Resources and Procedures segment of this catalog.

Exercise and Sport Science Major Requirements (66 credits)

Core Courses (63 credits)

ATTR 1200	Principles of Athletic Training (3 credits) *OR* EXSC 1200 Prevention and Care of Athletic Injuries (3 credits)
ATTR 1300	Emergency Care and First Aid (3 credits)
ATTR 1400	Health and Fitness (3 credits)
ATTR 2300	Sports Nutrition (3 credits)
ATTR 2400	Strength and Conditioning (3 credits)
BIOL 1400	Introductory Cell Biology (3 credits)
BIOL 3312	Human Anatomy and Physiology/Lab (5 credits)
EXSC 3700	Kinesiology (3 credits)
EXSC 3740	Exercise Physiology with Lab (4 credits)
EXSC 3760	Biomechanics of Human Movement with Lab (4 credits)
EXSC 3820	Exercise Prescription with Lab (4 credits)
EXSC 4100	Adapted Physical Education (3 credits)
EXSC 4220	Motor Learning with Lab (4 credits)
EXSC 4300	Research Methods in Sport and Physical Education (3 credits)
EXSC 4400	Exercise and Sport Administration (3 credits)
EXSC 4500	Advanced Strength and Conditioning (3 credits)
EXSC 4901	Practicum in Exercise Science (3 credits)
MATH 2020	Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
PSYC 3400	Sports Psychology (3 credits)

Major Electives (3 credits)

EXSC 4900	Special Topics in Exercise and Sport Science (3 credits)
EXSC 4950	Internship in Exercise and Sport Science (1–12 credits)
EXSC 4990	Independent Study in Exercise and Sport Science (1–3 credits)

Any 3000/4000-level EXSC course not counted as core course for the major (3 credits)

Minor

Exercise Science Minor

The exercise science minor is designed to provide students with a foundation and theory base in the movement sciences for the physically active. Additionally, the program offers courses for the student who is interested in the physiological, biomechanical, and psychological aspects of human function in response to exercise and physical activity. The primary goal of this program is to supplement academic knowledge for students to study in the exercise science sub-disciplines (biomechanics, exercise physiology, and motor behavior) and promote entry into professional programs. The minor is available to PALS (day) students only. This minor can be combined with any major and minor except the exercise and sport science major. When combining this minor with the athletic training major, a minimum of 8 credits must be exclusive to the minor and cannot be counted toward the major.

Exercise Science Minor Learning Outcomes

A successful exercise science minor is expected to:

1. Demonstrate and explain a strong foundation and theory base in the movement sciences for the physically active;
2. Analyze the physiological, biomechanical, and psychological aspects for human function in response to exercise and physical activity;
3. Develop and present a physical fitness program.

Exercise Science Minor Requirements (18 credits)

Core Courses (10 credits)

ATTR 1400	Health and Fitness (3 credits)
ATTR 2400	Strength and Conditioning (3 credits)
EXSC 3820	Exercise Prescription with Lab (4 credits)

Minor Electives (8 credits)

Select 8 credits from the following courses:

ATTR 2300	Sports Nutrition (3 credits)
EXSC 3700	Kinesiology (3 credits)
EXSC 3740	Exercise Physiology with Lab (4 credits)
EXSC 3760	Biomechanics of Human Movement with Lab (4 credits)*
EXSC 4100	Adapted Physical Education (3 credits)*
EXSC 4220	Motor Learning with Lab (4 credits)*

*Athletic training majors are required to select only these elective courses to complete the minor requirements.

Department of Health Science

The Department of Health Science is an interdisciplinary group of programs designed for health professionals with the desire to advance academically, administratively, or clinically within their profession. The department offers educational opportunities from entry-level undergraduate to programs for working health professionals, demonstrating the university's and college's commitment to lifelong learning. The Department of Health Science uses innovative online and on-campus components to achieve its mission of preparing professionals for today's health care market.

The department offers the Bachelor of Health Science (B.H.Sc.) in an exclusively online format. The department also houses a preeminent on-campus, entry-level program, the Bachelor of Science—Medical Sonography, on NSU's main campus, and houses the Bachelor of Science—Cardiovascular Sonography Program on the campus in Tampa. Both programs are supported by state-of-the-art teaching laboratories.

Computer Requirements

It is required that the student have access to a desktop or laptop consistent with a recent generation of Microsoft Windows (7 or 8) or Apple OS (10.8 or above) and compatible Microsoft Office software to include Word, Powerpoint, and Excel. Tablets and smartphones, while very useful, may not be sufficient for all program uses. The computing platform should include headphones, microphone, camera, and video conferencing capabilities. Broadband access is essential.Surge protection and appropriate back-up options strongly suggested. Minimum computer requires can found at https://www.nova.edu/publications/it-*standards*.

Majors

Bachelor of Health Science—Online Program (revised: see *Addendum H*)

The Bachelor of Health Science (B.H.Sc.)—Online Program is an online degree advancement program for graduates from associate's degree, diploma, or certificate programs in the health sciences such as military trained health care technicians, radiology technicians, respiratory therapists, etc. The NSU B.H.Sc. generalist track course of study is interdisciplinary and is designed to provide career advancement for health care practitioners as well as deliver a well-rounded curriculum. This cutting-edge program offers the opportunity for numerous health care occupations to complete their under graduate degree coursework online, conveniently from their own home or office, without compromising career or other obligations.

The B.H.Sc. Online program also offers a Pre -Master of Occupational Therapy (Pre-MOT) track for Certified Occupational Therapy Assistants. This educational opportunity is available to Certified Occupational Therapy Assistants (COTAs) to earn a Bachelor in Health Science degree and upon completion of the Pre-MOT Track be guaranteed admission to the Master of Occupational Therapy at NSU's main campus in Fort Lauderdale, Florida.

There have been dramatic changes in the health care market and delivery systems in the United States over the past decade. As health care becomes increasingly competitive, it becomes more important to distinguish one self professionally and academically. The Bachelor in Health Science—Online Program is offered via the College of Health Care Sciences Web-based distance learning technology that allows health care professionals to remain in their current location and employment.

Upon successful completion of the B.H.Sc. program, students are eligible to apply for admission to continue their education in health sciences in the online Master of Health Science (M.H.Sc.) and later the Doctor of Health Science (D.H.Sc.) program or other graduate program.

B.H.Sc. Mission Statement

The mission of the Nova Southeastern University (NSU) Bachelor of Health Science (B.H.Sc.) program is to provide an online, post-professional degree advancement/completion program for graduates from associate's degree, diploma, and certificate programs through an interdisciplinary course of study; to provide career and academic advancement opportunities for health care practitioners; and deliver a well-rounded curriculum allowing the enrolled students to complete their undergraduate degree online while continuing to work.

Bachelor of Health Science—Online Program Goals

The Bachelor of Health Science will enable students to:

1. Pursue a well-rounded and diverse educational degree completion program for health professionals in an online environment that allows them to continue gainful employment in their chosen field while attending and completing course work.
2. Enhance and develop the student's leadership and health care knowledge through academic inquiry while using current, practical health care models.
3. Enhance their understanding of diverse populations in health care and to prepare the student to take a leadership role in the rapidly changing health care environment.
4. Enhance the student's understanding of the political, social, legal and ethical issues that may be encountered and have an impact on areas of health care practice.
5. Develop knowledge that helps bridge between clinical care, health care diversity and critical inquiry.

Bachelor of Health Science—Online Program Learning Outcomes

Graduates of the Bachelor of Health Science degree completion program will demonstrate command of the following learning outcomes as evidenced by their participation in class, completion of class assignments, presentations, and projects.

Graduates will be able to:

1. Communicate effectively in writing on a variety of topics related to health care
2. Demonstrate an awareness and appreciation of the delivery of culturally competent health care.
3. Effectively communicate and acknowledge the impact of the legal, ethical, and political environment on health care policy and delivery.
4. Demonstrate the knowledge and ability to search and retrieve information and materials related to individual clinical practice issues or overall health policy concerns.
5. Describe and demonstrate management / leadership skills and theories that can be applied in preparation to lead or manage effectively in a health care environment.
6. Demonstrate knowledge of and effectively apply health care models, theories, and tools to issues impacting health care delivery

Computer Literacy

Access to and ongoing use of a computer will be required for all students to successfully complete the online programs and courses in the Department of Health Science. Each student is expected to acquire computer hardware and software appropriate to the program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and necessary for graduation.

Continuous Enrollment

Although continuous enrollment is not a requirement, the B.H.Sc. program strongly recommends students to enroll in at least two courses per semester, for the duration of their B.H.Sc. studies.

Online Student Center—Program and Course Communication

All students are required to visit the online student center at least once every two weeks. All communication and programmatic information will be posted in the online student center. It is required that all B.H.Sc. online students use the online student center when communicating with the program. All class communication must take place through the university's secure course management platform.

Bachelor of Health Science—Online Program Curriculum

The B.H.Sc—Online Program is designed for completion in a distance-learning format and requires no on-campus time. The coursework is professor-paced using Web-based delivery. The curriculum and coursework follow a standard 12-week semester calendar. The curriculum is designed to build upon the existing knowledge base of the health care professional while focusing on the overall health care picture. Leadership, diversity, and conflict resolution are but a few of the areas covered in the curriculum.

The program curriculum requires that a minimum of 30 semester hours of course work (including 21 semester hours of required core course work) be completed through the NSU B.H.Sc. program. To be eligible to graduate with the B.H.Sc. degree, a student must have completed a minimum of 30 credits of General Education course work in addition to the B.H.Sc. curriculum, with a resulting minimum total of 120 semester hours with a 2.0 cumulative grade point average and a 2.25 grade point average in the B.H.Sc. major.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Generalist Track Major Requirements (30 credits)

Core Courses (21 credits)*

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership (3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits); (Must be taken during the first semester of enrollment in the program)

* Students are required to obtain a grade of C or better (greater than or equal to 73 percent) in required core courses. Students receiving a grade of C- or lower in a required core course will be required to retake the course at its next scheduled offering.

Major Electives (minimum 9 credits)

The number of major electives requires is variable, based on the number of credit hours accepted for transfer.

BHS 3100	Current Issues in Health Care (3 credits)
BHS 3101	History of the US Health System (3 credits)
BHS 3130	Research and Design for Health Care (3 credits)
BHS 3140	Health Care Practice (3 credits)
BHS 3145	Principles of Environmental Health (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3161	Concepts of Health Care Finance (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)
BHS 3190	Patient Education in Health Care (3 credits)
BHS 3195	Therapeutic Communications for Health Care Professionals (3 credits)
BHS 4001	Individuals with Disabilities and Special Needs (3 credits)
BHS 4005	Alternative Medicine in Health Care (3 credits)
BHS 4006	Fundamentals of Chinese Medicine (3 credits)

BHS 4009	Sports Medicine: Principles and Practice (3 credits)
BHS 4010	Health Promotion and Disease Prevention (3 credits)
BHS 4011	Bioterrorism: Health Care Readiness and Response (3 credits)
BHS 4012	Torture, Violence, and Trauma—Health Care's Healing Role (3 credits)
BHS 4020	Topics in Maternal, Child Health (3 credits)
BHS 4031	Statistics for Health Professions (3 credits)
BHS 4110	Health Care and Aging (3 credits)
BHS 4130	Internship** (3 credits)
BHS 4140	Independent Study** (3 credits)
BHS 4150	The Science of Sound** (3 credits)
BHS 4151	Linguistics & Psycholinguistic Variables of Normal Language Development** (3 credits)
BHS 4152	Neuroanatomy & Neurophysiology of Audition** (3 credits)
BHS 4153	Speech and Language Disorders for Health Care Practitioners (3 credits)
BHS 4154	Effect of Hearing Impairment on Speech and Language** (3 credits)
BHS 4160	Education for Health Professions (3 credits)
BHS 5001	APA Writing Seminar (3 credits)

** Student must receive departmental and academic advisor approval in order to be allowed to register for these courses.

Open/Transfer Electives (60 credits)

Students are required to complete 60 credit hours of open/transfer electives, consisting of transfer credits or additional B.H.Sc. elective coursework.

Total Degree Requirement: 120 credits (minimum)

Bachelor of Health Science—Online Pre-MOT Track Curriculum

Pre-Master of Occupational Therapy (Pre-MOT) Track for Certified Occupational Therapy Assistants

This educational opportunity is available to Certified Occupational Therapy Assistants (COTAs) to earn a Bachelor in Health Science (B.H.Sc.) degree and, upon completion of the Pre-MOT Track, be guaranteed admission to the Master of Occupational Therapy program at NSU's main campus in Fort Lauderdale, Florida.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Pre-MOT Track Major Requirements (34 credits)

BIOL 1500	Biology I/Lab (4 credits)*
BIOL 3321	Human Anatomy and Physiology (3 credits)*
PHYS 2350	General Physics/Lab (4 credits) *OR* EXSC 3700 Kinesiology (3 credits)*
BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership (3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits); (Must be taken during first semester of enrollment in program)
BHS 4031	Statistics for Health Sciences (3 credits)

*May be used to fulfill General Education requirements

Major Electives (6 credits minimum)

Any BHS courses not counted as a core course.

The number of major electives required varies based on the number of credit hours accepted.

Open/Transfer Electives (60 credits)

Students are required to complete 60 credits of open/transfer electives, consisting of transfer credits or additional B.H.Sc. elective coursework.

Subtotal Required Courses: 40 credits (minimum)

Total Degree Requirement: 120 credits (minimum)

Bachelor of Health Science—Pre-O.T.D. Track for Occupational Therapy Assistants

This educational opportunity is available to certified Occupational Therapy Assistants (O.T.As) to earn a Bachelor in Health Science (B.H.Sc.) degree and upon completion of the Pre-O.T.D. Track be guaranteed admission to the Doctor of Occupational Therapy (O.T.D.) Entry Level Program at Nova Southeastern University, Tampa, FL.

Classes for NSU's three-and-a-half year, blended distance/face-to-face OTD program takes place at the NSU Tampa campus and online. The program, designed to attract creative and compassionate individuals who like to help others achieve their potential, meets the need for occupational therapy education beyond a Masters degree by students who want flexibility while performing their current occupations.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Pre-Doctor of Occupational Therapy (Pre-O.T.D.) Track Requirements

The Pred-O.T.D. Track Requirements can also be used to fulfill natural and physical science requirements.

Courses	***Credits***
Biology with Lab	4
Anatomy and Physiology	3
Physics with lab or Kinesiology (PHYS 2350 or EXSC 3700)	3

Additional Pre-O.T.D. Track Requirements (can be used towards open elective requirements)

Courses	***Credits***
Medical Terminology	1
Human growth and development or developmental psychology	3

Required B.H.S. Courses (30 credits)

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership(3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (must be taken during first semester of enrollment in program) (3 credits)
BHS 4031	Statistics for Health Sciences (3 credits)

Major Electives (6 credits minimum)

Any BHS courses not counted as a Core Course.

Open/Transfer Electives (60 credits minimun)

Any combination of coursework consisting of additional BHS prefixed elective courses and/or transfer courses of any prefix with a course level of 1000 or above resulting in a total of 60 credits

Subtotal Required B.H.S. Courses: 30 credits (minimum)

Total Degree Requirement: 120 credits (minimum)

Many of the general education, pre-O.T.D. track and open elective requirements may be fulfilled through prior OTA course work.

Bachelor of Science—Cardiovascular Sonography

Cardiac Sonography (Echocardiography)

Cardiac sonographers obtain images of the heart via ultrasound. Echocardiography is one of the most widely used imaging examinations for assistance in the diagnosis of heart disease. Echocardiography is especially useful for assessing diseases that affect the heart valves and for detecting abnormalities in the motion and appearance of the heart wall.

Vascular Sonography

Vascular sonographers use ultrasound imaging and other types of exams to detect anatomical and physiological changes caused by diseases of the arteries and veins and the resulting effects on organs and other tissues. Vascular disorders include carotid artery disease, which may lead to stroke; abdominal vascular diseases, such as aneurysms; peripheral arterial disease, which can result in chronic pain and may progress to loss of limbs; and venous conditions that can cause blood clots (thromboses), which can travel to the lungs (pulmonary embolism).

Cardiovascular Sonography Program

The NSU Cardiovascular Sonography Program in Tampa offers didactic and clinical training in both of these specialties, cardiac sonography (adult) and vascular sonography, as an integrated curriculum. Additional course content introduces the student to pediatric cardiac sonography and basic concepts in electrophysiological cardiology. Because of strong interrelationships between cardiac and vascular diseases, the need was seen for a comprehensive program covering both specialties. Also, some cardiology departments and other imaging providers may prefer that sonographers obtain training and professional registry in both cardiac sonography and vascular sonography for purposes of diagnostic expediency and professional flexibility. Graduates of the Cardiovascular Sonography program are eligible to apply for both the Adult Echocardiography and non-invasive Vascular Technology professional registry exams offered by the American Registry for Diagnostic Medical Sonography (ARDMS), and /or the corresponding credentials offered by Cardiovascular Credentialing International (CCI). The Cardiovascular Sonography program at NSU Tampa is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Bachelor of Science—Cardiovascular Sonography (B.S.—CVS)

This degree program is designed to prepare students for entry-level positions in the field of Cardiovascular ultrasound. Students receive education as a combined curriculum in two of the most sought-after specialties of diagnostic medical ultrasound: adult echocardiography (cardiac ultrasound) and vascular sonography, (non-invasive vascular technology). This prepares them for the 12-month clinical externship during their second year.

The cardiovascular sonography program includes on-campus lectures; extensive, hands-on training in our ultrasound laboratory; online courses; and a 12-month focused or combined externship in a clinical laboratory setting. The graduating student will earn a bachelor's degree in cardiovascular sonography. Students will take a combination of general courses in the health science field and focused core courses in the cardiovascular sonography field. Examples of general courses include subjects such as Writing for Medical Publication, Epidemiology, Biostatistics, and Principles and Practice of Management in Health Care. Examples of cardiovascular sonography courses include Ultrasound Physics, Cardiac Ultrasound, and Carotid Artery Duplex. While on campus, the student will spend more than 500 hours in the training laboratory learning imaging skills and techniques and physiologic testing methods prior to the clinical externship experience.

In the second year, the student will complete an approximately 1,600-hour clinical training program while continuing to take online courses. The student may have the option to perform his or her clinical externship in a vascular, adult echo,

or combined vascular/ echo clinical experience, based upon his or her interests and demonstrated competencies. Upon graduation, the student will be eligible to sit for professional registry exams based upon completion of program and clinical requirements

Prospective cardiovascular sonography students are selected by the Committee on Admissions (COA), which considers the overall qualities of the candidate. Areas of consideration include interpersonal skills, personal motivation, knowledge and understanding of the cardiovascular profession, academic performance and level of achievement, life experiences, and recommendations. Knowledge of the profession is essential. Personal interviews are offered to the most-qualified applicants to assess interpersonal and communication skills, altruistic attitude, maturity, and commitment to the cardiovascular profession. Phone interviews will not be provided, although in special circumstances, remote video interview via Skype or equivalent technology, may be offered.

Bachelor of Science—Cardiovascular Sonography Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Cardiovascular Sonography Major Requirements (91 credits)

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3130	Research and Design for Health Care (3 credits)
BHS 3150	Principles in Leadership (3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits)
BHS 4110	Health Care and Aging (3 credits)
CVS 3001	Correlative Imaging and Anatomy (4 credits)
CVS 3000	Introduction to Cardiovascular Instruments (3 credits)
CVS 3010	Echocardiography I/Lab (3 credits)
CVS 3020	Echocardiography II/Lab (3 credits)
CVS 3030	Echocardiography III/Lab (4 credits)
CVS 3040	Ultrasound Physics I (4 credits)
CVS 3050	Ultrasound Physics Review (1 credit)
CVS 3060	Cerebrovascular Testing/Lab (3 credits)
CVS 3070	Peripheral Arterial Testing/Lab (3 credits)
CVS 3080	Venous Testing/Lab (3 credits)
CVS 3090	Abdominal Vascular Testing/Lab (3 credits)
CVS 4000	Clinical Prep and Review / Basic Life Support (3 credits)
CVS 4500	Clinical Externship I (9 credits)
CVS 4600	Clinical Externship II (9 credits)
CVS 4700	Clinical Externship III (9 credits)

Subtotal Required Courses: 91 credits

Total Degree Requirement: 121 credits

Bachelor of Science—Medical Sonography

General Sonography

Includes subspecialties in obstetrics and gynecology, organs of the body, and small parts (soft tissues and superficial glands), as well as neurosonology. Professionals in this field are called sonographers or medical sonographers. Sonographers use

diagnostic medical ultrasound to obtain images of internal organs such as the liver, gallbladder, bile ducts, pancreas, spleen, appendix, kidneys, and adrenal glands. Sonographers specializing in obstetrics and gynecology obtain images of the female pelvic organs and the fetus, while those specializing in neurosonology obtain images of the brain and its blood vessels. Sonographers working in all these specialties determine normal from abnormal situations and contribute to the making of diagnosis of pathologies affecting those organs.

Vascular Sonography

Vascular Sonography studies the anatomical and physiological characteristics of blood vessels (veins and arteries)in the human body. Professionals working in this specialty are called vascular sonographers. They use ultrasound and other specialized equipment to assess the anatomic, physiologic, and pathologic conditions of veins and arteries. Among the most common studies are those of the carotid arteries, arteries of the upper and lower extremities, abdominal blood vessels, and intracranial circulation. Exploration of these vessels helps to determine the presence of plaques and thrombus, the direction of blood flow, and the process of revascularization, as well as the patency of grafts. Vascular Sonographers play a very important role in assessing the blood vessels in special situations such a stroke, peripheral arterial disease, abdominal aortic aneurysm, portal hypertension, and deep vein thrombosis. They even can help to select native vessels for grafts to be used in cardiac surgeries.

Bachelor of Science—Medical Sonography (B.S. Medical Sonograpy)

The Medical Sonography program in Fort Lauderdale offers didactic and clinical training in the general and vascular sonography subspecialties as one integrated curriculum. At the end of the program, the student will be able to perform general (abdomen, small parts, and breast) obstetrical and gynecological, as well as vascular studies. The growing use of ultrasound and the need for sonographers with multiple credentials to accommodate new regulations in the health care field have set the ground for a comprehensive program that combines these two main specialties leading to the following credentials: RDMS (Registered Diagnostic Medical Sonographer) and RVT (Registered Vascular Sonography).

The Bachelor of Science in Medical Sonography Program was designed to prepare entry-level professionals in the fields of general and vascular sonography. During the first year, students take online course at the undergraduate level, as well as on-campus classes that include many hours each week in the training ultrasound lab. This is followed by online courses and a 12-month externship in a clinical site.

The Medical Sonography Program includes on-campus lectures; extensive, hands-on training in our ultrasound laboratory; online courses; and a 12-month focused or combined externship in a clinical laboratory setting. The graduating students will earn a Bachelor's degree in Medical Sonography. Students will take a combination of general courses in the health science field and focused core courses in the medical sonography field. Examples of general courses include subjects such as Writing for Medical Publication, Epidemiology, Biostatistics, and Principles and Practice of Management in Health Care. Examples of medical sonography courses include: Ultrasound Physics, Abdominal Sonography, Obstetrics and Gynecology Sonography, Small Parts Sonography, Arterial, Venous, and Cerebrovascular Testing. While on campus, the student will spend more than 500 hours in the training laboratory learning imaging skills and techniques and physiologic testing methods prior to the clinical externship experience.

In the second year, the student will complete an approximately 1,600-hour clinical training program while continuing to take online courses. The student may have the option to perform his or her clinical externship in a general, vascular, or combined general and vascular clinical experience, based upon his or her interests and demonstrated competencies. Graduates will be eligible to sit for the American Registry of Diagnostic Medical Sonography (ARDMS) registry examination. This exam is administered in two parts. The first part (SPI: Sonography Principles and Instrumentation) is geared toward evaluation of understanding of fundamental concepts in the technology of ultrasound. Students at Nova Southeastern University will be able to take this portion of the ARDMS exam upon successful completion of the Ultrasound Physics Course after the first term of the program. The second part of the exam—either the RVT or the RDMS—evaluates knowledge and understanding of anatomy, physiology, pathologies, quality assurance, examination protocols, etc. in the respective areas. Students will be eligible to take this portion of the ARDMS upon graduation.

Bachelor of Science—Medical Sonography Program Objectives

The Bachelor of Science—Medical Sonography Program aims:

1. Minimum Expectations "To prepare entry level general sonographers in the cognitive (knowledge) psychomotor (skills), and affective (behavior) learning domains" and "To prepare competent entry-level vascular technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains".
2. To graduate competent general and vascular medical sonographers who are qualified to perform a variety of standard and specialized diagnostic sonographic procedures
3. To ensure that graduates are qualified to take and successfully pass the American Registry of Diagnostic Medical Sonography (ARDMS) registry examination in general and vascular sonography
4. To prepare graduates for future leadership roles in diagnostic sonography laboratories ultrasound departments, education and industry
5. To enhance the student's academic skills for pursuing research studies in the field of diagnostic medical sonography.

Bachelor of Science—Medical Sonography Learning Outcomes

Students completing the Bachelor of Science—Medical Sonography Program will be able to:

1. Perform a variety of standard and specialized diagnostic general and vascular procedures
2. Qualify to sit for the American Registry of Diagnostic Medical Sonography (ARDMS) registry examination for the Registered Vascular Technologist (RVT) and the Registered Diagnostic Medical Sonographer (RDMS) credentials.
3. Communicate in a professional manner using written and electronic methods.
4. Demonstrate an awareness and appreciation of the empathy and respect in the delivery of culturally competent care health care.
5. Communicate and acknowledge the impact that the social and political environment has on the development of heath care policies and the implications, benefits and ramifications on the delivery of health care.
6. Demonstrate the knowledge and ability to search and retrieve information through electronic means.
7. Describe and demonstrate management / leadership skills and theories, and prepare the student to lead or manage effectively in a health care environment.
8. Demonstrate understanding of the political, social, legal and ethical issues that may be encountered and have an impact on areas of health care practice
9. Demonstrate knowledge through the application of health care models, theories and tools in written and discussion of the issues impacting health care delivery through academic and critical inquiry.

Technical Standards

The profession of diagnostic medical sonographer includes but is not limited to, the following physical, cognitive, auditory, and visual demands:

Physical: The ability to lift fifty pounds of weight, the ability to reach up, the ability to stand for up to 80% of the time, the ability to push or pull equipment and other devices such as wheelchairs or stretchers, manual dexterity to control the settings on computers and on the ultrasound equipment,

Cognitive: the ability to remember, recall, and analyze information, the ability to work in a noisy environment, the ability to remain focused despite interruptions, the ability to cope with potentially stressful situations,

Auditory: the ability to hear from both ears within normal auditory range, the ability to distinguish sounds within normal hearing range,

Visual: the ability to distinguish colors, the ability to monitor the environment and work in dimmed light.

Computer Literacy

Access to and ongoing use of a computer will be required for all students to complete the bachelor's degree program in general and vascular sonography successfully. Each student is expected to acquire computer hardware and software appropriate to the Bachelor of Science in Medical Sonography Program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and a requirement for graduation. All applicants must show evidence of computer skills through coursework or self-study prior to the end of the first term. Students may obtain instruction through the NSU Student Microcomputer Laboratory or other training facilities.

Bachelor of Science—Medical Sonography Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Medical Sonography Major Requirements (95 credits)

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3130	Research and Design for Health Care (3 credits)
BHS 3150	Principles of Leadership (3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits)
BHS 4110	Health Care and Aging (3 credits)
BMS 3130	Ultrasound Physics I/Lab (3 credits)
BMS 3120	Ultrasound Cross-sectional Anatomy (4 credits)
BMS 3230	Ultrasound Physics Review/SPI Exam (1 credit)
BMS 3110	Introduction to Diagnostic Medical Sonography (3 credits)
BMS 3300	Cerebrovascular Testing/Lab (4 credits)
BMS 3170	Venous Testing/Lab (4 credits)
BMS 3190	Peripheral Arterial Testing/Lab (4 credits)
BMS 3160	Abdominal Sonography I Testing/Lab (4 credits)
BMS 3260	Abdominal Sonography II Testing/Lab (4 credits)
BMS 3280	Clinical Preparation and Review (4 credits)
BMS 3140	Small Parts Sonography (4 credits)
BMS 3150	Obstetrics and Gynecology Ultrasound I (4 credits)
BMS 3250	Obstetrics and Gynecology Ultrasound II (4 credits)
BMS 4500	Clinical Externship I (6 credits)
BMS 4600	Clinical Externship II (7 credits)
BMS 4700	Clinical Externship III (8 credits)

Subtotal Required Courses: 95 credits

Total Degree Requirement: 125 credits

Program Outcomes

Program Outcomes (a year post-graduation) as reported to the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in the last report (Dec 2014) for Vascular Class of 2013:

Attrition rate.....10%
Credential Success Rate.....100%
Job Placement Rate 77.8%

Commission on Accreditation of Allied Health Education Programs

1361 Park Street
Clearwater, FL 33756
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Department of Speech and Language Pathology

The Department of Speech Language Pathology offers undergraduate, graduate and postgraduate courses of study. The programs foster the development of students' knowledge, leadership, and problem-solving skills through scientifically based curricula that incorporate current research, ethical decision making, and models of best practice.

Computer Requirements

All students in the department are required to have a computer meeting the minimum requirements listed below.

- 1.5 GHz minimum processor
- 1 GB RAM
- Video and monitor capable of 1024 x 768 resolution or better
- CD-ROM or DVD drive
- Full duplex sound card and speakers
- DSL or CABLE modem
- Internet connection with private Internet service provider (ISP) for access from home to the Internet
- Windows XP or above or Macintosh with Virtual Machine and Windows
- Microsoft Office 2003 or newer with PowerPoint, Word and Excel minimum or compatible office suite
- Surge suppressor recommended
- DVD/RW or CD/RW

Recommended option: laptop computer with wireless Internet capability and wireless router

Major

Speech-Language and Communication Disorders Major

The Bachelor of Science (B.S.) in Speech-Language and Communication Disorders (SLCD) is designed as a pre-professional degree and provides students with the ability to address some of the academic requirements for American Speech-Language-Hearing Association (ASHA) certification. Additionally, the program is designed to serve as a pathway to the master's degree in Speech-Language and Communication Disorders, at Nova Southeastern University or elsewhere, by providing the necessary prerequisite coursework. Depending on the state in which the student resides, graduates of the undergraduate program can apply for licensure as a speech-language pathology assistant, which permits them to work under the direction of a certified and licensed speech-language pathologist in education and health-related settings. Students will be provided with a research-based, academic foundation in the concepts and principals in speech, hearing, language, and human communication disorders. The curriculum provides the scientific basis for subsequent coursework in the area of assessment and treatment of various communication disorders, instills a research philosophy in communication sciences and disorders, and introduces the profession as a career. Additionally, students will develop critical thinking and problem solving skills in their courses.

B.S. in Speech-Language and Communication Disorders Learning Outcomes

After completing the program, students will be able to demonstrate the ability to:

1. Apply fundamental concepts of basic sciences (i.e., biological, physical, mathematics/statistics, behavioral and social sciences) to the speech-language and communication disorders discipline;
2. Demonstrate professional oral, and written language skills;
3. Describe basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, linguistic and cultural bases;
4. Describe speech, language, and hearing disorders;
5. Observe a diversity of clients with communication disorders in a variety of settings;
6. Apply appropriate technology to speech-language and communication disorders;
7. Demonstrate flexible and adaptive problem-solving skills in the scientific and clinical curriculum
8. Develop the research skills needed to be a lifelong learner; and
9. Discuss and demonstrate ethical and professional behaviors in the field of speech-language and communication disorders.

Program Completion Requirements:

To graduate, a student must (a) successfully complete all coursework and apply for degree conferral, (b) maintain a cumulative grade point average of 2.5 or higher and (c) meet all financial obligations to the University.

B.S. in Speech-Language and Communication Disorders Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

B.S. in Speech-Language and Communication Disorders Program Requirements (24 credits)

ESOL 2903	Cross Cultural Studies (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
Any SPCH course	(Oral Communication, 3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
BHS 4150	The Science of Sound (3 credits)
BIOL 1070	Basics of Human Heredity (3 credits)
PSYC 2300	Behavior Modification (3 credits)
BHS 4001	Individuals with Disabilities and Special Needs (3 credits)

B.S. in Speech-Language and Communication Disorders Major Requirements (42 credits)

CSAD 2010	Communication Disorders Through Film & Media (3 credits)
CSAD 3010	Phonetics (3 credits)
CSAD 3020	Anatomy & Physiology of Speech, Language, and Hearing (3 credits)
CSAD 3025	Language Science (3 credits)
CSAD 3030	Speech and Language Development (3 credits)
CSAD 3035	Foundations of Language and Literacy (3 credits)
CSAD 3040	Neuroanatomy (3 credits)
CSAD 3050	Hearing and Speech Science (3 credits)
CSAD 3060	Directed Observation (1 credit)
CSAD 3080	Introduction to Research in CSD (3 credits)
CSAD 4010	Evaluation of Speech and Language Disorders (3 credits)
CSAD 4030	Treatment of Speech and Language Disorders (3 credits)
CSAD 4050	Introduction to Audiology (3 credits)
CSAD 4070	Rehabilitation for People having Hearing Impairment (3 credits)
CSAD 4080	Capstone (2 credits)

Program Electives (24 credits)

Total Credits Required for Degree Completion: 120 credits

Minor

Speech-Language Pathology Minor

The speech-language pathology minor provides students with a basic understanding of communication sciences and disorders. Students will be provided with a research-based, academic foundation in the concepts and principals in speech, hearing, language, and human communication disorders. Students will develop critical thinking and problem solving skills in their courses. All courses offered in the minor are offered only in the evenings at the NSU main campus and online. All speech-language pathology courses are only available to degree seeking students.

Speech-Language Pathology Minor Requirements (18 credits)

All students minoring in speech-language pathology will need to complete the following:

CSAD 3010	Phonetics (3 credits)
CSAD 3020	Anatomy and Physiology of the Speech-Language and Hearing Mechanisms (3 credits)
CSAD 3030	Speech-Language Development (3 credits)
CSAD 3040	Neuroanatomy (3 credits)
CSAD 3050	Hearing and Speech Science (3 credits)
CSAD 4050	Audiology (3 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the General Education Program in the Academic Policies and Procedures section of this catalog.

B.S. in Speech-Language and Communication Disorders Program Requirements (24 credits)

ESOL 2903	Cross Cultural Studies (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
Any SPCH course	(Oral Communication, 3 credits)
EDUC 3350	Survey of Exceptional Student Education (3 credits)
BHS 4150	The Science of Sound (3 credits)
BIOL 1070	Basics of Human Heredity (3 credits)
PSYC 2300	Behavior Modification (3 credits)
BHS 4001	Individuals with Disabilities and Special Needs (3 credits)

B.S. in Speech-Language and Communication Disorders Major Requirements (42 credits)

CSAD 2010	Communication Disorders Through Film & Media (3 credits)
CSAD 3010	Phonetics (3 credits)
CSAD 3020	Anatomy & Physiology of Speech, Language, and Hearing (3 credits)
CSAD 3025	Language Science (3 credits)
CSAD 3030	Speech and Language Development (3 credits)
CSAD 3035	Foundations of Language and Literacy (3 credits)
CSAD 3040	Neuroanatomy (3 credits)
CSAD 3050	Hearing and Speech Science (3 credits)
CSAD 3060	Directed Observation (1 credit)
CSAD 3080	Introduction to Research in CSD (3 credits)
CSAD 4010	Evaluation of Speech and Language Disorders (3 credits)
CSAD 4030	Treatment of Speech and Language Disorders (3 credits)
CSAD 4050	Introduction to Audiology (3 credits)
CSAD 4070	Rehabilitation for People having Hearing Impairment (3 credits)
CSAD 4080	Capstone (2 credits)

Program Electives (24 credits)

Total Credits Required for Degree Completion: 120 credits

College of Nursing

COLLEGE OF NURSING

Dean's Message

Welcome to the College of Nursing. We hope the academic and educational resources in this catalog will assist you. The College of Nursing endeavors to educate future nursing professionals in the delivery of quality health care. Educating students in the field of nursing will help assure an adequate supply of nursing resources for the community. If you have any suggestions about the services we provide, the university or the community, please feel free to contact us.

Marcella Rutherford, Ph.D., M.B.A.
Dean, College of Nursing

Health Professions Division Board of Governors

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Health Professions Division Mission Statement

The mission of Nova Southeastern University Health Professions Division is to train primary care health practitioners in a multidisciplinary setting, with an emphasis on medically underserved areas.

The institutional premise is that health professionals should be trained in a multidisciplinary setting and, whenever possible, with integrated education. The university trains students in concert with other health profession students so that the various disciplines will learn to work together as a team for the good of the public's health. During their didactic work, students share campus facilities and, in some cases, have combined classes. In their clinical experiences, they work together in facilities operated by the university.

Furthermore, the division aims to educate health care practitioners who will eventually increase the availability of health care in areas of Florida that suffer from health care shortages. The division aims to alleviate some of these shortages by exposing the entire student body to the needs, challenges, and rewards of rural, underserved urban, and geriatric care. Existing curricula require all students to attend ambulatory care clerkships in rural or urban areas, or both, making Nova Southeastern University strongly oriented toward a pattern of training its students in areas geographically removed from the health center itself, and to the care of indigent and multicultural population groups.

In doing this, it developed training programs that address the primary care needs of the region's most medically underserved populations.

College of Nursing Vision Statement

NSU College of Nursing will be nationally and internationally recognized for preparing transformational leaders in health care who are valued for excellence in nursing practice, education, and research.

College of Nursing Mission Statement

The College of Nursing (CON) provides quality undergraduate and graduate educational programs within an atmosphere of scholarly inquiry, professional values, inter-professional collaboration, and community service.

Core Values

- Integrity is the quality of consistently adhering to a code of honesty, accountability and being ethically moral.
- Creativity is the ability to transcend traditional ideas, patterns, and rules, as well as having the capacity to construct meaningful new ideas, methods, and interpretations.
- Courage is the aptitude to uphold one's convictions and demonstrate confidence to speak and act in accordance with one's beliefs and responsibilities.
- Stewardship is advocating and protecting resources entrusted to one's care.
- Compassion is an active desire to alleviate another's distress through caring, empathy, supporting and helping others.
- Competence is having the expertise, knowledge, and skills to successfully and efficiently perform the roles of their profession.

Introduction to the College of Nursing

The College of Nursing is committed to providing the highest quality education to its students. The college offers a Bachelor of Science in Nursing degree via three tracks:

Bachelor of Science in Nursing—Entry Level Nursing Program
Bachelor of Science in Nursing—R.N. to B.S.N Program
Bachelor of Science in Nursing—R.N. to M.S.N Program

Notice on Professional Examinations

Credits and degrees earned from colleges within the state of Florida that are licensed by the State Board of Independent Colleges and Universities do not automatically qualify the individual to participate in professional examinations in Florida. The established procedure requires the appropriate state professional board to review and recognize the colleges granting the degrees prior to scheduling examinations. Additional information regarding Nova Southeastern University Health Professions Division and its Colleges of Osteopathic Medicine, Pharmacy, Optometry, Health Care Sciences, Nursing, Medical Sciences, and Dental Medicine may be obtained by contacting the State Board of Independent Colleges and Universities, Department of Education, Tallahassee, Florida. Any student interested in practicing a regulated profession in Florida should contact the Department of Business and Professional Regulation, 2009 Apalachee Parkway, Tallahassee, Florida 32301.

HPD Library

Service Units Learning Resources

The HPD Library is located on the first floor at the north end of the Terry Building Complex in the Library/Lab Building. The collection consists of more than 17,000 print volumes, 700+ electronic books, and 8,000+ active medical/health journal subscriptions in both print and digital formats. Many of the available electronic texts are required textbooks in various courses. In addition, more 210 medical/health databases are available 24/7 to meet the needs of the seven HPD colleges. All students have access to the full resources of all NSU libraries, both print and online. Medical/health databases include Medline, CINAHL, Clinical Key (which includes Procedures Consult and First Consult), Lexi-Comp, UpToDate, Web of Science, as well as many databases specific to individual programs. The Interlibrary Loan/Document Delivery Office will provide additional journal articles, books, and items not available digitally to any student at no cost. All resources are available through the HPD Library home page (*nova.edu/hpdlibrary*). In addition, free notary service is available during business hours.

Professional reference services are available via phone, text, email, or face to face. Seven professional librarians are available for help with searching, finding full-text journals, citation reference management, and research strategies. Each HPD college/program is assigned a subject specialist liaison librarian who works closely with faculty and offer assistance with specific class assignments.

Quiet study areas are designated in the library with a variety of seating options available, from large tables to individual carrels and comfortable seating. There are 48 individual/small group study rooms in the library and adjacent Assembly II Building. Rooms may be checked out for up to three hours. All rooms are equipped with white boards and Wi-Fi. A small teaching lab is available for group instruction and there is a large group study hall. Two 50-station computer labs are open when the library is open. In addition, a production studio is available for student use for video recording, and video editing.

A common area provides space for collaborative projects and is equipped with two Media:scape units or collaboration using multiple laptops with single or double monitor displays for group work. The library has both PC and Mac computers for student use, as well as iPads for short-term checkout, each loaded with 100 medical and production apps. Other

library services include binding, faxing, and scanning services; earplugs; sports equipment for the student lounge; school supplies for sale; and coffee service.

Hours of operation for the HPD Library, Study Center rooms in Assembly II, and adjoining computers labs are: Monday-Thursday: 7:00 a.m.–midnight; Friday: 7:00 a.m.–9:00 p.m.; Saturday and Sunday: 10:00 a.m.-midnight. From September through May, the study rooms in the Assembly II building are open 24/7. For more information, please call (954) 262-3106.

Students also have check out privileges at other NSU libraries, including the **Panza Maurer Law Library; the Oceanography Library; and the Alvin Sherman Library, Research, and Technology Center** (a joint-use facility with the Broward county Board of County Commissioners).

See the Libraries section of the student handbook for information about NSU's Alvin Sherman Library.

HPD Policies and Procedures

Acceptance of Professional Fees

The activities of students are not to be construed as the practice of medicine, optometry, pharmacy, audiology, occupational therapy, physical therapy, physician assistant, anesthesiologist assistant, cardiovascular sonography, medical sonography, respiratory therapy, nursing, dentistry, public health, nutrition/dietician, athletic training, or speech-language therapists. It is a violation of the law and contrary to the policy of this university for any unlicensed person to attempt to engage in the professional practice of health care. Students who are appropriately licensed in a profession may engage in that professional work to the extent provided by law.

AIDS Policy

The university has adopted the following AIDS policy: Nova Southeastern University Health Professions Division recognizes its responsibilities for the health and welfare its students and faculty and staff members, as well as its responsibilities to patients suffering from AIDS or harboring the human immunodeficiency virus (HIV). While the division does not subscribe to compulsory HIV testing either as a screening device or in individual cases, some rotation sites require this test and students must comply. As an institution of medical learning, the division provides each student/faculty/staff person knowledge to understand the AIDS problem, including AIDS testing, treatment, and counseling by community services. The division provides an annual seminar to all students, faculty members, and staff members. The division recommends universal precautions in all laboratory and clinical settings. The division reserves the right to alter this policy as new information on AIDS becomes available. Students should consult their physician for HIV testing or treatment immediately following exposure.

Background Checks

Accepted applicants and students are required to authorize the NSU Health Professions Division to obtain background check (s) as per adopted policy of March 2011. If the background check (s) reveal information of concern, which the NSU Health Professions Division may deem unfavorable, HPD will request that the individual provide a detailed written explanation of the information contained in this report, along with appropriate documentation (e.g., police reports). Students may also be required to authorize clinical training facilities that they are assigned to by the Health Professions Division to obtain a background check with the results reported to the clinical training facility.

Offers of admission will not be considered final until the completion of the background check(s), with results deemed favorable by the NSU Health Professions Division, and, where appropriate, by the clinical training facilities. If information received indicates that the student has provided false or misleading statements, has omitted required information, or in any way is unable to meet the requirements for completion of the program, then the admission may be denied or rescinded, the student may be disciplined or dismissed, or his or her enrollment terminated.

Acceptance to an NSU Health Professions Division program does not guarantee that a student with information of a concern will be accepted by clinical training facilities to which they may be assigned.

Following the initial background check (s), students will be asked annually to provide a certification relating to any convictions or guilty or no-contest pleas to any criminal offense other than traffic violations. Additionally, a Level 2 background check may be required of students completing certain rotations.

Certificate of Physical Examination

Students must have a certificate of physical examination completed by their physician. Forms will be provided to each matriculant as part of the admissions package or can be downloaded.

Students may request that the University Health Service perform these examinations. The University Health Service will make appointments in as timely a manner as possible. The appointments, once made, become an obligation of the student and must be kept.

These certificates (whether done privately or by the university) will be placed in an appropriate facility.

If the renewal date for physical requirements occurs during a term, **the student must renew prior to the beginning of the term in which the renewal date occurs.** Approved status must be valid for the entire semester in which the student enrolls. A student who experiences a health problem that may interfere with the ability to provide client care (e.g., surgery, fracture) must provide a release from their health care provider indicating the ability to participate fully in client care situations. “Light duty” is not permissible.

- A Nova Southeastern University Health Form will be included with acceptance materials. The completed, signed form must be presented according to the admissions department guidelines.
- Basic Life Support (BLS) certification must be valid prior to each term for the duration of the term.
- The student should carry a copy of their health/ hospitalization insurance card with them to the clinical agency, as well as their BLS card.

Core Performance Standards for Admission and Progress

The Nova Southeastern University Health Professions Division is pledged to the admission and matriculation of qualified students and wishes to acknowledge awareness of laws that prohibit discrimination against anyone on the basis of race, color, religion or creed, sex, pregnancy status, national or ethnic origin, non-disqualifying disability, age, ancestry, marital status, sexual orientation, unfavorable discharge from the military, veteran status, or political beliefs or affiliations.

Regarding those students with verifiable disabilities, the university will not discriminate against such individuals who are otherwise qualified, but will expect applicants and students to meet certain minimal technical standards (core performance standards) as set forth herein with or without reasonable accommodation. In adopting these standards, the university believes it must keep in mind the ultimate safety of the patients whom its graduates will eventually serve. The standards reflect what the university believes are reasonable expectations required of health professions students and personnel in performing common functions. Any exceptions to such standards must be approved by the dean of the student’s particular college based upon appropriate circumstances.

The holders of health care degrees must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. In order to carry out the activities described below, candidates for Health Professions Division degrees must be able to integrate consistently, quickly, and accurately all information received, and they must have the ability to learn, integrate, analyze, and synthesize data.

Candidates for degrees offered by the Health Professions Division must have, with or without reasonable accommodation, multiple abilities and skills including intellectual, conceptual, integrative, and quantitative abilities; interpersonal communication; mobility and strength; motor skills; hearing, visual, tactile, behavioral, and social attributes. Candidates for admission and progression must be able to perform these abilities and skills in a reasonably independent manner.

Intellectual, Conceptual, Integrative, and Qualitative Abilities

These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving—a critical skill—requires all of these intellectual abilities. Candidates and students must have critical thinking ability sufficient for good clinical judgment. This is necessary to identify cause-effect relationships in clinical situations and to develop plans of care. In addition, candidates and students should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. An individual is expected to be able to perform multiple tasks in a diverse, dynamic, highly competitive, and challenging learning environment. All individuals are expected to meet their program requirements on a satisfactory level as determined by HPD administration or the applicable college/program administration.

Interpersonal Communication

Candidates and students must be able to interact and communicate effectively with respect to policies, protocols, and process, with faculty, students, staff, patients, patient surrogates, and administration during the student's educational program. They must be able to communicate effectively and sensitively with patients. Communication includes not only speech, but also reading and writing. Candidates and students must also be able to communicate effectively and efficiently in all written forms with all members of the health care team. They must have interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Motor Skills

Candidates and students should have sufficient motor function to execute movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required to some health care professionals are cardiopulmonary resuscitation, administration of intravenous medication, the application of pressure to stop bleeding, the opening of obstructed airways, and the ability to calibrate and use various pieces of equipment. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. Physical therapy and occupational therapy students must be able to position patients for treatment, as well as teaching the teaching the functions involving gross and fine movements. Pharmacy candidates and students must have sufficient motor skills to weigh chemical and pharmaceutical (including intravenous) solutions, prepare prescriptions, and carry out sterile procedures.

Strength and Mobility

Candidates and students must have sufficient mobility to attend to emergency codes and to perform such maneuvers as CPR when required. They must have the physical ability to move sufficiently from room to room and to maneuver in small places. Osteopathic medical students must have the ability to position patients for the administration and delivery of osteopathic manipulative treatment in a variety of settings and to position and move patients when required. Pharmacy students must be able to move about within a pharmacy setting and a patient's room. Physical therapy and occupational therapy students must be able to administer treatment in a variety of settings and positions and move patients when required.

Hearing

Candidates and students should have sufficient auditory ability to monitor and assess health needs. They must be able to hear information given by the patient in answer to inquiries; to hear cries for help; to hear features in an examination, such as the auscultatory sounds; and to be able to monitor equipment.

Visual

Candidates and students must have visual ability sufficient for observation and assessment necessary in patient care. It must be consistent in many cases with being able to assess asymmetry, range of motion, and tissue texture changes. Osteopathic Medicine, Optometry, and Physician Assistant students must have sufficient visual ability to use ophthalmologic instruments. It is necessary to have adequate visual capabilities for proper evaluation and treatment integration. Candidates and students must be able to observe the patient and the patient's responses including body language and features of the examination and treatment. Pharmacy students must be able to interpret prescriptions and medical orders, as well as to inspect medicine for deterioration or expiration.

Tactile

Candidates and students must have sufficient tactile ability for physical assessment. They must be able to perform palpation, functions of physical examination, and/or those related to therapeutic intervention. Pharmacy students must be

able to measure and compound, sometimes transferring from container to container and to carry out sterile procedures. Dental students must be able to deliver appropriate treatment using high technology equipment such as dental drills and surgical instruments.

Behavioral and Social Attributes

Candidates and students must possess the emotional health required for full use of their intellectual abilities; the exercise of good judgment; the ability to take responsibility for their own actions with respect to policies, protocols, and process, with faculty, students, staff, patients, patient surrogates, and administration during the student's educational program; the prompt completion of all responsibilities attendant to the diagnosis and care of patients; and the development of mature, sensitive, and effective relationships with the patients. Candidates and students must be able to physically tolerate taxing workloads, to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that will be assessed during the admissions and education process.

Sensory

Osteopathic students and physician assistants are required to have an enhanced ability to use their sensory skills. These enhanced tactile and proprioceptive sensory skills are essential for appropriate osteopathic evaluation and treatment of patients.

Dress Code

The HPD section of *NSU Student Handbook* outlines the dress code for NSU health professions students and serves as the foundation for the CON's dress code. Students must adhere to the CON's detailed dress code as outlined. Students must maintain a neat and clean appearance that is reflective of individuals enrolled in a professional nursing program. Attire should convey a professional appearance whenever the student is on campus or at any off-campus educational site. The dress code is to be maintained at all times in the Administration Building, regional campuses, classrooms, laboratories, and all areas involved in providing patient care. Additionally, the dress code is applicable Monday through Friday from 8:00 a.m. until 5:00 p.m. in the library and in all other areas not mentioned already. (The dress code requirement for clinical settings may fall outside of the aforementioned time frame but will also be applicable.) Those failing to comply with the dress code may be dismissed from the classroom, campus, and/or clinical setting. A written warning describing the infraction will be entered into the student's file.

The following is professional attire from 8:00 a.m. to 5:00 p.m.

- Students must visibly wear NSU ID badges while on campus, at all clinical, practicum, immersions, or any other NSU-CON affiliated experience
- The nursing uniform consists of teal scrubs with the student's name and NSU embroidered on the left side of the scrub top.
- White clinical jackets should be worn by all CON students, participating in classroom, clinical, laboratory, externship, or research experiences.
- Students must wear scrubs OR teal polo shirts and khaki bottoms to clinical experiences in psychiatric-mental health nursing and community health nursing.
- Professional business dress includes: shirts, slacks, and appropriate shoes for men; slacks/skirts, blouses/ shirts, dresses, and appropriate shoes for women.
- Shoes: If wearing scrub sets, students must wear white shoes. If wearing khaki slacks/skirts and teal polo shirt or business attire, students must wear brown/black shoes.
- Additional attire may include long-sleeve white or gray T-shirts under the scrubs.

No institutional scrubs may be worn by any College of Nursing student at any time while on campus. Institutional scrubs are those that have the identification symbols or lettering from the institution that owns or issues them. Those scrubs are marked in locations that are easy to identify as being part of the inventory of that institution.

The following attire is never appropriate while the student is on campus: jeans, capris, leggings, shorts or cutoffs, mini-skirts (higher than mid-thigh), see-through clothing or halter tops, flip-flops, jogging or exercise clothing, hats or caps

unless for a religious reason, or inappropriately mismatched garments. Students will wear the prescribed uniform during designated clinical experiences and be neatly groomed. The specified uniform is worn when the student is in the hospital, nursing lab, or health care agency under the supervision of a professor. The scrubs and shirts are to be ordered and purchased through the NSU bookstore or the approved vendor. No other uniform is acceptable.

Identification Badges

Students must wear identification badges at all times while on campus. ID badges are not transferable. ID badges are issued at the Division Badge Room. These badges are given to the students at no charge except for replacement.

Identification Requirements and Fieldwork Prerequisites

An affiliated clinical/ fieldwork teaching facility may also require a student to pass a state of Florida Department of Health screening before rotation. Other requirements, which may be held by the affiliated facility include, but are not limited to, fingerprinting, criminal background check, urinalysis for drugs and alcohol, and proof of immunization. If a student does not meet all requirements held by the affiliated facility on the date specified by the CON, the student's placement will be canceled.

Immunization Requirements

Students must complete a mandatory immunization form, which must be signed by a licensed health care provider. The form can be found at *nova.edu/smc*.

Students in the Health Professions Division may be required to upload proof of immunizations to multiple online portals to satisfy the requirements of their programs and the training facilities where they are assigned.

The following immunizations/vaccinations are required of student at the Health Professions Division based on the current Centers for Disease Control (CDC) recommendations for Health Care Personnel:

Basic Immunizations

Every student is required to have had an immunization for, or show evidence of immunity to, the following diseases before matriculating at Nova Southeastern University:

Hepatitis B

- Both of the following are required: three vaccinations and positive surface antibody titer. (Lab report is required.)
- If the series is in progress, evidence of at least one shot must be provided, and the renewal date will be set accordingly.
- If the titer is negative or equivocal, the student must repeat the series and provide repeat titer report.

Influenza Vaccination

Administered annually. (An annual, seasonal influenza vaccine is required by most clinical sites.)

Measles, Mumps and Rubella (MMR)

One of the following is required: Proof of two vaccinations, or positive antibody titer for measles (rubeola), mumps, and rubella. (Lab report is required.)

PPD Skin Test (2 Step)

One of the following is required: negative two-step test or negative blood test (such as QuantiFERON Gold Blood Test or T-Spot Test) or if positive PPD results, provide a chest X-ray and/or prophylactic treatment information within the past 12 months.

Tetanus Toxoid, Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap)

All students are required to have had a Tetanus Toxoid, Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap) booster

prior to matriculation and must maintain immunity by continuing to remain current according to the CDC recommendations for health care personnel during their program. Due to the increased risk of pertussis in a health care setting, the Advisory Committee on Immunization practices highly recommends health care workers receive a one-time Tdap (ask your health care provider). Tdap is required, without regard to interval of previous dose of Tetanus-Toxoid (Td).

Varicella (Chicken Pox)

One of the following is required: Proof of two vaccinations or positive antibody titer. (Lab report is required.)

Arrangements: Students may request that the Student Medical Center or the NSU Clinic Pharmacy administer these immunizations. The Student Medical Center will make appointments in as timely a manner as possible. Students may call (954) 262-1270 to make an appointment. Once made, the appointment becomes the student's obligation and must be kept. For students at other NSU campuses, appointments may be scheduled with the NSU designated physician for their area.

HPD fee: The HPD general access fee covers a series of three Hepatitis B vaccines and an annual PPD screening. All other immunizations and health care services are the responsibility of the student.

Failure to comply: The university is not required to provide alternative sites for clinical practicum or rotations should immunization be a requirement for placement. Therefore, failure to comply with this policy may result in a student's inability to satisfy the graduation requirements in his or her program.

Relative to clinical rotation site requirements, students are expected to consult their specific college/program handbooks for compliance with any college/program specific requirements.

Netiquette

In a traditional classroom, students are reminded that behavior that disrupts the class or interferes with other students and their ability to learn is unacceptable. Any person engaged in disruptive behavior receives a written warning from the instructor. Students who continue to engage in disruptive behavior after this warning may be administratively withdrawn from the course.

Similarly, in an online course, any electronic postings, emails, or electronic messages that disrupt the class or interfere with learning goals and objectives are unacceptable. Electronic communication—the backbone of this online course—must be civil, respectful, and cordial at all times. Any posting that disrupts or interferes with learning will be removed, and the author of the posting will receive a written warning. A second disruptive posting will cause the author to be administratively withdrawn from the course.

Student Insurance Requirement

It is required that each Health Professions Division student including online M.P.H., athletic training undergraduate, exercise science, respiratory therapy, and speech-language pathology students must carry adequate personal medical and hospitalization insurance. (Other online program students may not be required to submit proof of personal medical and hospitalization insurance; students should check with their program office.) It is strongly suggested that students and their families avail themselves of the insurance plan obtainable through the university. Information about the policy can be obtained by accessing the website at *novastudentinsurance.com*. Please note that students will see a charge for health insurance appear on their student account as part of the academic registration process annually.

For those students who already have health insurance coverage and do not need the NSU-endorsed insurance plan, this charge will be removed from their account once proof of coverage has been submitted by completing the online waiver. To complete the waiver form, go to *novastudentinsurance.com*. The online waiver is the only process by which insurance charges will be removed and coverage will be cancelled. Students who fail to complete the waiver form and provide proof of health insurance by the stated deadline will not be eligible to have charges removed and will continue to be enrolled in the insurance plan endorsed by NSU. Waivers must be completed each academic year.

In view of health care reform and the Affordable Care Act, as well as all forms of health care insurance, we wish to advise

those students who have health care coverage from commercial carriers—or the marketplace health care exchanges from other states than Florida—to check with their carriers in order to be sure they have comprehensive health care coverage in the region of Florida where they will be attending classes or practicum rotations.

Visits to Other Institutions

Students in the College of Nursing may not visit, in an official or presumably official capacity as a College of Nursing student, any health-related institution (hospital, pharmacy, practitioner's office, clinic, etc.) or any health school without express permission of the dean. Visits to relatives or friends who are hospitalized are permitted, provided they are within visiting hours and all hospital rules are observed.

Eligibility for Florida R.N. Licensure and Required Disclosure

Applicants to the nursing program who meet all university and departmental requirements will be considered for admission. Final determination of eligibility to take the NCLEX-RN rests with the Florida Department of Professional Regulation and Board of Nursing. The licensure application requires disclosure of any criminal history and the disposition of all cases prior to board review. Entry into the nursing education program is the prospective student's decision based upon the knowledge that he or she may, or may not, be granted a nursing license. Applicants will notify the department chair of any arrest record prior to and during enrollment in the NSU College of Nursing and prior to application for licensure. The graduate is required to meet all reporting requirements of the Board of Nursing at the time of application to sit for the NCLEX-RN.

Florida Board of Nursing
4052 Bald Cypress Way
BIN CO2
Tallahassee, Florida 32399-3252
Phone: (850) 488-0595

Florida Nursing Students Association

The Florida Nursing Student Association (FNSA) is the professional organization for nursing students in the state of Florida. It serves to prepare nursing students to be a member of a professional organization and provides a voice for students at public, institutional and governmental bodies. The Nova Southeastern University College of Nursing has a district chapter of FNSA. All students are required to become members. Participation in various local, district, state, and national activities is encouraged.

Health Forms (Student Health Records)

The College of Nursing is required to submit to clinical sites satisfactory evidence that each program participant is free from contagious disease and does not otherwise present a health hazard to hospital clients, employees, volunteers, or guests prior to his or her participation in the program. Students will be required to follow the requirements of the College of Nursing and the clinical agencies. Performance standards for all College of Nursing students are identified in College of Nursing Student Handbook. If students are unable to meet the performance standards, they will be asked to obtain clearance from a physician or nurse practitioner prior to returning to the program. Each year students will provide updates to their health form, which can be completed at the Student Health Center.

Health Insurance

Nursing students are required to carry health insurance to cover their health care. Students must use this health insurance for any needs during their clinical/ class times. Any college student may be seen at the Student Health Center. Please bring a school identification card and an insurance card. At the end of the visit, students will receive a statement showing the services performed. Payment of all co-payments and deductibles is expected at the time services are rendered. Students who do have private health insurance must apply for a waiver at *nova.edu/insurancewaiver/*. Also, review this site for the coverage requirements for private insurance. Students are responsible for complying with this requirement. Some insurance policies require a primary care provider (PCP) designation. In such cases, please be sure to designate an NSU provider prior to visiting NSU's Health Care Center. For a list of providers and participating insurance carriers, please visit the Health Care Center website at *nova.edu/smc/find-a-specialist/*.

Textbooks and Supplies

The textbooks and other related reading materials and supplies required for nursing are available for purchase at the Nova Southeastern University campus bookstore or online. Many of the textbooks purchased for nursing will be purchased during the first nursing course and used throughout the program. Unless advised otherwise, the College of Nursing recommends that students do not purchase textbooks required at other course levels until they are ready to enroll in these courses. This will enable students to have the most current required editions. The department also suggests that students put their names in all of their textbooks. It is strongly recommended that students do not leave them unattended in the classroom or elsewhere.

Students should buy their books early. After the first few weeks of the semester, the bookstore returns all books that have not been purchased to the publishers. Books are expensive, but financial aid is available. Books may also be purchased online through the NSU bookstore. If students purchase online from another vendor they may be purchasing the incorrect edition.

In addition to the printed materials, students will also need the following supplies: a watch with a second hand and stethoscope. These are available for purchase at any local uniform shop or via the Internet. All students will be measured for an NSU lab coat during the orientation.

Students must have access to a computer with Microsoft Office software.

Computer Requirements

Computer Literacy

Access to and ongoing use of a computer will be required for all students to successfully complete the online programs and courses in the College of Nursing. Each student is expected to acquire computer hardware and software appropriate to the program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and necessary for graduation.

Computer Recommendations (minimum)

All students are REQUIRED to have ongoing access to a computer and an active account with an Internet service provider. Detailed information on the minimum recommended specifications can be found in the Hardware Guidelines for Computing at NSU at this website: *https://nova.edu/publications/it-standards/*.

Nursing Programs

The College of Nursing offers a Bachelor of Science in Nursing (B.S.N.) that can be earned through a entry level program or in a post-licensure R.N. to B.S.N program. In addition, the college offers an R.N. to M.S.N option, for those students who meet the requirement and wish to earn both the B.S.N and the M.S.N degree. The B.S.N. may be earned through a entry-level Bachelor of Science in Nursing track or an R.N. to B.S.N. completion track for registered nurses holding an associate's degree or diploma in nursing. Students may also earn the B.S.N. and M.S.N. together through the R.N. to M.S.N. track for registered nurses holding an associate's degree or diploma in nursing. All of the programs focus on developing nursing professionals to assume leadership roles in the complex health care environment.

Upon successful completion of the program, B.S.N, students may be eligible to apply for admission to continue their education in nursing in the online Master of Science in Nursing (M.S.N.) program and later in the Doctor of Nursing Practice (D.N.P.) program or the Philosophy of Science Degree (Ph.D.) in Nursing Education program.

Majors

Bachelor of Science in Nursing Learning Outcomes

The goal of the Nova Southeastern University Bachelor of Science in Nursing degree program is to graduate nurses prepared to:

- Integrate knowledge, theory, and evidence-based research into current nursing practice;
- Assume a leadership role as the registered professional nurse in health care systems and diverse community settings;
- Engage in activities for continued professional growth.

Program Outcomes

- Exhibit leadership that support health care policies that promote safe quality nursing care within complex health care systems.
- Integrate evidence-based practices that support decision-making in the delivery of nursing care.
- Evaluate the effectiveness of patient and family centered nursing care based on nursing theories and evidence-based practice.
- Incorporate the concepts derived from liberal education to build an understanding of the human experience.
- Incorporate technology and information management to promote a safe practice environment.
- Engage in inter-professional collaboration to improve population health while considering fiscal and material resources in the delivery of safe nursing care.
- Integrate legal, ethical and professional values within generalist nursing practice.
- Collaborate with the inter-professional health community to provide culturally and spiritually competent patient and family centered care in health promotion and disease/injury prevention.

Bachelor of Science in Nursing—Entry-Level Track

The entry-level track is designed for students who are seeking initial licensure as a registered nurse. Upon completion of 121 credits, the student is awarded a Bachelor of Science degree in Nursing (B.S.N.) and is eligible to make application to sit for the national licensure examination for registered nurses (NCLEX-RN). The entry-level nursing track curriculum is completed following a minimum of 39 credit hours (or equivalent quarter hours) of specific undergraduate coursework. This coursework may be completed at a community college or another university. Upon completion of the 39 credit hours, the student may apply to the nursing program.

The remainder of the 82 credit hours may be completed within seven terms (three terms per year) in the nursing program. Each term is a combination of didactic and clinical courses. The department requires matriculants to complete the entire program. Individual requests for advanced placement, transfer of credit, or credit for experiential learning will be reviewed in line with college requirements.

Bachelor of Science in Nursing—Entry Level Nursing Curriculum

Students in the Bachelor of Science in Nursing—Entry-Level Track are required to take 30 credit hours of general education coursework; 9 credit hours of prerequisites; and 82 credit hours of designated nursing courses, resulting in a total of 121 credit hours necessary for graduation. Pre-Nursing students should follow the College of Arts, Humanities and Social Sciences' curriculum plan for pre-nursing students. For more information about the pre-nursing specialization, refer to the *Specializations* section in the College of Arts, Humanities and Social Sciences of this catalog.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog. Students must complete the General Education Program requirements before matriculating into the Bachelor of Science in Nursing—Generic Entry level Program.

Prerequisite Requirements (9 credits)

In addition to completing 30 General Education Requirements, students must complete 9 credit hours of prerequisites coursework.

Bachelor of Science in Nursing—Entry-Level Major Requirements (82 credit hours)

Students must complete all pre- and co-requisite nursing courses and be enrolled in the final general BHS course prior to enrolling in NUR 4180. Students who withdraw from final B.H.S. courses prior to the final term must withdraw from the nursing courses.

PHS 4904	Advanced Anatomy and Physiology for Health Professions (4 credits)
NUR 3002	Introduction to Baccalaureate Nursing Education (3 credits)
NUR 3160	Introduction to Professional Nursing (3 credits)
NUR 3130	Foundations of Professional Nursing Practice (6 credits)
NUR 3005	Mathematical Applications for Nursing Practice (2 credits)
NUR 3029	Foundations of Health Assessment (3 credits)
NUR 3131	Problem-Solving Strategies for Nursing Practice (1 credit)
NUR 3032	Foundations of Pathophysiology (3 credits)
NUR 3180	Primary Concepts of Adult Nursing I (6 credits)
NUR 3191	Pharmacological Basis for Nursing Interventions I (2 credits)
BHS 3110	Health Care Ethics (3 credits)
NUR 4110	Primary Concepts of Adult Nursing II (6 credits)
NUR 3192	Pharmacological Basis for Nursing Interventions II (2 credits)
NUR 4130	Concepts of Maternal-Child Nursing and Families (5 credits)
NUR 4160	Genetics for Nursing (2 credits)
NUR 3050	Research Methodologies and Evidence-Based Practice(3 credits)
NUR 4250	Concepts of Psychiatric-Mental Health Nursing (4 credits)
NUR 4150	Population Nursing Practice (4 credits)
NUR 4172	Nursing in Today's Health Care Environment (3 credits)
NUR 4020	The Nurse as a Leader and Manager (3 credits)
NUR 4030	The Business of Health Care (3 credits)
NUR 4120	Advanced Concepts of Adult Nursing (5 credits)
NUR 4180	Nursing Practicum (6 credits)

Pre-Nursing Program

NSU's undergraduate Pre-Nursing Program is designed for students who wish to apply to NSU's Entry Level Nursing program (B.S.N.) and complete the B.S.N. program admission requirements at the university. These prerequisite courses are offered by NSU's College of Arts, Humanities and Social Sciences.

Bachelor of Science in Nursing—R.N. to B.S.N. Track

This option is designed for the registered nurse holding an associate's degree or diploma from a hospital-based nursing school licensed in the United States who now wants to obtain a B.S.N. Students must hold an active, unencumbered U. S. Registered Nurse license from a regional and nursing accredited program. Students may complete the general education requirements in conjunction with the R.N. to B.S.N. track. Students are awarded 61 credit hours of prior learning credits. Individual requests for advanced placement, transfer of credit, or credit for experiential learning will be reviewed in line with college requirements. Although the track may be completed in as little as four terms, some students elect to spread the coursework out over a longer period of time.

State Disclosure

Arkansas: Arkansas Higher Education Coordinating Board certification does not constitute an endorsement of any institution, course, or degree program. Such certification merely indicates that certain minimum standards have been met under the rules and regulations of institutional certification as defined in Arkansas Code §6-61-301.

Washington State: Nova Southeastern University is authorized by the Washington State Achievement Council and meets the requirements and minimum educational standards established for degree-granting institutions under the Degree-Granting Institutions Act. This authorization is subject to periodic review and authorizes Nova Southeastern University to offer field placement components for specific degree programs. The Council may be contacted for a list of currently authorized programs. Authorization by the Council does not carry with it an endorsement by the Council of the institution or its programs. Any person desiring information about the requirements of the act or the applicability of those requirements to the institutions may contact the Council at P.O. Box 43430, Olympia, WA 98504-3430.

Transfer of Course/Degree Credit to Other Institutions: The student should be aware that these degree programs may not transfer. The transfer of course/degree credit is determined by the receiving institution.

Bachelor of Science in Nursing—R.N. to B.S.N. Track Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog. General education courses may be completed at any accredited community college or university.

Bachelor of Science in Nursing—R.N. to B.S.N. Track Major Requirements (85 credits)

Additional Program Requirements (10 credits)

PHS 4904 Advanced Anatomy and Physiology for Health Professions** (4 credits)
NUT 3000 Nutrition for the Health Professional** (3 credits)
BHS 3110 Health Care Ethics (3 credits)

Nursing Courses (36 credits)

NUR 3000 Transition to Baccalaureate Nursing Education for Registered Nurses (3 credits)
NUR 3013 Transition to Professional Nursing (3 credits)
NUR 3020 Theoretical Foundation of Professional Nursing Practice (3 credits)
NUR 3030 Health Assessment (3 credits)
NUR 3031 Pathophysiology (3 credits)
NUR 3051 Introduction to Nursing Research (3 credits)
NUR 4021 Transformational Nursing Leadership (3 credits)

NUR 4031 The Business of Health Care in Complex Systems (3 credits)
NUR 4151 Population Health: Promotion, Prevention, and Disease Management (4 credits)
NUR 4161 Genetics Concepts (2 credits)
NUR 4171 Nursing and Health Care Trends (3 credits)

**Credit with R.N. license

Master of Science in Nursing—R.N. to M.S.N. Track

This R.N. to M.S.N. option is designed for students with an active, unencumbered U.S. Registered Nurse license from a regional and nursing accredited program. Although the track may be completed in as little as nine terms, some students may elect to spread the coursework out over a longer period of time. Students are required to complete the general education requirements prior to beginning the M.S.N. courses. Students will transition to the M.S.N. courses only after meeting the requirements for the M.S.N. program. The M.S.N. program offers three tracks—nursing education, nursing informatics, and health systems leadership. To obtain a clinical MSN in an advanced practice registered nurse (A.P.R.N.) role, the college offers preparation for certification as a family nurse practitioner (FNP) and a gero-adult acute care family nurse practitioner (GAAFNP). All programs focus on developing nursing professionals to assume leadership roles in the complex health care environment. These programs are for nurses with a baccalaureate degree in any field that have an R.N. license. The master's degree in nursing prepares the experienced nurse to advance in nursing leadership. There are three unique tracks as well as the APRN program to earning the M.S.N., each of which offers an in-depth education by faculty experts in these fields.

1. M.S.N. nursing education for nurses who have a desire to enhance their ability to transition to an academic or staff development position
2. M.S.N. health systems leadership for nurses who desire a position of leadership within the unique organizational environment of health care
3. M.S.N. nursing informatics for nurses interested in the field of nursing computer technology and information science
4. M.S.N. (clinical) APRN is for nurses who desire a position as a family nurse practitioner within the role of the advanced practice nurse

Master of Science in Nursing—R.N. to M.S.N. Track Program Goals

1. Integrate advanced knowledge, theory, and evidence-based research into current nursing practice
2. Assume leadership roles in healthcare systems, the diverse community, and the profession including areas of specialization
3. Engage in activities for continued professional growth
4. Builds on baccalaureate education and prepares graduates for advanced roles within the discipline of nursing

Master of Science in Nursing—R.N. to M.S.N. Track Learning Outcomes

MSN Program Outcomes

1. Exhibit leadership through collaboration to promote quality and safety for improved patient outcomes
2. Transform clinical and educational practice through the integration of evidence
3. Design innovative strategies to improve practice environments
4. Incorporate knowledge of ethical and legal issues relevant to advanced nursing roles
5. Advocate for equitable healthcare policies that improve population health
6. Promote a culture of lifelong learning embracing professional nursing standards and values

Education Track Outcomes

The student successfully completing the education track will be able to:

1. Utilize evidence in educational design, implementation, and evaluation
2. Employ instructional strategies that recognize the diverse learner
3. Implement assessment and evaluation methods in a variety of learning environments
4. Analyze the teaching, scholarship, and service roles of the nurse educator

Health Systems Leadership Track Outcomes

The student successfully completing this track will be able to:

1. Integrate leadership and systems theories to promote quality and safety within complex health systems
2. Utilize technology, evidence, and inter-professional collaboration to improve patient outcomes in complex health systems
3. Apply business principles and practices within a healthcare delivery model
4. Design change strategies to meet regulatory standards based on analysis of current trends and data

Nursing Informatics Track Outcomes

1. Examine the role of nursing informatics competencies and the professional standards on nursing informatics practice.
2. Develop skills necessary to implement health information technology for knowledge management and quality improvement.
3. Describe key legal, regulatory, and ethical issues related to the utilization of health information technology.
4. Apply leadership concepts to support the utilization of health information technology within the healthcare system.

Family Nurse Practitioner/Gero-Adult Acute Care Practitioner Outcomes

1. Design evidenced based advanced nursing care for the target population.
2. Integrate theory, evidence, clinical judgment and inter-professional perspectives to improve health care outcomes for the target population.
3. Employ information systems technology and inter-professional collaboration to optimize safe and cost-effective health care outcomes.
4. Develop, implement, and evaluate clinical prevention and population health activities within scope of practice.

Master of Science in Nursing—R.N. to M.S.N. Track Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog. General education courses may be completed at any accredited community college or university. Students must complete the General Education Program requirements before matriculating into the Bachelor of Science in Nursing—R.N. to M.S.N. program.

Master of Science in Nursing—R.N. to M.S.N. Major Requirements (85 credits)

12 credtis of Natural/Physcial Sciences granted with R.N. License.

Additional Program Requirements (7 credits)

PHS 4904	Advanced Anatomy and Physiology for Health Professions** (4 credits)
NUT 3000	Nutrition for the Health Professional** (3 credits)

Nursing Courses (36 credits)

NUR 3000	Transition to Baccalaureate Nursing Education for Registered Nurses (3 credits)
NUR 3013	Transition to Professional Nursing (3 credits)
NUR 3031	Pathophysiology (3 credits)
NUR 3030	Health Assessment (3 credits)
NUR 4151	Population Health: Promotion, Prevention, and Disease Management (4 credits)

NUR 4161	Genetics Concepts (2 credits)
NUR 4171	Nursing and Health Care Trends (3 credits)
NUR 4175	Transition to Graduate Studies (9 credits)
NSG 5000	Advanced Nurse Roles (3 credits)
NSG 5100	Advanced Theoretical Concepts of Nursing Research (3 credits)

**Credit with R.N. license

R.N. to M.S.N. (nonclinical or clinical): The student may complete a nonclinical specialization in nursing education, health systems leadership, or nursing informatics, or a clinical specialization as a family nurse practitioner or a gerontology-adult acute care nurse practitioner (refer to Graduate Nursing brochure). Students interested in the clinical specializations will be interviewed to determine eligibility based upon clinical work experience and expertise.

College of Psychology

COLLEGE OF PSYCHOLOGY

Dean's Message

I am pleased to extend you a warm welcome to Nova Southeastern University and the College of Psychology. We hope to guide you through a rich and transformative journey where you will grow personally, academically and socially on the road to becoming major contributors to our society. Our aim is to guide you in your development of skills needed to impact the quality of life of individuals, families, institutions, and communities.

Our College offers bachelor's degree programs in psychology and behavioral neuroscience, as well as graduate programs in clinical and school psychology, counseling, experimental psychology, forensic psychology, and general psychology, along with other specialized training programs. Our outstanding faculty guide undergraduate students not only in discovering and appreciating the factual content of their respective fields of study, but also in developing the critical thinking skills essential to consumers of science and the investigative skills of aspiring professionals, researchers, and clinicians.

The scope of psychology, counseling, neuroscience and related fields is expansive, as our disciplines describe and explain the effects of psychological processes from the level of individual brain cells to the scale of complex social interactions. The areas of expertise our faculty collectively possess are similarly diverse. Regardless of the specific field or subfield of study, however, our students benefit from the greater involvement that small classes provide and from the related opportunities for research collaborations and for experiential placements in community settings.

While the lasting memories of one's college years surely include many events beyond the confines of the classroom, one's day-to-day enjoyment while enrolled as a university student depends largely on his or her chosen field of study and engagement with its particular subject matter. The College of Psychology is proud to house two of the most engaging majors available to the students at our university and proud to figure positively in the memories our students of their college experience.

The College of Psychology prepares students for graduate programs in psychology, counseling, neuroscience, and health professions as well as to embark upon careers in any of the numerous fields that require the critical thinking and communication skills developed by our undergraduate curriculum, especially those careers that rely upon a keen understanding of human behavior and mental processes.

On behalf of the faculty and staff of the College of Psychology, I am pleased to welcome you to Nova Southeastern University. It is my sincere belief and hope that you will find your time here richly rewarding, both during your enrollment with us and, retrospectively, as alumni entering the workforce or continuing to pursue your educational goals.

Karen S. Grosby, Ed.D.
Dean, College of Psychology

Mission Statement

Nova Southeastern University's College of Psychology offers programs in psychology and neuroscience that develop students' critical thinking, research, and communication skills and foster our students' commitment to community engagement and lifelong learning.

Introduction to the College

The College of Psychology offers comprehensive education in the psychological and brain sciences and prepares students for direct entry into a professional career or for further education in the form of graduate or professional school.

The College hosts two distinct undergraduate majors and four undergraduate minors. Additionally, the College administers the Psychological Studies concentration for the interdisciplinary Bachelor of Science degree in Applied Professional Studies. Each of these majors and minors is housed within the College's Department of Psychology and Neuroscience. College policies, major and minor curricula, and additional information about the College of Psychology and its departments can be found in the appropriate sections of the undergraduate catalog (and, where applicable, the graduate catalog).

To earn a bachelor's degree from the College of Psychology, a student must complete a minimum of 120 credit hours, inclusive of major, minor, general education, and elective courses. Refer to *Graduation Requirements* in the Academic Policies and Procedures section of the catalog for further details on graduation requirements.

Undergraduate Programs

The Bachelor of Science degrees offered through the College of Psychology include the majors in psychology and behavioral neuroscience.

Majors

Behavioral Neuroscience Major

The behavioral neuroscience major focuses on the biological basis of behavior by exploring the role of the nervous system in normal and abnormal behavior, thought, and emotion. It uses a multidisciplinary approach to study the organization and function of the nervous system, from the molecular to the behavioral level, in such areas as development, sensation and perception, cognition, learning and memory, movement, sleep, stress, aging, and neurological and psychological disorders. The major provides students with a program of study that prepares them to pursue entry-level positions in such areas as biomedical research and the pharmaceutical industry or graduate education in such disciplines as neuroscience, psychology, pharmacology, medicine, and neurobiology.

Behavioral Neuroscience Major Learning Outcomes

A successful behavioral neuroscience graduate is expected to:

1. Demonstrate a foundation of knowledge in behavioral neuroscience;
2. Demonstrate the ability to independently develop a research proposal and evaluate the application and limitations of various methodologies;
3. Demonstrate the ability to communicate research findings from the field of behavioral neuroscience.

Behavioral Neuroscience Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Behavioral Neuroscience Major Requirements (57 credits)

Required Courses (45 credits)

BIOL 1500	Biology I/Lab (4 credits)
BIOL 4340	Cellular and Molecular Biology (3 credits)
CHEM 1300	General Chemistry I/Lab (4 credits) *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab (4 credits) *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
NEUR 2500	Introduction to Neuroscience/Lab (4 credits)
NEUR 2600	Introduction to Neuroanatomy (3 credits)
NEUR 2700	Research Methods and Data Analysis in Behavioral Neuroscience/Lab (4 credits)
NEUR 3000	Behavioral Genetics (3 credits)
NEUR 4880	Senior Seminar in Behavioral Neuroscience (3 credits)
PSYC 1020	Introduction to Psychology (3 credits) *OR* PYSC 1020H Introduction to Psychology Honors (3 credits)

Select 6 credits from the following courses:

NEUR 3100	Developmental Neuroscience (3 credits)
NEUR 3200	Drugs and the Brain (3 credits)

NEUR 4100	Neurobiology of Disease (3 credits)
NEUR 4990	Independent Study in Neuroscience (1–3 credits)

Major Electives (12 credits)

Select 12 credits from the following courses:

BIOL 4200	Neurobiology (3 credits)
CHEM 3650	Biochemistry/Lab (4 credits)
PHIL 3180	Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits) *OR* PHIL 3220 Philosophy of Science (3 credits)
PHYS 2350	General Physics I/Lab (4 credits)
PHYS 2360	General Physics II/Lab (4 credits)
PSYC 3900	Neuropsychology (3 credits)
PSYC 3920	Sensation and Perception (3 credits)
PSYC 4300	Psychophysiology (3 credits)
PSYC 4400	Hormones and Behavior (3 credits)

Psychology Major

The psychology major prepares students for both entry-level jobs in the workforce and advanced professional education in psychology. The psychology major exposes students to each of the major domains of psychology and provides students with a solid base of knowledge in each of these domains. It encourages students to integrate and apply knowledge, and allows flexibility in course selection to help students meet their career goals. The major emphasizes scientific research and application to significant areas of human activities.

Psychology Major Learning Outcomes

A successful psychology graduate is expected to:

1. Demonstrate an understanding of the major theories, principles, and concepts that underlie the following core areas of psychology:
   a. Learning, Memory, and/or Cognition
   b. Sensation, Perception, and/or Biological Bases of Behavior
   c. Human Development
   d. Clinical, Abnormal, and/or Personality
   e. Social Influences on Thoughts, Feelings, and Behaviors
   f. Research Measurement, Design, and Methodology;
2. Integrate and apply the major theories, principles, and concepts of psychology to address research and/or applied issues in the field of psychology using critical thinking skills, skeptical inquiry, and when possible, the scientific approach;
3. Present written psychological information in a clear, concise manner that is consistent with professional standards (i.e., APA format).

Psychology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Psychology Major Requirements (54 credits)

Core Courses (21 credits)

MATH 2020	Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
PSYC 1020	Introduction to Psychology (3 credits) *OR* PSYC 1020H Introduction to Psychology Honors (3 credits)

PSYC 2900 Introduction to Quantitative Psychology (3 credits)
PSYC 3000 Psychological Research Methods (3 credits)
PSYC 3710 History and Theories of Psychology (3 credits)
PSYC 3760 Multicultural Issues in Psychology (3 credits)
PSYC 4880 Senior Seminar (3 credits)

Major Foundation Courses (18 credits)

Learning, Memory, and/or Cognition (3 credits)

Select 3 credits from the following courses:

PSYC 2010 Cognitive Processes (3 credits)
PSYC 2300 Behavior Modification (3 credits)
PSYC 3520 Principles of Learning (3 credits)

Sensation, Perception, and/or Biological Bases of Behavior (3 credits)

Select 3 credits from the following courses:

PSYC 2100 Biological Bases of Behavior (3 credits)
PSYC 3200 Evolutionary Psychology (3 credits)
PSYC 3920 Sensation and Perception (3 credits)
PSYC 4300 Psychophysiology (3 credits)

Human Development (3 credits)

Select 3 credits from the following courses:

PSYC 2350 Life-Span Human Development (3 credits)
PSYC 2360 Adolescent Psychology (3 credits)
PSYC 2370 Early Childhood Growth and Development (3 credits)

Clinical, Abnormal, and/or Personality (3 credits)

Select 3 credits from the following courses:

PSYC 2020 Foundations of Clinical and Counseling Psychology (3 credits)
PSYC 3210 Personality (3 credits)
PSYC 3260 Abnormal Psychology (3 credits)

Social Influences on Thoughts, Feelings, and Behaviors (3 credits)

Select 3 credits from the following courses:

PSYC 2160 Social Psychology (3 credits) OR PSYC 2160H Social Psychology Honors (3 credits)
PSYC 3180 Stereotypes, Prejudice, and Discrimination (3 credits)
PSYC 3360 Psychology of Gender (3 credits)

Methods and Application (3 credits)

Select 3 credits from the following courses:

PSYC 3030 Experimental Psychology (3 credits)
PSYC 4800 Practicum in Psychological Research (3 credits)
PSYC 4810 Practicum in Community Psychology (3 credits)
PSYC 4840 Advanced Practicum in Psychology (3 credits)

Psychology Major Electives (15 credits)

At least 9 of these credits must be at the 3000/4000 level.

Note: PSYC 1410 may not be used to meet the psychology major elective requirement.

Minors

Applied Behavior Analysis Minor

The applied behavior analysis minor is designed to address the growing need for behavior analysts in the community. Coupled with a major in psychology (or other fields), students graduate with a strong professional preparation in applied and research domains. Students are required to complete at least 90 hours of practicum experience as part of the minor. Students desiring to become certified in the applied behavior analysis field must complete additional supervised training hours to accrue the number of hours required for certification. This minor can be combined with any major and minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Applied Behavior Analysis Minor Requirements (18 credits)

PSYC 1020	Introduction to Psychology (3 credits) *OR* PSYC 1020H Introduction to Psychology Honors (3 credits)
PSYC 2300	Behavior Modification (3 credits)
PSYC 3330	Principles of Applied Behavior Analysis (3 credits)
PSYC 3350	Assessment in Applied Behavior Analysis (3 credits)
PSYC 3370	Interventions in Applied Behavior Analysis (3 credits)
PSYC 4700	Practicum in ABA I (3 credits)

Behavioral Neuroscience Minor

The behavioral neuroscience minor is intended to offer students in-depth training in brain-behavior relations and biological aspects of psychology. Behavioral neuroscience explores new discoveries and insights in dynamic areas such as the neurological origins of consciousness, emotion, and psychopathology. This minor is especially helpful for psychology students preparing for graduate school and for students planning to enter the medical fields who have an interest in brain-behavior relationships. This minor can be combined with any major and minor except the behavioral neuroscience major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Behavioral Neuroscience Minor Requirements (17 credits)

NEUR 2500	Introduction to Neuroscience (4 credits)
NEUR 2600	Introduction to Neuroanatomy (3 credits)
NEUR 2700	Research Methods and Data Analysis in Behavioral Neuroscience (4 credits)
NEUR 3000	Behavioral Genetics (3 credits)

Select 3 credits from the following courses:

PSYC 3900	Neuropsychology (3 credits)
PSYC 3920	Sensation and Perception (3 credits)
PSYC 4300	Psychophysiology (3 credits)
PSYC 4400	Hormones and Behavior (3 credits)

Forensic Studies Minor

The forensic studies minor brings the insights of several disciplines to bear on the criminal investigation process. This minor provides a multi-disciplinary course of study (criminal justice, psychology, and chemistry) and is an appropriate minor for students seeking a basic foundation in the essentials of crime scene investigation and analysis. It is a complementary minor for students majoring in criminal justice, psychology, chemistry, or legal studies, and provides a foundation for criminal justice practitioners seeking a basic understanding of forensic techniques. This minor is also an appropriate course of study for students majoring in other disciplines who have an interest in law enforcement and continued study in

forensic science. This minor may be combined with any other major or minor. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Forensic Studies Minor Requirements (19 credits)

CHEM 1200	Survey of Forensic Science/Lab (4 credits)
CRJU 3220	Policing (3 credits)
CRJU 3400	Criminal Investigations (3 credits)
CRJU 3700	The CSI Effect: Media and Criminal Justice (3 credits)
PSYC 2450	Forensic Psychology (3 credits)
PSYC 3270	The Psychology of Criminal Behavior (3 credits)

Psychology Minor

The psychology minor is intended to provide students with an overview of psychology and the opportunity to explore areas of psychology that most closely correspond to their interests and goals. This minor can be combined with any major and minor except the psychology major and APS major with a concentration in psychological studies.

Psychology Minor Requirements (18 credits)

At least 9 credits in the minor must be at the 3000 level.

Core Courses (6 credits)

PSYC 1020	Introduction to Psychology (3 credits) *OR* PSYC 1020H Introduction to Psychology Honors (3 credits)
PSYC 3710	History and Theories of Psychology (3 credits) *OR* PSYC 3760 Multicultural Issues in Psychology (3 credits)

Minor Electives (12 credits)

Select 12 credits from the following courses:

PSYC 2010	Cognitive Processes (3 credits)
PSYC 2020	Foundations of Clinical and Counseling Psychology (3 credits)
PSYC 2100	Biological Bases of Behavior (3 credits)
PSYC 2160	Social Psychology (3 credits)
PSYC 2350	Life-Span Human Development (3 credits)
PSYC 3000	Psychological Research Methods (3 credits)
PSYC 3210	Personality (3 credits)
PSYC 3260	Abnormal Psychology (3 credits)
PSYC 3520	Principles of Learning (3 credits)

Farquhar Honors College

FARQUHAR HONORS COLLEGE

Dean's Message

Welcome to the Farquhar Honors College at Nova Southeastern University. The university is known for its smaller class sizes, innovative and interactive learning experiences, and commitment to engaging with the community beyond the classroom. The Honors College champions these standards by providing academic and co-curricular distinguished programs of excellence.

Highly motivated and high-achieving leaders discover that the Farquhar Honors College is the perfect fit to help advance their potential as undergraduate students at Nova Southeastern University. Open to all majors, the college provides a rich educational experience for a network of select students from across the university.

As a student in the Honors College, you will exemplify the merits of the college by being part of NSU's programs of excellence, including the Undergraduate Honors Program, which supports opportunities for hands-on learning, individualized study, community and campus leadership roles, faculty mentorship, study-abroad, and dynamic workshops and seminars.

The Farquhar Honors College is an inclusive learning environment that will encourage your creative thinking and stimulate your intellectual curiosity.

Don Rosenblum, Ph.D.
Dean, Farquhar Honors College

Introduction to the College

NSU's Farquhar Honors College provides a rich educational experience for highly motivated and high achieving undergraduate students through curricular and co-curricular activities. Students in the Honors College engage in unique, thought-provoking programs and courses; benefit from the mentorship of Honors faculty; and become part of an active network of current students and college alumni.

Students in the Honors College have opportunities to:

- question and discuss global issues from the perspective of multiple disciplines
- develop and participate in research and creative scholarly projects
- explore diverse local and international cultures
- enhance an appreciation for the arts
- contribute to team endeavors and serve in leadership roles in the classroom, in campus organizations, and in the larger community

College Mission Statement

The Farquhar Honors College provides engagement and academic enhancement opportunities for high ability undergraduate students seeking a stimulating, rigorous, and rewarding collegiate experience. The College serves as steward for academically-focused value-added university programs, mentors high-ability undergraduate students, champions student-faculty interaction, celebrates undergraduate research experience, affirms community and alumni affiliation and relationship, and collaborates with all Colleges to provide honors experience in each major.

Programs and Initiatives

Honors Program

The centerpiece of the NSU Farquhar Honors College is the Honors Program. Approximately 10% of students in each major are eligible to participate in unique academic and co-curricular workshops and events. Honors Program students may be recognized at graduation for completing distinct curriculum requirements. Additional scholarship support and priority registration are also available to students in the Honors Program. Students must maintain specific curricular and performance requirements, as noted in the catalog.

Undergraduate Student Symposium

The Undergraduate Student Symposium showcases the outstanding scholarship of NSU undergraduate students through student poster displays, oral presentations, performances, and film presentations. This annual event has encouraged students to test their own hypotheses and uncover new ways of interpreting the world around them. Many of the projects featured at the symposium lead to further research, publication, or presentation at national conferences. Participating students develop mentoring relationships with faculty and experience firsthand the process and rewards of research and discovery. To prospective employers and graduate schools, these students demonstrate a unique and valuable level of academic engagement and initiative. NSU undergraduate students of all disciplines are encouraged to participate and attend.

Distinguished Speakers Series

Each year, NSU brings to campus a series of prominent leaders in their fields through the Distinguished Speakers Series. These events are free, and some may be open to the public. Tickets are often required for admission. In conjunction with these speaking engagements, special companion events—including panel discussions, book signings, faculty lectures, and performing and visual arts productions—are often organized to reflect each speaker's field of expertise.

Scholars Program

This program provides qualified students of high merit with enhanced opportunities for networking, recognition, workshops, and additional resources.

Academic Honor Societies

Honor societies recognize student excellence, promote understanding of the major, and provide a means by which undergraduate students can network and move forward in their career. The Honors College manages multi-disciplinary honor societies and brings faculty advisors and student leaders together on issues of common cause.

Honors in Major

Honors in Major provides a distinct recognition for honors quality work within the senior year of a student's undergraduate major program.

Fellowships and Scholarships

Students pursuing selective national and international distinguished fellowships and scholarships may be mentored through the Farquhar Honors College.

College Learning Outcomes

The Honors College's initiatives and projects are aligned to the following distinguishing qualities: inquiry, innovation and creativity, global awareness and sensitivity, art and culture, and ethics and engagement. Faculty working with the Honors community are highly vested in fostering these attributes, which are reflected in the following learning outcomes. These outcomes serve as defining experiences for Honors College participation.

All students engaged with programs in the Honors College are expected to:

1. Demonstrate skills in scholarship and research necessary to succeed in graduate or professional school and/or the workforce;
2. Conduct logical analysis and synthesis of information;
3. Communicate results fluently both orally and in writing;
4. Recognize and apply multiple disciplinary approaches to analyzing and solving problems;
5. Make connections among issues, ideas, and methods learned inside and outside the classroom;
6. Engage and discuss international and cultural questions and issues;
7. Engage in problem resolution addressing local, national, international, and intercultural issues;
8. Analyze and appreciate cultural artifacts;
9. Demonstrate integrated knowledge and appreciation of the arts in their exploration of important questions and issues;
10. Demonstrate a commitment to ethical principles through engagement in the community;
11. Contribute to successful group and team endeavors including leadership roles in the classroom, campus organization(s), and the larger community;
12. Participate in an intellectual community committed to personal, professional, and community success and achievement.

Undergraduate Honors Program

The Undergraduate Honors Program fosters intellectual community both within and across academic disciplines by offering special coursework, reading groups, and workshops to help students prepare for graduate school, advanced research, study abroad, and post-baccalaureate fellowships. Students in the Undergraduate Honors Program connect classroom and community experiences, including travel study, social activities, speakers series, and campus events. Academically talented and motivated students are encouraged to apply to the Honors Program; students may apply prior to or while enrolled in an undergraduate degree program. The program is facilitated by the Farquhar Honors College.

The Honors Program provides a small annual scholarship to students admitted into the program. Honors students may be awarded additional institutional scholarships (including the Dean's Scholarship, which is different from the Honors College Scholarship). Students in the Honors Program may also participate in the Dual Admission Program, athletics, Razor's Edge, performing arts, and other distinctive programs.

For more information about the Undergraduate Honors Program, contact the Office of the Dean in the Farquhar Honors College at (954) 262-8408 or visit the Honors Program website at *honors.nova.edu*.

Honors Program Mission Statement

The Undergraduate Honors Program at Nova Southeastern University provides a rigorous academic environment through value-added curricular and co-curricular experiences for high achieving undergraduate students. The program encourages academic integrity and leadership, professional development, engagement with faculty and peers, exploration of disciplinary and multi-disciplinary inquiry, and establishment of community among members of the honors students and faculty.

Honors Program Vision Statement

The Undergraduate Honors Program at Nova Southeastern University will attract outstanding students to the university by providing a selective and challenging interactive and innovative academic community. Students will enhance critical thinking skills, personal and academic integrity, and professional development while participating in a rigorous academic environment emphasizing academic excellence through multi-disciplinary exploration, research and scholarship, leadership, and engagement, which will advance students to productive lives in a dynamic and global setting.

Honors Program Requirements

The Honors Program is a distinct program with requirements of the highest standard of academic achievement and conduct. The program, which includes intensive seminars and honors-level general education classes, is open to freshman, transfer, and current students. Entering students are invited to participate on the basis of prior academic performance. Approximately 10 percent of each year's entering student class is invited to participate. Admission to the university is a prerequisite for admission to the Honors Program.

The Honors Program requires a cumulative NSU GPA of 3.5 or higher to maintain standing. Citation requirements for the Honors Program must be completed at NSU. All Honors courses will be noted on the student's transcript and students who successfully complete the requirements of the program will be recognized for their accomplishment.

Academic progress in the Honors Program is reviewed twice yearly, and Honors students not meeting the criteria may be invited to petition to retain Honors status. Petitions are reviewed on a case-by-case basis. A report of academic misconduct for a student in the Honors Program requires a review meeting to determine whether the student's Honors status should be terminated. Such a change of status may affect the student's Honors College Scholarship eligibility. Please refer to the Student Conduct—Academic Integrity section of this catalog for more information.

Honors Citations

Students in the Undergraduate Honors Program may pursue one or both of the following citations.

General Citation in Honors

Students are required to complete 21 credits of Honors coursework (Honors seminars and/or Honors-level classes) by graduation in order to receive the General Citation in Honors. All Honors courses will be noted on the student's transcript and students who successfully complete the requirements of the General Citation in Honors will be recognized for their accomplishment. In order to receive a General Citation in Honors, students must hold a cumulative NSU GPA of 3.5 or higher at the time of degree conferral.

Research Citation in Honors

Students are required to complete 9 credits of Honors coursework, including HONR 4990 Independent Study. In addition, students are required to complete an Honors thesis. The Honors thesis allows students to pursue independent research under the direction of a faculty mentor and typically takes two academic years to complete. Students must submit and have their thesis proposal approved. Approval must be given by the faculty mentor/adviser and the dean of the Farquhar Honors College. The successful completion and defense of an approved honors thesis is required to receive the Research Citation in Honors upon degree conferral. All Honors courses will be noted on the student's transcript, and students who successfully complete the requirements of the Honors thesis will be recognized for their accomplishment. In order to receive a Research Citation in Honors, students must hold a cumulative NSU GPA of 3.5 or higher at the time of degree conferral.

Honors Courses

Honors courses are highly interactive, discussion-based, and hands-on courses, and are designed to enhance student critical thinking and problem solving skills. Honors students have direct interaction with faculty and may be invited to present portions of the course material to classmates. Honors courses might include a field trip or other hands-on learning experiences. Honors seminars (HONR XXXX) are unique courses offered only to students in the Honors College. Core courses offered as 'honors sections' (CHEM 1500H or BIOL 1500H, for example) address the same learning outcomes as non-Honors sections, and incorporate unique instructional methods such as problem based instruction, have smaller enrollment, and are limited to honors students.

Honors courses may be used to satisfy degree requirements for the major, general education requirements, and general electives.

For specific course information, visit *honors.nova.edu/honors/courses.html*.

H. Wayne Huizenga College of Business and Entrepreneurship

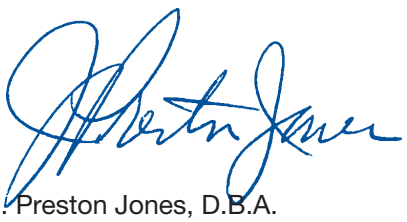
H. WAYNE HUIZENGA COLLEGE OF BUSINESS AND ENTREPRENEURSHIP

Dean's Message

Nova Southeastern University's H. Wayne Huizenga College of Business and Entrepreneurship does not just talk about the need to transform business education—it lives it. In an era when business schools are struggling to keep pace with the trends and challenges faced by the business world, NSU is pioneering the development of an integrated approach to leading and managing that places our graduates at the forefront of management application and theory.

The Huizenga College of Business is focused on creating value for you and your organization. Our theory-based, intuitive, and pragmatic approach brings all the necessary pieces together to create leaders and managers who develop a holistic approach to life and work. The Huizenga College of Business's value-driven management philosophy is a revolutionary approach to leading and managing that focuses on maximizing value over time. You will learn to balance your perspectives of world cultures; the United States and its subcultures; and what the customers, suppliers, third parties, employees, competitors, and owners of your organization value. You will learn how effective leaders and managers manage this juggling act and make good decisions that lead to positive results.

If you want to be on the cutting edge of a management education that delivers results for you and your organization in the 21st century, then the H. Wayne Huizenga College of Business and Entrepreneurship is for you. Our professors bring a mix of research and practical real-world business experience to the classroom. Our flexible and high-quality learning systems meet the needs of working professionals, full-time students, and organizations. The Huizenga College of Business at Nova Southeastern University is committed to serving as your partner in the business world, preparing you to be a strong competitor in this challenging marketplace. We want students who share our excitement about the future of leading and managing in the 21st century. Together, through this cutting-edge approach to management education, we will create a foundation of knowledge, skills, and experience on which you can build your future.



J. Preston Jones, D.B.A.
Dean, H. Wayne Huizenga College of Business and Entrepreneurship

Vision Statement

The H. Wayne Huizenga College of Business and Entrepreneurship is a worldwide provider of academic, professional, and practical education for individuals in business, academia, government, and nonprofit organizations. With a recognized reputation for quality, the Huizenga College of Business and Entrepreneurship's corporate relationships and modern technology provide superior real-world learning experiences for students.

Mission Statement

The mission of the H. Wayne Huizenga College of Business and Entrepreneurship is to advance the intellectual and career development of our diverse community of students.

To fulfill this mission, we:

- Partner with industry to offer entrepreneurial and experiential learning.
- Build student leadership skills in a global context.
- Emphasize critical thinking, corporate social responsibility, and ethical decision-making.
- Deliver accessible, innovative, relevant and student-centered learning.
- Capitalize on the business and research experience of our dedicated faculty.
- Leverage the unique international and service economy of southeastern Florida.

Philosophy

We believe in this fast-paced, rapidly changing world, individuals in business, academia, government, and nonprofit organizations need convenient, accessible, superior-value educational opportunities. Only by utilizing faculty possessing scholarly and professional qualifications, providing personal interaction with students, and effectively using technology, can we prepare students for success.

We can only realize our vision if all faculty and staff of the Huizenga College of Business, with the support of our other stakeholders, are dedicated to innovation in courses, curricula, delivery methods, and services to students according to the students' needs. The success of the Huizenga College of Business is contingent upon the ability of our faculty, staff, and students to apply newly-acquired knowledge to create value in their respective business, academic, government, and nonprofit organizations in particular, and society as a whole.

Principles

1. Conduct all of our academic affairs with integrity.
2. Be committed to the Huizenga College of Business and Entrepreneurship's vision, mission, philosophy, and principles.
3. Treat each other with dignity, respect, and sensitivity to create a caring environment that allows faculty, staff, and students to reach their greatest potential.
4. Stay focused on and anticipate the needs of our constituents to prepare our students to be "shapers" of our society, not mere "reactors."
5. Set high expectations for ourselves and demonstrate initiative, judgment, flexibility, and teamwork so we may fulfill our mission and vision.
6. Have a compelling desire to advance the knowledge of how organizations function, and apply this knowledge so that developing creative solutions is a major focus.
7. Have the vision, creativity, openness, and receptivity to challenge the status quo, to create learning and change,

and to view our role in the Huizenga College of Business and Entrepreneurship and the University as part of a dynamic process rather than a set of static, fixed relationships with related tasks.

8. Constantly try to understand the contributions we can make to the vision and mission of the organization, and to seek to contribute where there is a clear, comparative advantage.
9. Believe that lifelong learning, and the application of that learning, greatly enhances society.
10. Be culturally mature and demonstrate a strong appreciation for the diversity and the richness it brings to life and learning.

Vision, Mission, Principles, January 2016
H. Wayne Huizenga College of Business and Entrepreneurship

Introduction to the H. Wayne Huizenga College of Business and Entrepreneurship

Undergraduate majors in business fields are offered through the H. Wayne Huizenga College of Business and Entrepreneurship. Master's programs are listed in the Graduate Catalog. The information provided in this section addresses curricular requirements for majors and minors in business administration and related fields under the direction of the Huizenga College's faculty and undergraduate business program office. Curricula are subject to change. Students should consult their academic advisor regarding course selection and program planning.

Internships Across the Curriculum

Internships provide opportunities for experiential learning. They provide opportunities for students to experience their chosen work environment, to make connections with potential employers, and to network with colleagues and mentors. Students may earn credit for internships that complement and enhance their academic programs. The H. Wayne Huizenga College of Business and Entrepreneurship proudly offers credit-bearing internships in Accounting, Finance, Management, Marketing, Public Administration, and Sport and Recreation Management.

To learn more about internships, students should visit the Office of Career Development located on the first floor in the Carl DeSantis Building or call (954) 262-7376 for assistance. The process should be initiated as early as possible in the student's academic career, but a minimum of one semester prior to the term in which the internship is requested.

Ethics Across the Curriculum Policy

Nova Southeastern University faculty believes that a socially responsible institution should not limit the study of ethical issues only to coursework, but that such study should be an ongoing endeavor, enhancing the experience of the student. To this end, the faculty is committed to making the study of ethical issues an integral part of the bachelor's degree academic program. The faculty believes that by incorporating the study of ethics throughout the curriculum, students will give additional relevance and reality to their studies which will help them to become more responsible and productive citizens.

Business Programs

The Bachelor of Science in Business Administration degree program offered through the H. Wayne Huizenga College of Business and Entrepreneurship provides the following majors: accounting, business, finance, marketing, management, and sport and recreation management. The Bachelor of Science degree program is offered with a major in public administration.

Learning Goals

A successful graduate is expected to:

1. Demonstrate knowledge and skills in the core business disciplines;
2. Apply critical thinking skills to business situations;
3. Effectively communicate ideas and information in a business situation;
4. Apply ethical reasoning to decision making;
5. Demonstrate broad and deep knowledge in one business discipline.

Majors in Business

Accounting Major

The objective of the accounting major is to prepare students for accounting careers in the public and private sectors as well as to lay a foundation for more advanced accounting education. The major will also serve as the foundation for those preparing for the CPA examination. The State Board of Accountancy in Florida requires an additional 30 credits beyond the bachelor's degree to qualify for the examination. To meet this requirement, the Huizenga School offers a master's degree program designed to satisfy the CPA requirements. Students are cautioned to plan their schedule carefully since upper-division accounting courses are offered only once per year and may be offered only in the evening.

Accounting Major Learning Outcomes

1. Properly apply generally accepted accounting principles (GAAP) in the preparation of financial statements;
2. Use appropriate cost and managerial accounting techniques to prepare information for decision making;
3. Demonstrate knowledge of auditing techniques and processes;
4. Correctly apply relevant UCC and tax codes and regulations;
5. Demonstrate knowledge of accounting information systems including the design and documentation of such systems.

Accounting Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)*
ACT 2300	Managerial Accounting (3 credits)*
FIN 3010	Corporation Finance (3 credits)
INB 3550	International Business (3 credits)

ISM 3660	Management Information Systems (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 2150	Business Law I (3 credits)
MGT 4100	Business Ethics (3 credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)
MKT 3050	Marketing Principles and Applications (3 credits)
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Accounting Major Requirements (30 credits)

ACT 3030	Cost Management (3 credits)*
ACT 3050	Intermediate Accounting I (3 credits)*
ACT 3060	Intermediate Accounting II (3 credits)*
ACT 3070	Intermediate Accounting III (3 credits)*
TXX 3110	Federal Taxation I (3 credits)*
ACT 3150	Business Law II for Accountants (3 credits)*
ACT 4010	Advanced Accounting (3 credits)*
ACT 4050	Accounting Information Systems (3 credits)*
TXX 4110	Federal Taxation II (3 credits)*
ACT 4210	Auditing I (3 credits)*

* Students must earn a grade of C or higher in this course, or it must be repeated.

Business Major

The business major is aimed at students seeking a bachelor's degree in preparation for careers in business and related fields. This major provides general knowledge in business from both the theoretical and practical perspectives. Students learn the important ingredients that effective managers need to know to not only survive, but also succeed in today's business world. This major provides a solid foundation for admission into M.B.A. programs. Grades of C or higher are required for prerequisite courses marked with an asterisk (*). Students who choose this major cannot double major in management.

Business Major Learning Outcomes

1. Demonstrate an understanding of business principles and financial practices;
2. Apply interpersonal skills, individual, and group behavioral dynamics to business practices for motivating people in the workplace;
3. Demonstrate the ability to listen, absorb and research business information;
4. Translate business information into effective oral and written communication or action;
5. Demonstrate an understanding of the legal and regulatory issues facing organizations;
6. Recognize and apply current and emerging technology systems and applications to critically and creatively solve business problems;
7. Recognize and demonstrate the value of ethical and socially responsible decisions;
8. Demonstrate an ability to formulate organizational strategies;
9. Use quantitative skills effectively to solve business problems;
10. Demonstrate an understanding of the value of diversity as part of the increasing interaction between business and the global economy.

Business Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course

requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)*
ACT 2300	Managerial Accounting (3 credits)
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INB 3550	International Business (3 credits)
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MGT 4100	Business Ethics (3 credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)
MKT 3050	Marketing Principles and Applications (3 credits)*
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Select one course from each of the following areas (15 credits):

FIN Finance
HRM Human Resource Management
INB International Business
MGT Management
MKT Marketing

Select three upper-level courses from any of the following areas (9 credits):

ACT Accounting
ECN Economics
ENT Entrepreneurship
FIN Finance
HRM Human Resource Management
INB International Business
LED Leadership
MGT Management
MKT Marketing
SPT Sport and Recreation Management
REE Property Management

Finance Major

The finance major is designed for students who want to combine a broad approach to business studies with specialization in the discipline of finance. Specialized skills in finance are realized through the study of foreign currencies, investments, portfolio theory, financial management, money and banking, and economics. Graduates are well prepared to enter an M.B.A. program, professional programs such as law, and/or master's degree programs in finance. Graduates are also well prepared to work for a finance department or for a finance firm in the financial services industry, which includes investment brokerage, real estate, insurance, or financial planning.

Finance Major Learning Outcomes

1. Obtain and understand financial, economic and business information in the global market places;
2. Utilize modern software to perform complex computations and to develop financial models;
3. Interpret, analyze and synthesize qualitative and quantitative information;
4. Formulate financial, economic and business decisions;
5. Convey results using written and verbal communications;
6. Interact with others in a professional and ethical manner.

Finance Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)
ACT 2300	Managerial Accounting (3 credits)
FIN 3010	Corporation Finance (3 credits)
INB 3550	International Business (3 credits)
ISM 3660	Management Information Systems (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 2150	Business Law I (3 credits)
MGT 4100	Business Ethics (3 credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)
MKT 3050	Marketing Principles and Applications (3 credits)
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Finance Major Requirements (24 credits)

ECN 3025	Intermediate Macroeconomics (3 credits)
ECN 3210	Monetary Theory and Policy (3 credits)
FIN 3110	Financial Management (3 credits)
FIN 3120	Principles of Investments (3 credits)
FIN 3130	Securities Analysis (3 credits)
FIN 3150	Banking and Financial Institutions (3 credits)
FIN 4120	Advanced Financial Management (3 credits)
FIN 4550	International Finance (3 credits)

Management Major

The management major strategically supplies future leaders with human, technical, and conceptual knowledge and skills, by means of accessible, relevant, and entrepreneurial-spirited courses, so that they can effectively deal with the complexities of dynamic organizations in a multi-cultural and global context by:

- Planning proactively for uncertainty and risk
- Organizing and collaborating with innovation and creativity
- Leading legally, ethically, and in a socially responsible manner
- Evaluating with fairness and knowledge-based management.

Our students transform themselves and their organizations, and thereby create value for themselves, their organizations, their communities, and society as a whole.

Management Major Learning Outcomes

1. Apply management principles to organizational situations
2. Communicate effectively at the baccalaureate level orally and within writing in the management context.
3. Apply interpersonal skills, individual, and group behavioral dynamics to (simulated) business practices for motivating people in the workplace;
4. Apply ethical and socially responsible reasoning to management situations;
5. Apply current and emerging technology systems and applications to critically and creatively solve business problems;
6. Apply laws and regulations to the organizational context;
7. Formulate, implement and evaluate organizational strategies in simulated business scenarios;
8. Use quantitative skills effectively to solve business problems;

9. Identify the relationship between management concepts and the global marketplace.
10. Recognize diversity best practices in organizations.

Management Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)
ACT 2300	Managerial Accounting (3 credits)
FIN 3010	Corporation Finance (3 credits)
INB 3550	International Business (3 credits)
ISM 3660	Management Information Systems (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 2150	Business Law I (3 credits)
MGT 4100	Business Ethics (3credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)
MKT 3050	Marketing Principles and Applications (3 credits)
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Management Major Requirements (24 credits)

ENT 3100	Small Business Management (3 credits)
MGT 3100	Managing Conflict and Change (3 credits)
HRM 4160	Human Resource Management (3 credits)
HRM 4300	Managing Workplace Diversity (3 credits)
INB 4600	International Management (3 credits)
LED 3000	Introduction to Leadership (3 credits)
MGT 3020	Business Communication (3 credits)
MGT 3055	Managing Groups and Teams (3 credits)

Marketing Major

The mission of the undergraduate marketing major program is to help prepare students for marketing careers in today's changing marketplace, including careers in sales, brand management, sales promotion, customer service, direct marketing, event planning, advertising, and media planning. The program provides students with an understanding of the marketing process for creating, communicating, and delivering products and services that have superior value for customers and other stakeholders. Students are exposed to a range of current marketing practices in their curriculum, which consists of core foundational courses and marketing electives. This is supplemented by internships, competitive marketing projects, and participation in the student chapter of the American Marketing Association.

Marketing Major Learning Outcomes

1. Apply in detail the practices and principles common to the marketing function;
2. Apply marketing principles to analyze, plan, implement, and control marketing operations;
3. Demonstrate knowledge and comprehension of brand and marketing management as well as selling and integrated marketing communication;
4. Demonstrate proficiency in marketing research by making appropriate suggestions to resolve marketing problems and interpret marketing research results;
5. Suggest appropriate marketing strategies and tactics for domestic, global business and consumer markets;

6. Demonstrate competency of the Internet and interactive marketing technologies as a promotional medium and distribution channel.

Marketing Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)
ACT 2300	Managerial Accounting (3 credits)
FIN 3010	Corporation Finance (3 credits)
INB 3550	International Business (3 credits)
ISM 3660	Management Information Systems (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 2150	Business Law I (3 credits)
MGT 4100	Business Ethics (3credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)
MKT 3050	Marketing Principles and Applications (3 credits)
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Marketing Major Requirements (12 credits)

MKT 3060	Consumer Behavior (3 credits
MKT 4100	Integrated Marketing Communications (3 credits)
MKT 4700	Marketing Research (3 credits)
MKT 4710	Marketing Strategy (3 credits)

Marketing Concentration Requirements (12 credits)

Students are required to select one of the following Concentrations:

Marketing Management

MKT 3210	Professional Selling (3 credits)
MKT 3100	Services Marketing (3 credits)
MKT 3800	Entrepreneurial Marketing (3 credits)
MKT 3900	Marketing Internship (3 credits)

Digital and Social Media

MKT 3600	Digital and Search Engine Marketing (3 credits)
MKT 3605	Content Marketing (3 credits)
MKT 3610	Social Networking (3 credits)
MKT 3900	Marketing Internship (3 credits)

Professional Sales

MKT 3210	Professional Selling (3 credits)
MKT 3220	Advanced Selling (3 credits)
MKT 3230	Managing the Sales Force (3credits)
MKT 3900	Marketing Internship (3 credits)

Service and Retail Marketing

MKT 3100	Services Marketing (3 credits)
MKT 3110	Retail Management (3 credits)
MKT 3510	Customer Value and Relationship Marketing (3 credits)
MKT 3900	Marketing Internship (3 credits)

Global and Regional Markets

MKT 3320	International Marketing (3 credits)
INB 4300	Export/Import Trade (3 credits)
ECN 4300	International Economics (3 credits)
MKT 3900	Marketing Internship (3 credits)

Public Administration Major

The public administration major prepares students for career management positions in government organizations, and provides a foundation for advanced academic work in public administration, public policy, public management, and law. The public administration major is interdisciplinary in nature, drawing on subject matter as diverse as finance, economics, political science, psychology, management, labor relations, organizational behavior, public policy, and law. The Public Administration major emphasizes public service and ethical behavior and is appropriate for students planning graduate studies or careers in state government, local government, public health, public safety, and public sector human resource management.

Public Administration Major Learning Outcomes

The successful public administration graduate is expected to:

1. Demonstrate the ability to manage and serve a diverse workplace and citizenry.
2. Effectively manage organizational resources to accomplish public goals.
3. Properly translate state or local policy into a working program.
4. Articulate and apply methods for improving organizational performance.
5. Behave ethically and with integrity.
6. Communicate effectively in writing: Prepare clear, concise and well-organized written materials tailored to the audience's needs.
7. Communicate effectively in speech: Presents oral information accurately, clearly, concisely and persuasively tailored to the audience's needs.

Public Administration Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Major Requirements

Prerequisite Courses (12 credits)

MATH 2020	Applied Statistics (3 credits)
PHIL 3670	Social and Political Philosophy (3 credits)
POLS 1010	American Government and Politics (3 credits)
POLS 2100	State and Local Government (3 credits)

Core Courses (48 credits)

ACT 2300	Managerial Accounting (3 credits)
ECN 2025	Principles of Macroeconomics (3 credits)
HS 3315	Human Services and Cultural Diversity (3 credits)
MGT 4170	Organizational Behavior (3 credits)
PADM 2100	Principles of Management in Public Administration (3 credits)
PADM 3000	Public Policy (3 credits)
PADM 3100	Financial Accounting in the Public Sector (3 credits)
PADM 3200	Public Budgeting (3 credits)
PADM 3300	Public Sector Human Resource Management (3 credits)

PADM 4100	Data Driven Decision-Making (3 credits)
PADM 4200	Planning, Zoning, and Development (3 credits)
PADM 4500	Administrative Ethics in the Public Sector (3 credits)
PADM 4880	Senior Seminar (3 credits)
PADM 4950A	Internship in Public Administration (3 credits)
TECH 1110	Technology in Information Age (3 credits)
TECH 2130	Business Applications of Microcomputers (3 credits)

Major Electives (15 credits)

Students, with the assistance of their mentors, will select 15 credits from a wide selection of campus-wide course offerings as major electives. These electives should be selected to enrich each student's understanding of a field or area of study directly related to the management of state and local government organizations.

Select any 15 credits from the following courses:

Additional Internship Experience

PADM 4950B	Internship in Public Administration B (3 credits)

Health Care

BHS 3100	Current Issues in Health Care (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
ENVS 3101	Introduction to Public Health (3 credits)

Non-Profits

HS 1200	Introduction to Human Services Administration (3 credits)
HS 3120	Grant Writing and Management (3 credits)
HS 3130	Nonprofit Leadership (3 credits)
HS 3140	Fundraising and Philanthropy (3 credits)
HS 4250	Program Planning and Evaluation (3 credits)

Human Resource Management

MGT 3100	Managing Conflict and Change (3 credits)
HRM 4200	Organizational Development and Change (3 credits)
PADM 2200	Leadership of Public Organizations (3 credits)
PADM 4400	Public Sector Labor Relations (3 credits)
PSYC 3070	Stress Management (3 credits)
PSYC 3480	Industrial/Organizational Psychology (3 credits)

Sustainability

BSMP 3130	Environmental Economics (3 credits)
BSMP 3145	Archeological Oceanography (3 credits)
BSMP 3260	Resolving Environmental and Public Disputes (3 credits)
ENVS 3100	Environmental Issues (3 credits)
ENVS 4300	Industrial Ecology (3 credits)
LGST 3350	Environmental Law and Policy (3 credits)
SOCL 3600	Environmental Sociology (3 credits)

Coastal Management

BSMP 3210	International Integrated Coastal Zone Management (3 credits)
BSMP 3220	Marine Biosecurity (3 credits)
BSMP 3230	Maritime and Port Security (3 credits)
BSMP 3240	Ocean and Coastal Law (3 credits)
BSMP 3350	Marine Ecotourism (3 credits)
BSMP 3360	Marine Protected Areas (3 credits)

Geographical Information Systems

GEOG 2075	Geographical Information Systems (3 credits)
GEOG 3050	Applied Geographic Information Systems (3 credits)
GEOG 3075	Geospatial Field Methods (3 credits)
GEOG 4050	Space-Borne and Aerial Image Processing (3 credits)

Public Relations

COMM 3200	Principles of Public Relations (3 credits)
MGT 3020	Business Communications (3 credits)
PSYC 2330	Interpersonal Communication (3 credits)
SPCH 3120	Speech Communication for the Professions (3 credits)
WRIT 2100	Introduction to Professional Writing (3 credits)
WRIT 2200	Civic and Community Writing (3 credits)
WRIT 3150	Business Writing (3 credits)

Sport and Recreation Management Major

The sport and recreation management major, available to students enrolled in the Professional and Liberal Studies Program, prepares students to pursue careers in school and community-based programs, professional sports, and commercial and agency based programs.

Sport and Recreation Management Major Learning Outcomes

1. Work cooperatively with peers in solving cases, preparing and delivering presentations, and creating marketing, public relations, and sponsorship plans relative to sport;
2. Demonstrate a thorough understanding of economics and finance principles and theories as they apply to sport, including financing of intercollegiate athletics, stadium funding, economic impact analysis, revenue streams, ticketing, and fund-raising;
3. Create a complete public relations strategy to support an athlete or sporting event;
4. Demonstrate the ability to analyze legal issues in sport and recreation by applying proper legal theory and drawing from precedent setting cases;
5. Understand the importance of sport as social phenomena, and demonstrate knowledge regarding the roles that gender, race, age, and religion play in the sport context;
6. Recognize the value of ethical thinking and theory in decision making for leaders in sport;
7. Be prepared to apply leadership and planning skills to effectively manage a sport facility or event.

Sport and Recreation Management Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Business Core (39 credits)

ACT 2200	Financial Accounting (3 credits)*
ACT 2300	Managerial Accounting (3 credits)*
FIN 3010	Corporation Finance (3 credits)
INB 3550	International Business (3 credits)
ISM 3660	Management Information Systems (3 credits)
MGT 2050	Principles of Management (3 credits)
MGT 2150	Business Law I (3 credits)
MGT 4100	Business Ethics (3 credits)
MGT 4170	Organizational Behavior (3 credits)
MGT 4880	Business Strategy and Policy (3 credits)

MKT 3050	Marketing Principles and Applications (3 credits)
OPS 3880	Operations Management (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Sport and Recreation Management Major Requirements (24 credits)

MKT 3210	Professional Selling (3 credits)
SPT 1050	Introduction to Sport and Recreation Management (3 credits)
SPT 2050	Sport in Popular Culture (3 credits)
SPT 2150	Sport in Society (3 credits)
SPT 2950	Sport and Recreation Practicum (3 credits)
SPT 3150	Facility and Event Management (3 credits)
SPT 3925	The Business of College Sports (3 credits)
SPT 4850	Seminar in Sport and Recreation Management (3 credits)

OR

Sport and Recreation Management Internship Option (24 credits)

SPT 1050	Introduction to Sport and Recreation Management (3 credits)
SPT 2050	Sport in Popular Culture (3 credits)
SPT 2150	Sport in Society (3 credits)
SPT 3150	Facility and Event Management (3 credits)
SPT 3925	The Business of College Sports (3 credits)
SPT 4850	Seminar in Sport and Recreation Management (3 credits)
SPT 4951	Sport and Recreation Internship (6 credits)

Minors in Business

All students are encouraged to complete one or more minors to prepare them for careers or graduate studies. A minor requires the completion of 15–18 credits. If a student has taken one or more of the courses listed in the minor as part of his/her major, a minimum of three additional courses must be successfully completed to earn the minor. A maximum of six credits may be used from a student's major courses to satisfy a minor.

Accounting Minor

The minor in accounting provides students with practical accounting knowledge.

Accounting Minor Requirements (15 credits)

All students who minor in accounting are required to complete the courses listed below.

ACT 2200	Financial Accounting (3 credits)* **
ACT 2300	Managerial Accounting (3 credits)* **
ACT 3030	Cost Management (3 credits)* **
ACT 3050	Intermediate Accounting I (3 credits)**
TXX 3110	Federal Taxation I (3 credits)**

*Business students may satisfy this requirement, depending upon their major.

**Students must earn a grade of C or higher in this course, or it must be repeated.

Business Minor (non-business majors)

This minor is designed for students who want exposure to primary topical areas in business to help prepare them for jobs in business and industry.

Business Minor Requirements (18 credits)

All students who minor in business are required to complete the courses listed below.

MBA Track (18 credits)

ACT 2200	Financial Accounting (3 credits)
ECN 2020	Principles of Microeconomics (3 credits)
FIN 3010	Corporation Finance (3 credits)
MATH 2020	Applied Statistics (3 credits)
MGT 2050	Principles of Management (3 credits)
MKT 3050	Marketing Principles and Application (3 credits)

Generalist Track (15 credits)

Select five courses from any of the following prefixes:

ACT, ECN, ENT, FIN, HRM, INB, ISM, LED, MGT, MKT, OPS

Economics Minor

This minor will provide students with the opportunity to learn both micro and macro economic theory and methods. Students will be able to integrate theory and observations, and apply this knowledge in the real world by analyzing social problems and evaluating public policy solutions. Graduates with a minor in economics will be competent in key concepts of economic theory, analysis and computations.

Economics Minor Requirements (15 credits)

All students who minor in economics are required to complete the courses listed below.

ECN 3020	Intermediate Microeconomics (3 credits)
ECN 3025	Intermediate Macroeconomics (3 credits)*
ECN 4210	Econometrics I (3 credits)

Select two courses from the following:

ECN 3210	Monetary Theory and Policy (3 credits)*
ECN 4215	Econometrics II (3 credits)
ECN 4300	International Economics (3 credits)
ECN 4310	Economic Development (3 credits)
ECN 4320	Latin American and Caribbean Economics (3 credits)
ECN 4500	Principles of Health Economics (3 credits)
ECN 4600	Law and Economics (3 credits)
ECN 4910	Advanced Special Topics I (3 credits)
ECN 4920	Advanced Special Topics II (3 credits)

*Business students may satisfy this requirement, depending upon their major.

Entrepreneurship Minor

This minor in entrepreneurship is intended for students who desire a course of study to improve their understanding of the business environment and entrepreneurial issues related to a business or organization.

Entrepreneurship Minor Requirements (15 credits)

Students who minor in entrepreneurship are required to complete the courses listed below.

MGT 2050 Principles of Management (3 credits)*

Select four courses from the following:

LED 3000	Introduction to Leadership (3 credits)*
ENT 3100	Small Business Management (3credits)*
MKT 3210	Professional Selling (3 credits)*

ENT 4800	Entrepreneurship Experience (3 credits)
ENT 4400	Franchise Management (3 credits)

*Business students may satisfy this requirement, depending upon their major.

Finance Minor

This minor is designed for students who are already employed in, or who would like to pursue a career, with financial institutions.

Finance Minor Requirements (18 credits)

Students who minor in banking and finance are required to complete the courses listed below.

FIN 3010	Corporation Finance (3 credits)*

Select five courses from the following:

ECN 3025	Intermediate Macroeconomic (3 credits)
ECN 3210	Monetary Theory and Policy (3 credits)
FIN 3110	Financial Management (3 credits)
FIN 3120	Principles of Investments (3 credits)
FIN 3130	Securities Analysis (3 credits)
FIN 3150	Banking and Financial Institutions (3 credits)
FIN 4120	Advanced Financial Management (3 credits)
FIN 4550	International Finance (3 credits)

*Business students satisfy this requirement.

Human Resource Management Minor

This minor is designed for students who are already in or would like to be employed in the fields of personnel, training and development, labor relations, or related areas.

Human Resource Management Minor Requirements (15 credits)

Students who minor in human resource management are required to complete the courses listed below.

MGT 2050	Principles of Management (3 credits)*

Select four courses from the following:

HRM 4160	Human Resource Management (3credits)*
MGT 4170	Organizational Behavior (3 credits)*
HRM 4200	Organization Development and Change (3 credits)
HRM 4250	Strategic Human Resource Management (3 credits)
HRM 4300	Managing Workplace Diversity (3 credits)
HRM 4650	International HR Management (3 credits)
HRM 4700	Seminar in Current HR Issues (3 credits)
HRM 4850	Reading in HR Management (3 credits)

*Business students may satisfy this requirement, depending upon their major.

International Business Minor

This minor is designed for students employed by, or desiring employment in, multinational companies. Exporters, importers, freight forwarders, customs brokers, transportation firms, wholesalers, or manufacturers should choose this minor.

International Business Minor Requirements (15 credits)

Students who minor in international business are required to complete the courses listed below.

MGT 2050	Principles of Management (3 credits)*

Select four courses from the following:

MKT 3320	International Marketing (3 credits)
INB 3550	International Business (3 credits)*
INB 4300	Export/Import Trade (3 credits)
FIN 4550	International Finance and Banking (3 credits)*
INB 4600	International Management (3 credits)*

*Business students may satisfy this requirement, depending upon their major.

Leadership Minor

The minor in leadership is intended for students who desire a course of study to improve their understanding of the impact of effective leaders along with an examination of contemporary leadership models and theories describing and explaining the leadership process.

Leadership Minor Requirements (15 credits)

Students who minor in leadership are required to complete the courses listed below.

LED 3000	Introduction to Leadership (3 credits)*
MGT 2050	Principles of Management (3 credits)*

Select three courses from the following:

LED 3200	Creativity and Workplace Performance (3 credits)
LED 4100	Great World Leaders (3 credits)
LED 4200	Current Issues in Leadership (3 credits)
LED 4250	Self Leadership in Organizations (3 credits)
LED 4300	Situational Leadership (3 credits)

*Business students may satisfy this requirement, depending upon their major.

Management Minor

The Management program strategically supplies future leaders with human, technical, and conceptual knowledge and skills, by means of accessible, relevant, and entrepreneurial-spirited courses, so that they can effectively deal with the complexities of dynamic organizations in a multi-cultural and global context by:

- Planning proactively for uncertainty and risk
- Organizing and collaborating with innovation and creativity
- Leading legally, ethically, and in a socially responsible manner
- Evaluating with fairness and knowledge-based management.

Our students transform themselves and their organizations, and thereby create value for themselves, their organizations, their communities, and society as a whole.

Management Minor Requirements (15 credits)

Students who minor in management are required to complete the courses listed below.

MGT 2050	Principles of Management (3 credits)*

Select four courses from the following:

LED 3000	Introduction to Leadership (3 credits)

MGT 2510	Supervisory Skills (3 credits)
MGT 3020	Business Communication (3 credits)
MGT 3055	Managing Groups and Teams (3 credits)
MGT 3100	Managing Conflict and Change (3 credits)
MGT 4100	Business Ethics (3 credits)*
MGT 4170	Organizational Behavior (3 credits)*
HRM 4160	Human Resource Management (3 credits)
HRM 4300	Managing Workplace Diversity (3 credits)
INB 4600	International Management (3 credits)

*Business students may satisfy this requirement, depending upon their major.

Marketing Minor

This minor is designed for students who are employed in the fields of advertising, sales, promotion, retail, wholesale, or related areas or for those who would like to pursue a career in marketing.

Marketing Minor Requirements (15 credits)

Students who minor in marketing are required to complete the courses listed below.

MGT 2050	Principles of Management (3 credits)*
MKT 3050	Marketing Principles and Application (3 credits)*

Select three courses from the following:

MKT 3060	Consumer Behavior (3 credits)
MKT 3100	Services Marketing (3 credits)
MKT 3110	Retail Management (3 credits)
MKT 3210	Professional Selling (3 credits)
MKT 3220	Advanced Selling (3 credits)
MKT 3230	Managing the Sales Force (3credits)
MKT 3320	International Marketing (3 credits)
MKT 3510	Customer Value and Relationship Marketing (3 credits)
MKT 3600	Digital and Search Engine Marketing (3 credits)
MKT 3605	Content Marketing (3 credits)
MKT 3610	Social Networking (3 credits)
MKT 3800	Entrepreneurial Marketing (3 credits)
MKT 3900	Marketing Internship (3 credits)
MKT 4100	Integrated Marketing Communication (3 credits)
MKT 4700	Marketing Research (3 credits)
MKT 4710	Marketing Strategy (3 credits)

*Business students satisfy this requirement.

Property Management Minor

The need for qualified professionals in the property management industry in today's market continues to grow. The minor in property management develops a broad array of skills preparing students in real estate leasing, residential property management, commercial property management, and facilities management. It also offers practical training through a provided internship. The curriculum is designed by industry professionals to provide students with the necessary skills to excel in property management.

The Property Management minor is also focused on providing students with the educational resources necessary to successfully complete property management assignments and projects with the support of the business community. Industry professionals provide mentoring to students enrolled in the program to help ensure their successful entry into the profession. Case study competitions that are judged by industry professionals are used to help facilitate and develop

useful oral and written presentations by students. Site visitations and guest lectures also serve a vital role as part of the experiential learning environment.

Property Management Minor Requirements (18 credits)

REE 3301 Real Estate Principles, Practices and Law
REE 3900 Property Management Internship
REE 4302 Residential Property Management
REE 4303 Commercial Property Management
REE 4304 Facilities Management
REE 4305 Property Portfolio and Asset Management

Public Administration Minor

The public administration minor is designed to provide students with an overview of employment in government, and public service.The public administration minor introduces students to core concepts in the field and provides students with the opportunity to develop specialized knowledge in the areas of organizational behavior, management, budgeting, and public policy. This minor is appropriate for students planning careers in public service. The public administration minor also provides a foundation for continued studies in public administration, law, and human service disciplines. This minor may be combined with any other major or minor except the public administration major. A minimum of 9 credits must be exclusive to the minor and cannot be counted toward any other majors/minors/certificate programs.

Public Administration Minor Requirements (18 credits)

ACT 2300	Managerial Accounting
MGT 4710	Organizational Behavior
PADM 2100	Principles of Management in Public Administration
PADM 3000	Public Policy
PADM 3200	Public Budgeting
POLS 2100	State and Local Government

Sales Minor

The sales minor offers a set of classes aimed at educating the student in sales concepts so important in today's job market. The student will take a marketing course plus four sales courses that combine sales concepts with real-world sales techniques. By taking full advantage of the state-of-the-art Sales Institute at Nova Southeastern University, students will leave with a real-world skill. Sales skills are a necessary part of all occupations, whether one is selling him or herself, an idea, a new business proposal, or to a new client. All NSU students would benefit from this valuable business education as a minor or major, regardless of the student's chosen discipline.

Sales Minor Requirements (15 credits)

Students who minor in sales are required to complete the courses listed below.

MKT 3050	Marketing Principles and Applications (3 credits)*
MKT 3210	Professional Selling (3 credits)*
MKT 3220	Advanced Selling (3 credits)
MKT 3230	Sales Force Leadership (3credits)
MKT Elective	(MKT 3900 preferred) (3 credits)

*Business students may satisfy this requirement, depending upon their major.

Sport and Recreation Management Minor

This minor is designed for students who will be associated with sport in the course of their careers, be it through business, education, coaching, athletic training or other opportunities.

Sport and Recreation Management Minor Requirements (15 credits)

Students who minor in sport and recreation management are required to complete the courses listed below.

SPT 1050	Introduction to Sport and Recreation Management (3 credits)

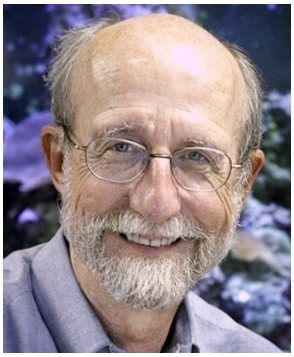
Select four courses from the following:

SPT 2050	Sport in Popular Culture (3 credits)
SPT 2150	Sport in Society (3 credits)
SPT 2350	Ethics in Sport and Recreation Management (3 credits)
SPT 3150	Facility and Event Management (3 credits)
SPT 3550	Principles of Economics and Finance in Sport (3 credits)
SPT 3650	Sport Marketing (3 credits)
SPT 3925	The Business of College Sports (3 credits)
SPT 4550	Legal Aspects of Sport and Recreation (3 credits)

Halmos College of Natural Sciences and Oceanography

HALMOS COLLEGE OF NATURAL SCIENCES AND OCEANOGRAPHY

Dean's Message

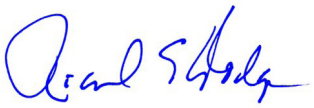


Welcome to Nova Southeastern University and to the Halmos College of Natural Sciences and Oceanography.

At NSU, students enroll in a diverse array of majors and minors, working closely with outstanding faculty members and learning resources, to pursue their educational goals. We intend to serve all students with high-quality academic experiences that support their personal and professional development.

In the Halmos College of Natural Sciences and Oceanography, we focus on providing information and developing critical thinking to prepare our students in their programs of study with the tools and specialized knowledge necessary for success. Thus students receive a comprehensive education that helps them directly enter the workforce after graduation or continue their education in graduate or professional school. It is essential that students are prepared for the challenges of an increasingly diverse and complex global society. We aim to provide the broad sciences background and values that will support a lifetime of well-rounded, knowledgeable, and engaged citizenship. Our College also contributes to the NSU comprehensive general education program with coursework and complementary combinations of specializations, minors, and double majors that will satisfy academic, professional, and personal needs. We support our students as they pursue their classroom, field, independent, and research endeavors.

The Halmos College of Natural Sciences and Oceanography as part of Nova Southeastern University provides opportunities and experiences throughout your academic endeavors. It is an exciting place to be with programs and courses in mathematics, chemistry, physics, biology, and marine and environmental sciences. On behalf of our faculty and staff, I extend best wishes for a successful academic year and continued progress toward your personal and professional goals.



Richard E. Dodge, Ph.D.
Dean, Halmos College of Natural Sciences and Oceanography

Mission Statement

The mission of the Halmos College of Natural Sciences and Oceanography is to carry out innovative, basic, and applied research and to provide high quality graduate and undergraduate education in a broad range of disciplines including natural, ocean, environmental, and biological sciences (including pre-medical and pre-health professions), mathematics, chemistry, and physics.

Introduction to the College

The Halmos College of Natural Sciences and Oceanography provides multidisciplinary science education that prepares students for:

- Professional Careers
- Further exploration through graduate and Professional study
- Responsible citizenship

The college houses six graduate majors (M.A., M.S., and Ph.D.), five undergraduate majors, eight undergraduate minors, and three graduate certificate programs.

This section includes learning outcomes and curricula for all undergraduate majors and minors offered by the Halmos College of Natural Sciences and Oceanography. All other college information i.e., admissions, general policies, graduate programs, and program delivery, is included in other applicable catalog sections

To receive a bachelor's degree from the Halmos College of Natural Sciences and Oceanography, students must complete at least 120 credits, including major, minor, general education, and elective coursework. At least 30 credits of upper level (3000 level and higher) credits, including prior learning, must be part of the minimum required 120 credits. Of these 30 upper level credits, at least 15 credits must be included in coursework for the major. For complete graduation requirements, see the Graduation Requirements section in Academic Resources and Procedures.

Regular communication between students and their academic advisors is strongly recommended to ensure that each student is successfully moving toward graduation. Students are encouraged to closely monitor their progress toward graduation requirements (2.25 or higher GPA within the major and 2.0 or higher cumulative GPA) at 30 earned credits, 60 earned credits, and 90 earned credits. Bachelor's Degree conferral will take place upon completion of all course and degree requirements.

The Halmos College of Natural Sciences and Oceanography comprises of four departments: Biological Sciences; Chemistry and Physics; Marine and Environmental Sciences; and Mathematics. Several majors and minors are housed in each department.

Department of Biological Sciences

The Department of Biological Sciences provides students with a strong foundation in biology at the undergraduate and graduate levels with opportunities for a bachelor's degree and master's degree in the biological sciences. Coursework includes a wide array of topics from general biology, anatomy and physiology, evolution, molecular biology, genomics, and more. In addition to teaching, the Department is committed to excellence in research and service, providing opportunities and connections for current students and graduates. Our graduates achieve their goals of becoming doctors, dentists, pharmacists, physician assistants, and physical therapists as well as molecular biologists, professors, and teachers.

Major

Biology (Premedical) Major

The biology major, with a premedical emphasis, provides a strong curriculum in biology with significant study in the physical sciences. This major can provide the basis for graduate study in specialized fields of biology, for professional training in medical fields, and for teaching. Professional careers in the medical fields and in biology involve graduate study beyond the baccalaureate degree; therefore, both the core and the major have been designed to meet the admission requirements of many medical, dental, pharmacy, optometry, allied health, and veterinary schools, and of schools for graduate study in the biological sciences. Dual admission and combined programs with the Nova Southeastern University Health Professions Division are available for select, qualified students. Information on these programs can be obtained from the Office of Undergraduate Admissions.

Biology Major Learning Outcomes

A successful biology graduate is expected to:

1. Demonstrate a working knowledge of the scientific method;
2. Demonstrate essential knowledge of biological sciences;
3. Demonstrate essential knowledge of physical sciences as they relate to the biological sciences;
4. Use mathematics to solve scientific problems and evaluate research data;
5. Demonstrate the ability to use standard laboratory and research techniques to collect and assess data;
6. Demonstrate an ability to synthesize and integrate biological principles with contemporary issues.

Biology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Biology Major Requirements (69 credits)

Core Courses (49 credits)

BIOL 1500	Biology I/Lab (4 credits)
BIOL 1510	Biology II/Lab (4 credits) *OR* BIOL 1510H Biology II/Lab Honors (4 credits)
BIOL 3600	Genetics/Lab (4 credits)
CHEM 1300	General Chemistry I/Lab (4 credits) *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)

CHEM 1310 General Chemistry II/Lab (4 credits) *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CHEM 2400 Organic Chemistry I/Lab (4 credits) *OR* CHEM 2400H Organic Chemistry I/Lab Honors (4 credits)
CHEM 2410 Organic Chemistry II/Lab (4 credits) *OR* CHEM 2410H Organic Chemistry II/Lab Honors (4 credits)
Any LITR course (3 credits)
MATH 2020 Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
MATH 2100 Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)

Select one of the following PHIL courses:

PHIL 3010 Ethical Issues in Communication (3 credits)
PHIL 3180 Biomedical Ethics (3 credits) *OR* PHIL 3180H Biomedical Ethics Honors (3 credits)
PHIL 3200 Ethics and Sport (3 credits)
PHIL 3220 Philosophy of Science (3 credits)
PHIL 3360 Environmental Ethics (3 credits)

PHYS 2350 General Physics I/Lab (4 credits) *OR* PHYS 2400 Physics I/Lab (4 credits)
PHYS 2360 General Physics II/Lab (4 credits) *OR* PHYS 2500 Physics II/Lab (4 credits)

Major Electives (20 credits)

Select a minimum of 20 credits from the following courses:

BIOL 2600 Medical Terminology (3 credits)
Any 3000/4000-level BIOL course (excluding BIOL 3600)
CHEM 3650 Biochemistry/Lab (4 credits)
MATH 2001 Introduction to Mathematical Models in Biology (3 credits) *OR* MATH 2200 Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)

Note: Major Electives may include a maximum of 3 credits from the following courses:

BIOL 4900 Special Topics in Biology (3 credits)
BIOL 4950 Internships in Biology (3 credits)
BIOL 4990 Independent Study in Biology (3 credits)

Minor

Bioinformatics Minor

Bioinformatics is a new scientific discipline that merges biology, computer science, mathematics, and other areas into a broad-based field that has profound impacts on all fields of biology. It is the comprehensive application of mathematics (e.g., probability and statistics), science (e.g., biochemistry), and a core set of problem-solving methods (e.g., computer algorithms) to the understanding of living systems. The bioinformatics minor provides foundational study in this emerging field of study.

Bioinformatics Minor Requirements (17 credits)

BIOL 3600 Genetics/Lab (4 credits)
BIOL 4100 Genomics/Lab (4 credits)
BIOL 4321 Systems and Synthetic Biology (3 credits)
CSIS 3600 Computational Algorithms in Bioinformatics (3 credits)
MATH 2001 Introduction to Mathematical Models in Biology I (3 credits)

Department of Chemistry and Physics

The Department of Chemistry and Physics prepares students for the modern scientific world by providing strong curricula in a chemistry major, a chemistry minor and a physics minor. The chemistry major is a B.S. in Chemistry with two tracks (non-ACS track and ACS track). ACS stands for the American Chemical Society. Both tracks combine an advanced chemistry curriculum with significant studies in physics, biology, and mathematics. The major is intended for those who wish to pursue a career in chemistry-related fields or secondary education teaching and who wish to enter a graduate program in chemistry or in health-related fields such as medicine, pharmacy, dentistry, optometry, and law. The chemistry and physics minors are intended to further develop students' quantitative and analytical skills by expanding their knowledge beyond the introductory level. These minors complement curricula in other disciplines ranging from biology and engineering to computer sciences, as well as being essential for education majors who intend to teach physical sciences in high school. The faculty in our department are actively engaged in research with students in a wide range of expertise within chemistry and physics sub-disciplines.

Major

Chemistry Major

The chemistry major prepares students for the modern scientific world by providing a blend of a strong chemistry curriculum with significant study in physics, biology, and mathematics. The chemistry major has two tracks: a B.S. in Chemistry (non-ACS track) and a B.S. in Chemistry (ACS track). ACS stands for the American Chemical Society. Both B.S. tracks are intended for those who wish to pursue a career in chemistry-related fields or secondary education teaching and who wish to enter a graduate program in chemistry or in health-related fields such as medicine, pharmacy, dentistry, optometry, assistant anesthesiology, and law.

Chemistry Major Learning Outcomes

A successful chemistry graduate is expected to:

1. Demonstrate a firm foundation in the fundamentals and applications of chemical and scientific theories;
2. Describe the fundamental content and processes of organic, inorganic, analytical, physical chemistry, and biochemistry;
3. Design, carry out, record and analyze the results of chemical experiments by using modern instrumentation and classical chemical techniques;
4. Solve problems, think critically, reason analytically, and explore new areas of research;
5. Use modern library searching and retrieval methods to obtain information about issues relating to chemistry;
6. Demonstrate procedures and regulations for safe handling and use of chemicals;
7. Communicate research results to appropriate audiences.

Chemistry Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Chemistry Major Requirements (non-ACS track: 68–69 credits)

Core Courses (59–60 credits)

BIOL 1500	Biology I/Lab (4 credits)
CHEM 1300	General Chemistry I/Lab *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CHEM 2400	Organic Chemistry I/Lab *OR* CHEM 2400H Organic Chemistry I/Lab Honors (4 credits)
CHEM 2410	Organic Chemistry II/Lab *OR* CHEM 2410H Organic Chemistry II/Lab Honors (4 credits)
CHEM 3000	Chemical Literature (1 credit)
CHEM 3101	Chemistry Seminar (3 credits)
CHEM 3460	Quantitative Analysis/Lab (4 credits)
CHEM 4005	Inorganic Chemistry I (3 credits)
CHEM 4101	Senior Chemistry Seminar (1 credit)
MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II *OR* MATH 2200H Calculus II Honors (4 credits)
PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)

Select one of the following course groupings:

BIOL 1510	Biology II/Lab (4 credits) *OR* BIOL 1510H Biology II/Lab Honors (4 credits)
CHEM 3400	Biophysical Chemistry (3 credits)
CHEM 3410	Biophysical Chemistry II/Lab (4 credits)

OR

CHEM 3700	Physical Chemistry I/Lab (4 credits)
CHEM 3710	Physical Chemistry II/Lab (4 credits)
MATH 3200	Calculus III (4 credits) *OR* MATH 3400 Ordinary Differential Equations (3 credits)

Major Electives (9 credits)

Select 9 credits from the following courses:

CHEM 3150	Environmental Chemistry (3 credits)
CHEM 3215	Survey of Rational Drug Design (3 credits)
CHEM 3650	Biochemistry/Lab (4 credits)
CHEM 4010	Inorganic Chemistry II/Lab (4 credits)
CHEM 4150	Chemical Instrumentation (4 credits)
CHEM 4200	Plant Drug Analysis (3 credits)
CHEM 4300	Clinical Chemistry (3 credits)
CHEM 4900	Special Topics in Chemistry (3 credits)*
CHEM 4990	Independent Study in Chemistry (1–4 credits)*

*Only 3–4 credits of CHEM 4900 and CHEM 4990 can be used.

Note: CHEM 3700 and CHEM 3710 are recommended if pursuing a career in chemistry or graduate studies in chemistry.

Chemistry Major Requirements (ACS track: 74–75 credits)

Core Courses (74–75 credits)

BIOL 1500	Biology I/Lab (4 credits)
CHEM 1300	General Chemistry I/Lab *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CHEM 2400	Organic Chemistry I/Lab *OR* CHEM 2400H Organic Chemistry I/Lab Honors (4 credits)
CHEM 2410	Organic Chemistry II/Lab *OR* CHEM 2410H Organic Chemistry II/Lab Honors (4 credits)
CHEM 3000	Chemical Literature (1 credit)
CHEM 3101	Chemistry Seminar (3 credits)
CHEM 3460	Quantitative Analysis/Lab (4 credits)
CHEM 3650	Biochemistry/Lab (4 credits)
CHEM 3700	Physical Chemistry I/Lab (4 credits)
CHEM 3710	Physical Chemistry II/Lab (4 credits)

CHEM 4005	Inorganic Chemistry I (3 credits)
CHEM 4010	Inorganic Chemistry II/Lab (4 credits)
CHEM 4101	Senior Chemistry Seminar (1 credit)
CHEM 4150	Chemical Instrumentation (4 credits)
CHEM 4990	Independent Study in Chemistry (3 credits)
MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3200	Calculus III (4 credits) *OR* MATH 3400 Ordinary Differential Equations (3 credits)
PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)

Minor

Chemistry Minor

The fundamental role that chemistry plays in medicine, pharmacy, and the environment can be further explored in the chemistry minor. Basic, clinical, and field research in these disciplines all involve the application of chemical principles and techniques. The minor offers advanced courses in chemistry expanding on the base provided by general and organic chemistry. Cross disciplinary in its approach, the chemistry minor complements the student's major area of study. This minor can be combined with any major and minor except the chemistry major and APS major with a concentration in biological and physical sciences.

Chemistry Minor Requirements (16 credits)

Select 16 credits from the following courses:

Any CHEM courses 2000-level or higher, excluding the following:

CHEM 3000	Chemical Literature (1 credit)
CHEM 3101	Seminar in Chemistry (3 credits)
CHEM 4101	Senior Chemistry Seminar (1 credit)

A maximum of 4 credits of 2000-level courses can be counted toward the minor if they have already been applied to the student's major core course requirements.

A maximum of 3 credits of CHEM 4990 Independent Study in Chemistry can be counted toward the minor.

Physics Minor

The physics minor is intended to provide students with a basic background in physics and related mathematical methods. A knowledge of physics is useful for students in fields that range from biology and medicine to computer science, as well as being essential for education majors who intend to teach physical sciences in high school. All students in the minor must take a core of required courses in mechanics, electromagnetism, and modern physics. The remainder of the minor then consists of a set of additional physics and mathematics courses chosen by the student, so that the minor can be tailored to the needs and interests of the individual student. This minor can be combined with any major and minor.

Physics Minor Requirements (18 credits)

Core Courses (12 credits)

PHYS 3500	Introduction to Mechanics (3 credits)
PHYS 3610	Electromagnetic Theory I (3 credits)
PHYS 3700	Modern Physics I (3 credits)
PHYS 3750	Modern Physics II (3 credits)

Minor Electives (6 credits)

Students must select 6 credits in any physics (PHYS) or mathematics (MATH) courses at the 3000/4000 level.

Department of Mathematics

The department of mathematics provides a core curriculum in pure mathematics, applied mathematics, and analytical sciences. As a department, we are committed to the highest quality teaching and research. Through the mathematics major, mathematics minor, and applied statistics minor, our course work provides students the skills to formulate, abstract, analyze, and solve complex problems. Our coursework is enhanced by co-curricular activities including a department colloquium series and faculty mentorship of undergraduate student research projects. Graduates of our programs will be prepared to enter graduate study in the mathematical sciences or pursue careers in a variety of fields including science, medicine, industry, and business.

Major

Mathematics Major

The mathematics major provides a core of applied mathematics, pure mathematics, and analytical sciences. This major provides students with the mathematical skills to formulate, abstract, analyze and solve problems typically encountered by mathematicians, educators, government officials, scientists, engineers, and other professionals. Graduates of this program will be prepared to enter graduate study in mathematics and pursue careers in science, industry, and business.

Mathematics Major Learning Outcomes

A successful mathematics graduate is expected to:

1. Apply analytical, critical thinking, and abstract reasoning skills;
2. Analyze and formulate Mathematical proofs and critique for correctness;
3. Apply general mathematical techniques, theories, and abstract reasoning to find solutions to concrete problems.

Mathematics Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Mathematics Major Requirements (53 credits)

Core Courses (27 credits)

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 2500	Introduction to Advanced Mathematics (3 credits) *OR* CSIS 2050 Discrete Mathematics (3 credits)
MATH 3200	Calculus III (4 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 3400	Ordinary Differential Equations (3 credits)
MATH 4050	Advanced Calculus I (3 credits)* *OR* MATH 4350 Abstract Algebra I (3 credits)*
MATH 4060	Advanced Calculus II (3 credits)* *OR* MATH 4360 Abstract Algebra II (3 credits)*

*Can be counted only once, either as a core course requirement or a major elective requirement

Note: Six (6) credits of MATH may fulfill the General Education requirements.

Laboratory Science (8 credits)

Select 8 credits from the following courses:

CHEM 1300	General Chemistry I/Lab (4 credits) *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab (4 credits) *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
PHYS 2350	General Physics I/Lab (4 credits)
PHYS 2360	General Physics II/Lab (4 credits)
PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)

Note: Six (6) credits of CHEM/PHYS may fulfill the General Education requirements.

Major Electives (18 credits)

Select 18 credits from the following courses:

MATH 3050	Mathematics and Biology (3 credits)
MATH 3260	Combinatorics (3 credits)
MATH 3270	Logic (3 credits)
MATH 3340	Linear Algebra II (3 credits)
MATH 3350	Number Theory (3 credits)
MATH 3450	Elementary Differential Geometry (3 credits)
MATH 3900	History of Mathematics (3 credits)
MATH 4050	Advanced Calculus I (3 credits)*
MATH 4060	Advanced Calculus II (3 credits)*
MATH 4100	Introduction to Topology (3 credits)
MATH 4200	Complex Variables (3 credits)
MATH 4300	Numerical Methods (3 credits)
MATH 4350	Abstract Algebra I (3 credits)*
MATH 4360	Abstract Algebra II (3 credits)*
MATH 4400	Partial Differential Equations (3 credits)
MATH 4450	Basic Probability (3 credits)
MATH 4500	Probability and Statistics (3 credits)
MATH 4600	Introduction to Applied Mathematics (3 credits)
MATH 4700	Applied Cryptography (3 credits)
MATH 4900	Special Topics in Mathematics (3 credits)
MATH 4950	Internship in Mathematics (1–12 credits)
MATH 4990	Independent Study in Mathematics (1–3 credits)

*Can be counted only once, either as a core course requirement or a major elective requirement

The following courses are excluded for credit toward the mathematics major:

MATH 3030	Applied Statistics II (3 credits)
MATH 4020	Applied Regression Analysis (3 credits)
MATH 4040	Applied Multivariate Statistical Analysis (3 credits)
MATH 4080	Introduction to Statistical Computations (3 credits)

Minors

Applied Statistics Minor

Statistical methods are widely used in science, social and behavioral sciences, business, health professions, and industry. The applied statistics minor is appropriate for all NSU students with interests in experimental design, data analysis, or statistical modeling. The minor is designed to enable a student to properly design studies and analyze the resulting data, and to evaluate statistical methods used in marketing research, biological models, social studies, or their field of study.

Applied Statistics Minor Requirements (15 credits)

The applied statistics minor requires the successful completion of 15 credit hours of statistics courses with a MATH prefix at the 2000 or higher level, including at least 9 credit hours at the 3000 level or higher, with the exception of MATH 2020 Applied Statistics and MATH 2020H Applied Statistics Honors, which is excluded from the minor.

The courses eligible for this minor include (but are not limited to) the following:

MATH 3030	Applied Statistics II (3 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 4020	Applied Regression Analysis (3 credits)
MATH 4040	Applied Multivariate Statistical Analysis (3 credits)
MATH 4080	Introduction to Statistical Computations (3 credits)
MATH 4500	Probability and Statistics (3 credits)
MATH 4900	Special Topics (1–3 credits)
MATH 4990	Independent Study (1–3 credits)

Mathematics Minor

Mathematics is extensively used throughout the disciplines, including the sciences, engineering, finance, and social sciences. For those already engaging in disciplines with higher mathematics courses, the mathematics minor provides an opportunity to deepen their understanding into their own fields and develop professional tools that may not be commonly available to their peers. The minor in mathematics is appropriate for all NSU students looking to broaden their mathematical horizons.

Mathematics Minor Requirements (17 credits)

Select 17 credits of MATH courses at the 2000 of higher including at least 9 of these credits at the 3000 level or higher. The courses eligible for this minor include (but are not limited to) the following:

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 2250	Euclidean Geometry (3 credits)
MATH 3200	Calculus III (4 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 3350	Number Theory (3 credits)
MATH 3400	Ordinary Differential Equations (3 credits)
MATH 4500	Probability and Statistics (3 credits)
MATH 4900	Special Topics (1–3 credits)
MATH 4990	Independent Study (1–3 credits)

The following courses are excluded for credit toward the mathematics minor:

MATH 2020	Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
MATH 2080	Applied Calculus (3 credits)
MATH 3030	Applied Statistics II (3 credits)
MATH 4020	Applied Regression Analysis (3 credits)
MATH 4040	Applied Multivariate Statistical Analysis (3 credits)
MATH 4080	Introduction to Statistical Computations (3 credits)

Department of Marine and Environmental Sciences

The Department of Marine and Environmental Sciences focuses on issues in the Life and Earth Sciences that concern the ocean, atmosphere, and the land. Opportunities exist at the undergraduate and graduate levels with bachelor's degrees and master's degrees in Marine Biology and Environmental Science. We pride ourselves on our Ph.D. in Oceanography. Coursework includes a wide array of topics from general marine biology, ecology, and geology to molecular biology, genomics, and more. In addition to teaching, the Department is committed to excellence in research and service providing a wide variety of opportunities and connections for current students and graduates. Our graduates have become academic or professional scientists; working in industry, government, non-governmental organizations, or academia as biologists, geologists, physicists, professors, and teachers.

Majors

Environmental Science/Studies Major

The environmental science/studies major provides a comprehensive knowledge of Earth's physical, chemical, and biotic systems. The program emphasizes the practical application of science, sociology, and ethics to solve problems created by the impact of human activity on the environment. This major incorporates the following areas of study: wetlands ecology, ecotourism, geographic spatial analysis, sustainability issues, public health, and marine biology. The program is designed so students will share a common set of courses in their freshman year to ensure that all students gain an overview of the subject. Upon entering their sophomore year, students are required to select major electives. The program is designed to be completed within a four-year period. An internship is required of all students in this program.

Environmental Science/Studies Major Learning Outcomes

A successful environmental sciences/studies graduate is expected to:

1. Demonstrate a working knowledge of the scientific method so as to identify, evaluate, and recommend solutions to environmental problems;
2. Communicate concisely and clearly through public speaking, the publishing of written articles, the construction and maintenance of a website, and photographic documentation either through photography or videography;
3. Formulate strategies to maximize the responsible use of technology as it applies to issues within environmental science;
4. Identify legal issues relating to environmental science;
5. Apply concepts of environmental science to lifetime vocational aspirations;
6. Demonstrate a behavior of environmental awareness and interest in environmental issues of South Florida;
7. Apply knowledge from the fields of biology, botany, and physical sciences to environmental science;
8. Identify the principles of environmental ethics;
9. Identify concepts relating to the future of environmentalism.

Environmental Science/Studies Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Environmental Science/Studies Major Requirements (58 or 59 credits)

Core Courses (43 or 44 credits)

CHEM 1500	Introduction to Environmental Chemistry (3 credits)
ENVS 1100	Environmental Science I (3 credits)
ENVS 1200	Environmental Science II (3 credits)
ENVS 2100	Environmental Science Laboratory (3 credits)
ENVS 3000	Environmental Geology/Lab (4 credits)
ENVS 3100	Environmental Issues (3 credits)
ENVS 3170	Everglades Ecology and Conservation (3 credits)
ENVS 4300	Industrial Ecology (3 credits)
ENVS 4950	Internship in Environmental Science and Study (3 credits)
GEOG 2050	Survey of Geography (3 credits)
GEOG 2260	Geography of Natural Resources (3 credits)
GEOG 3010	Amazonian Cloud Forest Biogeography (3 credits) OR ENVS 1500 Natural History of South Florida (4 credits)
LGST 3350	Environmental Law and Policy (3 credits)
PHIL 3360	Environmental Ethics (3 credits)

Major Electives (15 credits)

Select 15 credits from the following courses:

BIOL 1100	Concepts and Connections in Biology (3 credits) *OR* BIOL 1400 Introductory Cell Biology (3 credits)
BIOL 3200	General Ecology/Lab (4 credits)
BIOL 3400	Microbiology/Lab (4 credits)
CHEM 1300	General Chemistry I/Lab (4 credits) *OR* CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab (4 credits) *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CHEM 2400	Organic Chemistry I/Lab (4 credits) *OR* CHEM 2400H Organic Chemistry I/Lab (4 credits)
CHEM 3150	Environmental Chemistry (3 credits)
ENVS 2000	Biodiversity of Alaskan Ecosystems (3 credits)
ENVS 2001	Biodiversity of Alaskan Ecosystems Field Course (1 credit)
ENVS 3101	Introduction to Public Health (3 credits)
ENVS 4990	Independent Study in Environmental Science/Study (1–3 credits)
GEOG 2075	Geographical Information Systems (3 credits)
GEOG 3000	Geography of Ecotourism (3 credits)
MBIO 2410	Marine Biology and Lab (4 credits)
SOCL 3600	Environmental Sociology (3 credits)

Marine Biology Major

The marine biology major is designed to prepare students for a career or further graduate study. The curriculum consists of a set of core courses in the biological and physical sciences, leading to a degree that is designed as a solid basis for entering the field of marine biology, as well as preparation for further graduate study in this area.

Marine Biology Major Learning Outcomes

A successful marine biology graduate is expected to:

1. Demonstrate a working knowledge of the scientific method;
2. Demonstrate essential knowledge of the marine sciences;
3. Use mathematics to solve scientific problems and evaluate research data;
4. Use standard laboratory and research techniques to collect, assess, and present data;
5. Synthesize and integrate marine biological principles with contemporary issues.

Marine Biology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Marine Biology Major Requirements (79 credits)

Core Courses (60 credits)

BIOL 1500	Biology I/Lab (4 credits)
BIOL 1510	Biology II/Lab *OR* BIOL 1510H Biology II/Lab Honors (4 credits)
BIOL 3200	General Ecology/Lab (4 credits)
BIOL 3300	Invertebrate Zoology/Lab (4 credits)
BIOL 3600	Genetics/Lab (4 credits)
CHEM 1300	General Chemistry I/Lab *OR* CHEM1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab *OR* CHEM 1310H General Chemistry II/Lab Honors (4 credits)
CHEM 2400	Organic Chemistry I/Lab *OR* CHEM 2400H Organic Chemistry I/Lab Honors (4 credits)
CHEM 2410	Organic Chemistry II/Lab *OR* CHEM 2410H Organic Chemistry II/Lab Honors (4 credits)
MATH 2020	Applied Statistics (3 credits) *OR* MATH 2020H Applied Statistics Honors (3 credits)
MATH 2100	Calculus I OR MATH 2100H Calculus I Honors (4 credits)
MBIO 1050	Introductory Marine Biology Seminar (1 credit)
MBIO 2410	Marine Biology/Lab (4 credits)
MBIO 2500	Oceanography/Lab (4 credits)
PHYS 2350	General Physics I/Lab (4 credits)
PHYS 2360	General Physics II/Lab (4 credits)

Major Grouped Electives (19 credits)

Group I: Science foundation electives (13 credits)

Select 13 or more credits from the following courses:

BIOL 3311	Vertebrate Zoology/Lab (4 credits)
BIOL 3800	Evolution (3 credits)
CHEM 3650	Biochemistry/Lab (4 credits)
ENVS 2100	Environmental Science Laboratory (3 credits)
ENVS 3000	Environmental Geology/Lab (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MBIO 3500	Food Web Dynamics (3 credits)
MBIO 3600	Plankton Ecology (3 credits)
MBIO 3700	Biology of Fishes/Lab (4 credits)
MBIO 3750	Coral Reefs and Coral Communities (3 credits)
MBIO 3910	Sharks and Their Relatives (3 credits)
MBIO 4900	Special Topics in Marine Biology (1–3 credits)
SCIE 3210	History of Science (3 credits)
SCIE 4490	Research Methods (3 credits)

Group II: Lab or field-based electives (6 credits)

Select 6 or more credits from the following courses:

ENVS 1500	Natural History of South Florida (4 credits)
ENVS 2000	Biodiversity of Alaskan Ecosystems (3 credits) *AND* ENVS 2001 Biodiversity of Alaskan Ecosystems Field Course (1 credit)
ENVS 3170	Everglades Ecology and Conservation (3 credits)
MBIO 3450	Survey of Marine Mammals (3 credits)
MBIO 3800	Island Biogeography (3 credits) *AND* MBIO 3801 Island Biogeography Field Course (1 credit)
MBIO 4260	Ecology of the Galapagos Islands (3 credits) *AND* MBIO 4261 Ecology of the Galapagos Islands Field Trip (1 credit)
MBIO 4990	Independent Study in Marine Biology (1–12 credits)

Minors

Geographic Information Science Minor

Geographic information science has become an essential foundation for numerous disciplines that require location-based analysis. This minor provides an understanding of geographic tools, software and hardware, techniques, and spatial methodologies for use in the natural, social, and behavioral sciences, as well as in business and economics. This minor is designed for students from diverse disciplines interested in using geospatial technology in their studies, research, and careers. It is appropriate for students majoring in natural and behavioral science, computer and information science, urban planning, business, and public health.

Geographic Information Science Minor Requirements (18 credits)

CSIS 1800	Introduction to Computer and Information Sciences (3 credits)
CSIS 2000	Introduction to Database Systems (3 credits)
GEOG 2075	Geographical Information Systems (3 credits)
GEOG 3050	Applied Geographic Information Systems (3 credits)
GEOG 3075	Geospatial Field Methods (3 credits)
GEOG 4050	Space-Borne and Aerial Image Processing (3 credits)

Marine Biology Minor

The marine biology minor focuses on the life processes of marine organisms and is intended for students interested in the field as a complement to their major curriculum. Biology majors can take the marine biology minor with no additional prerequisites outside of those required for the biology major. Students in other majors who have taken the appropriate prerequisites may also pursue this minor. This minor is available to PALS (day) students only. This minor can be combined with any major and minor except the marine biology major and marine ecology minor.

Marine Biology Minor Requirements (17 credits)

Core Courses (8 credits)

MBIO 2410	Marine Biology/Lab (4 credits)
MBIO 2500	Oceanography/Lab (4 credits)

Minor Electives (9 credits)

Select 9 credits from the following courses:

BIOL 3200	General Ecology/Lab (4 credits)
BIOL 3300	Invertebrate Zoology/Lab (4 credits)
BIOL 3311	Vertebrate Zoology/Lab (4 credits)
MBIO 3450	Survey of Marine Mammals (3 credits)
MBIO 3500	Food Web Dynamics (3 credits)
MBIO 3600	Plankton Ecology (3 credits)
MBIO 3700	Biology of Fishes/Lab (4 credits)
MBIO 3750	Coral Reefs and Coral Communities (3 credits)
MBIO 3800	Island Biogeography (3 credits) *AND* MBIO 3801 Island Biogeography Field Course (1 credit)
MBIO 3910	Sharks and Their Relatives (3 credits)
MBIO 4260	Ecology of the Galapagos Islands (3 credits) *AND* MBIO 4261 Ecology of the Galapagos Islands Field Trip (1 credit)
MBIO 4900	Special Topics in Marine Biology (1–3 credits)
SCIE 4490	Research Methods (3 credits)

Marine Ecology Minor

The marine ecology minor focuses on the interactions among marine organisms and the relationships between these

organisms and their environment. This minor is intended for marine biology majors who want more specific training in marine ecological science. Students in other majors who meet the prerequisites may also pursue this minor. This minor is available to PALS (day) students only. This minor can be combined with any major and minor except the marine biology minor. When combining with the marine biology major, a minimum of 6 credits must be exclusive to the minor and cannot be counted toward the major.

Marine Ecology Minor Requirements (18 credits)

Select 18 credits from the following courses:

ENVS 1500	Natural History of South Florida (4 credits)
ENVS 2000	Biodiversity of Alaskan Ecosystems (3 credits) *AND* ENVS 2001 Biodiversity of Alaskan Ecosystems Field Course (1 credit)
ENVS 3170	Everglades Ecology and Conservations (3 credits)
MBIO 3450	Survey of Marine Mammals (3 credits)
MBIO 3500	Food Web Dynamics (3 credits)
MBIO 3600	Plankton Ecology (3 credits)
MBIO 3700	Biology of Fishes/Lab (4 credits)
MBIO 3750	Coral Reefs and Coral Communities (3 credits)
MBIO 3800	Island Biogeography (3 credits) *AND* MBIO 3801 Island Biogeography Field Course (1 credit)
MBIO 3910	Sharks and Their Relatives (3 credits)
MBIO 4260	Ecology of the Galapagos Islands (3 credits) *AND* MBIO 4261 Ecology of the Galapagos Islands Field Trip (1 credit)
MBIO 4990	Independent Study in Marine Biology (1–3 credits)

COURSE DESCRIPTIONS

Undergraduate Course Descriptions

This section lists courses offered at Nova Southeastern University. Refer to the appropriate college or school section for curriculum requirements. Course descriptions for graduate courses in the R.N. to M.S.N. program may be found in the Health Professions Division catalog.

ACT—Accounting

ACT 2200 Financial Accounting (3 credits)
Provides an introduction to financial accounting and its decision-making elements. Areas covered are the conceptual frameworks of accounting, financial statements and their components, and advance manufacturing environments. Prerequisites: MATH 1030 or higher. Frequency: Every Fall and Winter.

ACT 2300 Managerial Accounting (3 credits)
Integrates the accounting process with the planning, coordinating, and control functions of the business organization. Topics include strategic planning, tactical and operational decision making, budgeting, responsibility accounting, and performance measurement. Prerequisites: MATH 1030 or higher. Frequency: Every Fall and Winter.

ACT 3030 Cost Management (3 credits)
Students learn cost measurement techniques in the manufacturing and service sectors. Using a strategic approach, the course examines the design and operation of cost accounting systems in both traditional and advanced manufacturing environments. Prerequisite: ACT 2300 and ACT 3050. Frequency: Every Winter.

ACT 3050 Intermediate Accounting I (3 credits)
Study the conceptual framework of accounting and the development of the balance sheet and income statement. Examine the concepts underlying the valuation of current and non-current assets and current liabilities. Cover the recognition and measurement of Income. Prerequisite: ACT 2200. Frequency: Every Fall.

ACT 3060 Intermediate Accounting II (3 credits)
Continuation of Intermediate Accounting I. Study of long-term liabilities (including bonds, pensions, and leases), inter-period tax allocation, owners' equity, and earnings per share. Prerequisite: ACT 3050. Frequency: Every Winter.

ACT 3070 Intermediate Accounting III (3 credits)
This course continues the analysis of the accounting principles used to generate financial statements. Topics covered include an investigation of stockholder's equity, earnings per share, the statement of cash flows, investments, derivatives, and accounting changes and error correction. Prerequisite: ACT 3060. Frequency: Every Fall.

ACT 3150 Business Law for Accountants (3 credits)
A survey course focusing on the legal aspects of business decision-making, including torts, contracts, Uniform Commercial Code, and debtor/creditor law. The course provides students with an understanding of the role of legal rules and their impact on business. Students learn through assignments that teach them to analyze issues and appreciate the philosophy behind court decisions. The course focuses on those areas of business law that are necessary for successful completion and passing of the CPA exam. Prerequisites: MGT 2150, ACT 2300, and ACT 3050. Frequency: Every Winter.

ACT 3900 Accounting Internship (3 credits)
The Huizenga College internship fosters learning through the application of classroom theory in the workplace. During the course, the student also focuses on practical career skills and personal professional goals with individual guidance from the professor. The minimum work requirement is 180 hours during one semester (16 weeks). Contact Academic Advising for registration. ACADEMIC REQUIREMENTS: good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours. Frequency: Every Fall and Winter.

ACT 3910 Advanced Special Topics I (3 credits)
Examines advanced topics in accounting that are not included in regular course offerings. Specific content and prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Every Fall and Winter.

ACT 4010 Advanced Accounting (3 credits)
Study of accounting principles and practices related to business combinations (accounting for mergers and acquisitions, constructing consolidated financial statements), foreign operations (recording foreign currency transactions and hedging exchange risk, currency translation of foreign subsidiary financial statements), and local governments. Examination of the cash flow statement and accounting changes. Prerequisite: ACT 3070 or equivalent. Frequency: Every Winter.

ACT 4050 Accounting Information Systems (3 credits)
Examines the design, construction, and operation of accounting information systems. Information theory, database construction, computer hardware and software selection, and internal control are also covered. Prerequisites: ACT 3070. Frequency: Every Winter.

ACT 4210 Auditing I (3 credits)
Provides an overview of basic auditing concepts, auditing standards, and audit programs. Special emphasis is given to preparing the student for the auditing section of the CPA examination. Prerequisite: ACT 3060. Frequency: Every Fall.

ACT 4920 Advanced Special Topics II (3 credits)
Examines advanced topics in accounting that are not included in regular course offerings. Specific content and prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Every Fall and Winter.

ANTH—Anthropology

ANTH 1020 Introduction to Anthropology (3 credits)
This course is an interdisciplinary examination of the ways in which anthropologists study people and their

ways of life across cultures and across time. The four major fields of anthropology will be introduced with an overview of each of the following perspectives: cultural anthropology, biological anthropology, archaeology, and linguistics. Frequency: Every Fall and Winter.

ANTH 2300 Cultural Anthropology (3 credits)
The course compares and contrast cultures, the ways people live, through an anthropological lens. It will include examination of how humans create and transmit culture and cultural artifacts. Analysis of how humans view cultures other than their own and the ways in which this impacts the study of anthropology will also be addressed. Prerequisite: ANTH 1020 Frequency: Even Year Winter.

ANTH 4900A Special Topics in Anthropology A: Myth, Ritual, and Mysticism (3 credits)
This course will use selected case studies and readings to explore myths, rituals, mystical beliefs and frameworks that are held and observed by divergent ethnic and cultural groups over time. The course will explore how and why various cosmologies and worldviews are established, maintained, modified, and changed from anthropological perspectives. Prerequisite: ANTH 1020 or SOCL 1020

ANTH 4950B Internship in Anthropology B (1–3 credits)
This course is a 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student?s major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of academic director. Frequency: Every Fall and Winter.

ARAB—Arabic

ARAB 1210 Elementary Arabic I (3 credits)
Essentials of Arabic language with emphasis on grammar, vocabulary, writing, and oral skills. Introduction to Arab culture. Not open to native speakers. Frequency: Every Fall and Winter.

ARAB 1220 Elementary Arabic II (3 credits)
Continuation of the essentials of Arabic language with emphasis on grammar, vocabulary, writing, and oral skills. Introduction to Arab culture. Not open to native speakers. Prerequisite: ARAB 1210. Frequency: Every Winter.

ARTS—The Arts

ARTS 1200 Introduction to Drawing (3 credits)
This course will emphasize the development of drawing and observational skills. Students will learn to effectively use various studio materials and drawing techniques while representing form and space on a two-dimensional plane. Frequency: Every Fall and Winter.

ARTS 1250 Life Drawing (3 credits)
This course will examine the anatomy, proportion and movement of the living form using live and skeletal models. Beginning with skeletal and muscular studies, the students will develop detailed drawings exploring gesture, movement and structure. Students will also learn historical and contemporary depiction of living forms. Frequency: Every Fall.

ARTS 1400 The Theater Arts (3 credits)
This course focuses on the arts of the theatre, including drama, music, dance, and play production, particularly those plays representing major theatrical trends. Frequency: Every Fall and Winter.

ARTS 1500 Music Through History (3 credits)
This course traces the development of music in Western culture, with an emphasis on music written and preserved from the Middle Ages to the present. The course encourages and enables students to recognize, analyze, and understand the materials of music (such as musical instruments and their properties, and the use of scales, modes and rhythms) as well as various musical forms (fugue, sonata cycle, overture). Frequency: Every Fall and Winter.

ARTS 1500H Music Through History Honors (3 credits)
This course traces the development of music in Western culture, with an emphasis on music written and preserved from the Middle Ages to the present. The course encourages and enables students to recognize, analyze, and understand the materials of music (such as musical instruments and their properties, and the use of scales, modes and rhythms) as well as various musical forms (fugue, sonata cycle, overture). Honors students only. Frequency: Every Fall and Winter.

ARTS 1700 Fundamentals of Color (3 credits)
In this course, students develop the foundation to apply basic design principles to a variety of visual effects. Students will explore color theory, including additive and subtractive color. Frequency: Every Fall and Winter.

ARTS 1800 Two–Dimensional Design (3 credits)
This course is an introduction to the visual organization of two-dimensional art and design. Students will practice making representational and non-objective designs and utilize design terminology, theory and studio materials. Emphasis will be placed on developing compositional skills. A historical and contemporary survey of visual art and design will be examined. Frequency: Every Fall and Winter.

ARTS 2100 Painting I (3 credits)
This course explores painting as a studio medium emphasizing the practice of painting and compositional skills. Students will represent form and space on a two-dimensional plane and utilize traditional and contemporary techniques while examining the history and aesthetics of various painters and styles. Prerequisite: ARTS 1200. Frequency: Every Fall and Winter.

ARTS 2200 Digital Photography (3 credits)
This course will explore the basic principles of photography and digital imaging. Camera operation, exposure, effect of the shutter and aperture, composition for impact, lens selection, and the qualities of light will be covered. Frequency: Every Fall and Winter.

ARTS 2300 Art and Society (3 credits)
This course examines the ways in which artists and the arts have influenced Western society from the Renaissance to the 20th century, focusing on painting, sculpture, architecture, music, dance, and film. Students will also visit local museums and attend musical and theatrical events as a means of gaining a greater understanding of the arts. Prerequisite: COMP 1500 or WRIT 1500 or COMP 1500H. Frequency: Every Fall and Winter.

ARTS 2300H Art and Society Honors (3 credits)
This course examines the ways in which artists and the arts have influenced Western society from the Renaissance to the 20th century, focusing on painting, sculpture, architecture, music, dance and film. Students will also visit local museums and attend musical and theatrical events as a means of gaining a greater understanding of the arts. (Honors students only). Prerequisite: COMP 1500 or COMP 1500H. Frequency: Even Year Fall.

ARTS 2410 Graphic Design I (3 credits)

This course provides an introduction to graphic design. The computer is introduced as a graphic design problem-solving tool. Students will use current industry-standard software and technology to create designs based on graphic design principles. Through various assignments, students will become familiar with the operation of the personal computer while exploring the visual language of text, image and digital design. The course will familiarize students with basic aesthetic, technical, historical and conceptual issues as they relate to design. Frequency: Every Fall and Winter.

ARTS 2450 Graphic Design II (3 credits)
This course will focus on the understanding of the design process and developing effective graphic design concepts for a variety of formats, with an emphasis on form, content, and principles of design and layout composition. Students will further their knowledge of industry-standard computer software as applied to various formats of visual communication. Prerequisite: ARTS 2410. Frequency: Every Winter.

ARTS 2600 Introduction to Arts Administration (3 credits)
This course introduces basic principles, theories, concepts, processes and practices relating to organizations in the arts industry. Emphasis will be placed on the structure of the arts industry, leadership in the arts industry, staffing, volunteerism, fundraising, and intellectual property. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Odd Year Fall.

ARTS 2800 Three–Dimensional Design (3 credits)
This course will be a study of form and structure, emphasizing the visual organization of three-dimensional art and design. Students will practice various methods in the construction of functional and non-functional designs. A historical and contemporary survey of sculpture, craft and industrial design will be examined. Frequency: Every Winter.

ARTS 3020 Women in the Arts (3 credits)
A study of the particular contributions of women in art, music, theatre, and dance. Prerequisites: One ARTS course and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

ARTS 3040 Museum Studies and Gallery Practices (3 credits)
This course offers an investigation of the many characteristics of museum and gallery management including hands-on participation in Gallery 217's ongoing productions. Students will gain experience with exhibition research, design, development, and management. Additionally, students will have a real-world application to the continued operations and/or programs of Gallery 217. Prerequisites: COMP 2000, COMP 2010 or COMP 2020 and any 1000/2000 level ARTS course or COMP 2000H or ARTS 2300H. Frequency: Every Fall.

ARTS 3100 Painting II (3 credits)
This course will continue the study and practice of painting. Students will develop an individual creative direction working thematic projects in oils, acrylics, and mixed media. Students are expected to develop a command of both technical and conceptual components of painting related to both the studio practices and the history of painting. Prerequisite: ARTS 2100. Frequency: Odd Year Fall.

ARTS 3200 Digital Photographic Design (3 credits)
This course provides the skills and concepts required to develop professional-quality illustrations, and photo manipulations. The focus of the course will be on both technical and aesthetic issues, and the relationship of image manipulation to different graphic design formats. Prerequisite: ARTS 2200. Frequency: Odd Year Fall.

ARTS 3450 Graphic Design III (3 credits)
Students explore the underlying principles of grid theory, text and display typography, sequence, page layout, and type and image integration as they relate to a range of publication design applications. Prerequisite: ARTS 3650. Frequency: Even Year Winter.

ARTS 3500 Sculpture I (3 credits)
Through the process of investigation, growth and discovery, the students will complete hands-on projects using a variety of media and techniques. In addition, students will explore the historical and contemporary influence of sculpture. Prerequisite: ARTS 2800. Frequency: Odd Year Winter.

ARTS 3550 Ceramics I (3 credits)
Students will create pottery, using multiple techniques such as hand building as well as throwing on the potter's wheel. Students will apply ceramic glazes and firing procedures in order to produce finished ceramic ware. The course will also include some discussion of the historical development of the ceramic arts. Prerequisite: Any 1000 or 2000 level ARTS course. Frequency: Even Year Fall.

ARTS 3600 Advanced Arts Administration (3 credits)
This course applies the basic principles, theories, concepts, processes and practices of arts administration to the creation and management of various types of arts organizations. Particular emphasis will be placed on audience development, special event planning, program planning, financial planning, proposal writing, grant writing and advocacy. Prerequisites: ARTS 2600; COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

ARTS 3650 Typography (3 credits)
This essential course explores the fundamentals of typography including the history, theory and practical employment of type. Through a variety of challenging and informative projects, the creative function of type as an illuminative graphic design element will be examined. Prerequisite: ARTS 2410. Frequency: Every Fall.

ARTS 3700 Methods and Materials (3 credits)
Through a practical exploration of theoretical/conceptual issues, students will become aware of the complexity and interrelatedness of the elements of art. Students complete a series of studio projects emphasizing the awareness, creative use, and practical application of various materials as a formal means of visual communication and expression. Prerequisite: ARTS 1200. Frequency: Even Year Winter.

ARTS 3800 Art History I (3 credits)
This course introduces students to the historical developments in artistic expression from the Prehistoric to Renaissance period. Prerequisites: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

ARTS 3850 Art History II (3 credits)
This course introduces students to the historical developments in artistic expression from the sixteenth century to the present. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

ARTS 4250 Multimedia & Web Design (3 credits)
This course focuses on the study of layout techniques for the online environment. Emphasis will be placed on producing web sites and interactive media according to current industry criteria with special considerations for identifying a target audience. Relevant legal issues will also be discussed. Prerequisite: ARTS 2410. Frequency: Odd Year Winter.

ARTS 4400 Installation Art (3 credits)
This course explores site specific and non-site specific installation art. Through historical study, students may incorporate a variety of media including photographs, paintings, drawings, video performances, and sound and sculptural materials in works that expand the physical boundaries of art. Students are introduced to techniques for documenting the installation project. Prerequisite: ARTS 3700. Frequency: Upon Request; see academic department chair.

ARTS 4500 Professional Print Design (3 credits)
The focus of this course is on multiple page documents and extended design systems. Students will create professional print design projects that reflect the range of work designers encounter in the studio, agency, or corporate design environment. Print production techniques will be investigated. Prerequisite: ARTS 2450. Frequency: Even Year Fall.

ARTS 4900 Special Topics in the Arts (3 credits)
This course is designed for students with an interest in a particular period or genre of art, music, or theatre, specific artist, composers, dramatists, or topics not covered in other art, music, or theatre courses. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one ARTS course and COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H or ARTS 2300H. Frequency: Upon Request; see academic department chair.

ARTS 4900A Special Topics in the Arts: Handmade Books (3 credits)
This art studio course visually examines traditional and alternative book structures in relationship to narrative content. Lectures and demonstrations introduce students to creative processes involved in book making, including traditional and alternative book formats, adhesives and sewn binding structures, archival concerns, and methods for generating original images and text. Prerequisite: one ARTS course and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Upon Request; see academic department chair.

ARTS 4950 Internship in the Arts (3 credits)
Training and practice at a professional arts venue. Prerequisites: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and written consent of a division director. Frequency: Every Fall and Winter.

ARTS 4990 Independent Study in the Arts (3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One ARTS course; COMP COMP 2000, COMP 2010, or COMP 2020. Frequency: Upon Request; see academic department chair.

ARTS 4995 Senior Project (1 credit)
In this course, students will prepare a portfolio of artwork for participation in a senior exhibition. Prerequisite: Completion of at least 90 credits and written consent of the division director. Frequency: Every Winter.

ATTR—Athletic Training

ATTR 1100 Introduction to Athletic Training (3 credits)
This course is an introduction to the sports medicine team, legal considerations, environmental concerns, and the profession of athletic training. Students will be able to promote athletic training as a professional discipline in order to educate athletes, the general public, and the physically active. This course includes a minimum of 50 hours of scheduled clinical observations at an approved site, under the supervision of a Certified Athletic Trainer. Prerequisites: COMP 1000 or equivalent or SAT Verbal score of 520, ACT English score of 22, a TOEFL score of 650 (paper) or 280 (computer), a passing Writing Challenge Exam. Frequency: Every Fall.

ATTR 1200 Principles of Athletic Training (4 credits)
Emphasis will be on the basic concepts of preventing athletic injuries, injury recognition and assessment, and care and treatment procedures for proper management of athletic injuries. Additionally, students will be instructed in the arts and skills of taping and wrapping. This course includes a minimum of 50 hours of scheduled clinical observations at an approved clinical site, under the supervision of a Certified Athletic Trainer. Prerequisite: ATTR 1100. Frequency: Every Winter.

ATTR 1300 Emergency Care and First Aid (3 credits)
Students will learn to recognize, assess, and treat the acute injuries and illnesses of athletes and others involved in physical activities, preventing disease transmission, emergency care of injuries such as splinting, and to provide proper medical referral. Frequency: Every Fall and Winter

ATTR 1400 Health and Fitness (3 credits)
This course will provide students with the basic concepts of health, such as nutritional issues, physiological concerns, and wellness screening. Students will also gain an appreciation for lifetime fitness activities and an understanding of how community programs provide necessary health services to the general public. Frequency Every Fall and Winter.

ATTR 2100 Injury Evaluation I (4 credits)
Emphasis will be on recognition, assessment, treatment, and appropriate medical referral of athletic injuries and illnesses of the lower extremities including the head and the lumbar spine. Additional emphasis will be placed on the psychosocial aspects of injury and illness. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 1200. Frequency: Every Fall.

ATTR 2200 Injury Evaluation II (4 credits)
Emphasis will be on recognition, assessment, treatment, and appropriate medical referral of athletic injuries and illnesses of the upper extremities, including the head and cervical spine. Additional emphasis will be placed on clinical evaluation skills. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 2100. Frequency: Every Winter.

ATTR 2300 Sports Nutrition (3 credits)
This course includes the study of nutrition, biochemical processes in energy metabolism, and nutrition-related health problems. Additional emphasis will be placed on nutrition as it relates to physical performance, sports, and fitness. Prerequisite: ATTR 1400. Frequency: Every Fall and Winter.

ATTR 2400 Strength and Conditioning (3 credits)
Strength and Conditioning: This course includes the study of the varied aspects of strength and conditioning in a variety of sports. In addition to learning and practicing strength training techniques, students will design a conditioning program and explain their program to their peers. Prerequisite: ATTR 1400. Frequency: Every Fall and Winter.

ATTR 2610 Athletic Training Clinical I (3 credits)
This course focuses on field experiences and the application of learned principles from athletic training clinical skills. This course includes 150 hours of observation in various settings and specific clinical skills

from ATTR 1200 to facilitate comprehensive learning. Students will be supervised and given the opportunity to practice learned skills in the clinical setting. Only for students matriculated in the Athletic Training major. Prerequisite: ATTR 1200. Frequency: Every Fall.

ATTR 2620 Athletic Training Clinical II (3 credits)
These courses focus on field experiences and the application of learned principles from athletic training clinical skills. This course includes 150 hours of observation in various settings. and specific clinical skills from the previous semester to facilitate comprehensive learning. Students will be supervised and given the opportunity to practice learned skills in the clinical setting. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 2210 or ATTR 2610. Frequency: Every Winter.

ATTR 3100 General Medicine in Sports (3 credits)
Students will acquire skills and knowledge on the recognition, treatment, and referral of general medical conditions related to each of the body systems, including but not limited to congenital and acquired abnormalities of athletes and other physically active individuals. Also included are physiological progression of injuries, illnesses, and diseases. An additional area of focus is related to pathology, medical diagnostics, medical interventions (pharmacological and procedural), and the implications of these for the athlete or others involved in physical activities. Prerequisites: ATTR 2220 or ATTR 2620 and BIOL 3312 or BIOL 3320. Frequency: Every Fall

ATTR 3300 Therapeutic Modalities/ Lab (4 credits)
A study of sports therapy physical agents used to treat injuries of the musculoskeletal, neuromuscular, and integumentary systems including, but not limited to cryotherapy, hydrotherapy, electrotherapy, biofeedback, and mechanical therapy. Students will apply the techniques and clinical skills related to the application of therapeutic modalities. Clinical hours in the athletic training room and other facilities (see Clinical Experience I through IV) will give the student the additional opportunity to use the knowledge, skills, and techniques learned in this course. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 2100. Frequency: Every Winter.

ATTR 3500 Rehabilitation of Athletic Injuries/Lab (4 credits)
The study of the principles of a comprehensive rehabilitation program; specifically related to design and implementation of a therapeutic program. Students will learn to incorporate exercises related to strength, proprioception and neuromuscular control to achieve sport specific goals and objectives. Students will assess rehabilitation progress and criteria for return to competition. Prerequisite: ATTR 3300. Frequency: Every Fall.

ATTR 3630 Athletic Training Clinical III (3 credits)
This course focuses on field experiences and the applications of learned principles from athletic training clinical skills. This course includes 150 hours of observation in various settings and specific clinical skills from the previous semester to facilitate comprehensive learning. Students will be supervised and given the opportunity to practice learned skills in the clinical setting. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 2220 or ATTR 2620. Frequency: Every Fall.

ATTR 3640 Athletic Training Clinical IV (3 credits)
Clinical Experiences in Athletic Training IV: These courses focus on field experiences and the applications of learned principles from athletic training clinical skills. This course includes 150 hours of observation in various settings and specific clinical skills from the previous semester to facilitate comprehensive learning. Students will be supervised and given the opportunity to practice learned skills in the clinical setting. Only for students matriculated in the Athletic Training Education Program. Prerequisite: ATTR 3230 or ATTR 3630. Frequency: Every Winter.

ATTR 4100 Athletic Training Administration (3 credits)
Concepts of legal liability, budget/financial and personnel management, marketing, public relations, inventory control, facility design/development/maintenance, and administration of allied-health care programs will be addressed. Additionally, the student will discuss the day-to-day supervision, scheduling and provision of services to athletes and other physically active individuals offered in the athletic training room, health-care facilities and other venues. Prerequisite: ATTR 3230 or ATTR 3630. Frequency: Every Winter.

ATTR 4900 Special Topics in Athletic Training (1–3 credits)
Topics in sports medicine and athletic training that are not included in a regular course offering. Prerequisites may be required. Specific content and prerequisites are announced in the course schedule for the given term. Students may reenroll for Special Topics covering different content. Frequency: Every Fall and Winter.

ATTR 4900A Special Topics in Athletic Training: Capstone in Athletic Training (1 credit)
This course prepares Athletic Training students to take the Board of Certification Inc. (BOC) Exam to earn the credential for an Athletic Trainer. Students will review didactic knowledge from previous courses in the Athletic Training Education Program. In addition to didactic material, this course will provide athletic training students with online testing similar to the Board of Certification Computer Based Examination consisting of multiple choice and hybrid questions. Prerequisite: ATTR 3630. Frequency: Every Fall and Winter.

ATTR 4950 Internship in Athletic Training (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director.

ATTR 4950A Internship in Athletic Training (A) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

ATTR 4950B Internship in Athletic Training (B) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

ATTR 4950C Internship in Athletic Training (C) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements.

Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

ATTR 4950D Internship in Athletic Training (D) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

ATTR 4990 Independent Study in Athletic Training (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and the division director. Frequency: Every Fall and Winter.

ATTR 4990A Independent Study in Athletic Training (A) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

ATTR 4990B Independent Study in Athletic Training (B) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

ATTR 4990C Independent Study in Athletic Training (C) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

BENG—Biomedical Engineering

BENG 2080 Foundations of Biomedical Engineering (3 credits)
Topics in this course include application of fundamental engineering skills to solve problems in medicine and biology. Introduces students to a wide range of state-of-the-art applications in biomedical engineering and promotes understanding of interdisciplinary nature of the field.

BENG 4030 Biomechanics and Materials (3 credits)
Topics in this course include concepts of statics, dynamics, mechanics of materials, and fluid mechanics applied to biological systems. Characterization of biological materials, including time-dependent properties.

BENG 4040 Physiological Systems and Modeling for Engineering I (3 credits)
Topics in this course include quantitative approach to human physiology from the biomedical engineering perspective with emphasis on cellular, neural, endocrine and musculoskeletal systems. Introduction to numerical simulation of physiologic processes and simple control/feedback systems.

BENG 4050 Physiological Systems and Modeling for Engineering II (3 credits)
Topics in this course include quantitative approach to human physiology from the biomedical engineering perspective with emphasis on cardiovascular, pulmonary, renal and gastrointestinal systems. Applied numerical simulation of physiologic processes and control/feedback systems.

BENG 4200 Biomedical Instrumentation (3 credits)
Topics in this course include instrumentation and techniques used in acquisition, processing, and presentation of biomedical signals: transducers, sensors, Fourier analysis, flow measurement, medical imaging, biosensors, amplifiers, bridge circuits, and measurement of physical parameters and electrophysiological signals.

BHS—BHS-Bachelor of Health Science

BHS 3100 Current Issues in Health Care (3 credits)
This course discusses current issues and concepts regarding health care to prepare the student with the essential vocabulary and thought processes to understand and evaluate the legal, political and ethical challenges facing health care in the US. Prerequisite: COMP 1500. Frequency: Every Winter and Every Summer II.

BHS 3101 History of the US Health System (3 credits)
This course will examine the origins and ongoing development of the US health system. Students will gain historical understanding of the origins and forces that have influenced change within the US health care system. Prerequisite: COMP 1500. Frequency: Every Spring and Every Summer II.

BHS 3110 Health Care Ethics (3 credits)
This course is designed to introduce ethical thinking and concepts regarding health care to prepare the student with the essential vocabulary and thought processes to understand, evaluate and participate in ethical decision making. Students will be introduced to the idea that ethical problems are largely a matter of reason and that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite: COMP 1500. Frequency: Evey Spring, Every Summer I, Every Sumer II, Every Fall and Every Winter.

BHS 3120 Introduction to Epidemiology (3 credits)
The purpose of this course is to introduce the history and development of epidemiology in relation to public health and disease. Communicable, epidemic and endemic as well as social diseases will be discussed. Prerequisite: COMP 1500. Frequency: Every Spring, Every Summer II, Every Fall and Every Winter.

BHS 3130 Research and Design for Health Care (3 credits)
This course is designed as an introduction to critical analysis of research and medical literature as well as basic research methods. The course includes an introduction to descriptive and inferential statistics and research design. Statistical and research concepts and procedures are combined with an emphasis on practical health care applications. Prerequisite: COMP 1500. Frequency: Every Winter.

BHS 3140 Health Care Practice (3 credits)
The purpose of this course is to study the legal implications of licensing, practice, and contractual employment. The importance of understanding rules of practice and standards of care are discussed. Prerequisite: COMP 1500. Frequency: Every Fall and Every Winter.

BHS 3145 Principle of Environmental Health (3 credits)
This course will introduce students to the principles of environmental health and their importance to human populations. Some of the topics covered include Environmental Quality, Occupational Health, Vector-borne

and Pandemic Diseases, and Hazardous Materials Management, and the regulations promulgated to manage each. Prerequisite: COMP 1500. Frequency: Every Winter and Every Spring.

BHS 3150 Principle of Leadership (3 credits)
This course will provide an overview of numerous leadership theories to prepare the student for a leadership role in Health Care. The course will critically analyze the differences between leadership and management. Prerequisite: COMP1500. Frequency: Every Spring, Every Summer I, Every Summer II Evey Fall and Every Winter.

BHS 3151 Health Services Management (3 credits)
This course will provide an overview of health care and general management to prepare the student for a managerial role in Health Care administration. Course topics include human resource issues and policy, personnel planning, staffing, development, coaching and training of employees. Prerequisite: COMP 1500. Frequency: Every Summer I and Every Fall.

BHS 3155 Conflict Resolution in Health Care (3 credits)
The purpose of this course is to develop an understanding of conflict and effective conflict resolution strategies that increase personal achievement and create collaborative relationships in the workplace. A variety of health care disputes including employee-employee conflict, supervisor-subordinate conflict, patient-patient conflict, and patient/client-provider conflict are analyzed and problem-solving methods are applied that reduce stress, manage conflict, and create environments of positive growth, personal and organizational safety, and intrapersonal and interpersonal satisfaction. Prerequisite: COMP 1500. Frequency Every Spring, Every Summer I, Evey Summer II, Every Fall and Every Winter.

BHS 3160 Health Policy (3 credits)
This course provides the student with a broad understanding of Health Policy, how health care is organized, and how the practitioner can better work in the system. The focus will be on policy issues of population health and its determinants, access to care, and its impact on health. Students receive an introduction to key features in the US health care system, and will examine issues of rising health care costs and the quality of the care given. (Because there are a number of changes forthcoming as a result of recent legislation, some of the material presented this semester may change radically!). Prerequisite: COMP 1500. Frequency: Every Spring, Every Summer I, Every Summer II, Every Fall and Every Winter.

BHS 3161 Concepts in Health Care Finance (3 credits)
The course introduces the fundamental tools, concepts, and applications aimed at providing students an understanding of numerous financial theories and techniques utilized in health care financial management. The course materials are structured around emerging health care policies and the role finance and economics play in establishing policy. Cases studies are drawn from a variety of sources such as health maintenance organizations, home health agencies, nursing units, hospitals, and integrated health care systems. Some topics of discussion also include: concepts of capital financing for providers, budgeting, financial ethics, payment systems, provider costs, high cost of health care, and measuring costs. Prerequisite: COMP 1500. Frequency: Every Summer I, and Every Fall.

BHS 3162 Economics of Health Services (3 credits)
This course will teach the student to use economic analysis to understand critical issues in health care and health policy. Issues to be studied include the demand for health care, health insurance markets, managed care, medical technology, government health care programs, national health reform, and the pharamaceutical industry. The course will focus on the US health care sector, but will also examine health care systems of other countries. Prerequisite: COMP 1500. Frequency: Every Spring and Every Summer II.

BHS 3170 Health Care Delivery Systems (3 credits)
The purpose of this course is to provide an overview and analysis of American health care delivery systems. An understanding of the economical, social, political and professional forces that shape the health care delivery system will be discussed as well as an examination of how the sistem is organized, how services are delivered, and the mechanisms by which health care services are financed. Prerequisite: COMP 1500. Frequency: Every Winter and Every Spring.

BHS 3190 Patient Education in Health Care (3 credits)
Patient education is an integral part of health care in every setting, from patient treatment, to health and wellness promotion, to injury and illness prevention. The focus of this course is to explore the many issues that impact patient education, from both a health care professional and management perspective. Adult education theory, patient/therapist interaction, communication barriers, strategies for success, web-based patient education, documentation, federal laws and initiatives and standards for patient education are some of the topics that will be examined. Prerequisite: COMP 1500. Frequency: Every Winter.

BHS 3195 Therapeutic Communications for Health Care Professionals (3 credits)
This course covers a variety of general concepts and contemporary discussions in the area of therapeutic communications. Attention is paid to self-awareness, basic communication skills, and therapeutic responses from all health care professionals. Frequency: Every Winter and Summer II.

BHS 4000 Cultural Competency in Health Care (3 credits)
The purpose of this course is to develop competency and better understanding when confronted with issues related to culture, diversity and ethnically based customs, rituals, alternative health care choices, folk medicine, cultural structure and viewpoints and the practitioner's delivery of health care. Prerequisite: COMP 1500. Frequency: Every Spring, Every Summr I, Every Summer II, Every Fall and Every Winter.

BHS 4001 Individuals with Disabilities and Special Needs (3 credits)
With the continued graying of the American population and the extending life expectancy of individuals with disabilities there are a growing number of individuals facing chronic life challenges. These individuals are consumers of health care. It is incumbent on health care providers to understand how different challenges affect a person?s abilities. Topics of discussion include: laws that impact services, the history of disability care, and specific disabilities and their impact on functioning. Prerequisite: COMP 1500. Frequency: Every Winter and Every Fall.

BHS 4005 Alternative Medicine in Health Care (3 credits)
This course examines and analyzes alternative and complimentary medicine and their impact on the healthcare industry. The approach to the subject is to present selected alternative and complimentary medicine fields in an informative, non-judgmental format. Example topics include acupuncture, chiropractic, herbal medicine, homeopathy, massage and naturopathic medicine. Prerequisite: COMP 1500. Frequency: Every Winter, Every Summer I

and Every Fall.

BHS 4006 Fundamentals of Chinese Medicine (3 credits)
This course will discuss and analyze the impact, origins and background of Chinese medicine. It is important to enter this class with an open mind, and understand that there are other forms of treatment for disease, different than those taught in westernized medicine programs. Critical analysis of the meridians and pathways and various signs and symptoms associated with disease will be covered. Prerequisite: COMP 1500. Frequency: Every Winter.

BHS 4009 Sports Medicine: Principles and Practice (3 credits)
This course will present a study of athletic injuries and the principle concepts and practices of Sports Medicine including discussion of; prevention, diagnosis, treatment, and recovery. The major musculoskeletal portions of the body will be covered, major preventive measures will be studied, and the major sports injuries will be addressed. The course will identify the medical treatments associated with the major sports injuries. Prerequisite: COMP 1500. Frequency: Every Spring and Every Fall.

BHS 4010 Health Promotion and Disease Prevention (3 credits)
This course develops the knowledge and skills needed to work with communities to improve health status of the community. Major topics will include health promotion and disease prevention. Special emphasis will be placed on the "Healthy People 2020" initiatives. Prerequisite: COMP 1500. Frequency: Every Winter, Every Spring and Every Fall.

BHS 4011 Bioterrorism: Health Care's Readiness & Response (3 credits)
This course uses a systems perspective to provide health professionals with an understanding of the prevention and response to the intentional release of armful biologic agents. Category A diseases will be reviewed including anthrax and smallpox. Risk assessment and reduction for health care facilities will be discussed. The structure of public disaster response agencies and the potential difficulties integrating with privately-held critical infrastructure will be evaluated. Tactics and structural components from the class can also be used in unintentional outbreaks to reduce their impact. Prerequisite: COMP 1500. Frequency: Every Spring, Evey Summer II and Evey Fall.

BHS 4012 Torture, Violence and Trauma Health Care's Healing Role (3 credits)
This course provides an overview of the physical and psychological effects of torture, violence, and trauma. It focuses on the relationship between health care professionals and victims of human rights violations. Discussion topics include the detection, treatment and documentation of victims of these events. The course examines the role health care as it relates to incidents of torture, violence and trauma. Prerequisite: COMP 1500. Frequency: Every Winter and Every Summer II.

BHS 4013 Global Issues in Human Trafficking (3 credits)
This undergraduate level course is designed to raise awareness and knowledge of the global, national and local issue of human trafficking and contemporary slavery. Students will acquire important terminology related to the issue, and recognize the various forms human trafficking can take domestically and globally. Physical and psychological impact of exploitation on the victims and traffickers recruitment methods will also be explored. Students will research the role that private citizens, professionals, government agencies, the media or faith-based organizations can play in addressing the issue. Prerequisite: COMP 1500. Frequency: Every Summer II.

BHS 4020 Topics in Maternal Child Health (3 credits)
The purpose of this course is to provide an overview of Maternal and Child Health (MCH) issues and topic areas. One to two MCH topics will be discussed weekly. To adequately prepare for class discussion questions and course assignments, students are expected to complete the required readings for each session. This course is designated for individuals who have an interest in working in the area of maternal and child health, program development and intervention. Prerequisite: COMP 1500. Frenquency: Every Winter, Every Spring, Every Summer I and Every Summer II.

BHS 4031 Statistics for Health Sciences (3 credits)
This course is designed to introduce the conceptual foundation of statistical analysis & statistical reasoning of health sciences data, and prepare the student to calculate, interpret and utilize appropriate software packages for basic statistical analysis. Prerequisite: COMP 1500. Frequency: Every Winter, and Every Summer II.

BHS 4100 Academic and Professional Writing (3 credits)
The purpose of this course is to introduce students to the format, content and thought processes for successful academic and professional writing through utilization of APA form and style manual. An overview of proper sentence and paragraph structure, grammar, punctuation usage, formatting and bibliographic referencing will be discussed. Must be taken during first semester of enrollment in program. Prerequisite: COMP 1500. Fequency: Every Spring, Every Summer I, Every Summer II, Every fall and Every Winter.

BHS 4110 Health Care and Aging (3 credits)
This course examines the psychosocial and cultural variations associated with maturing and aging. Topics covered will be an overview of life choices, living wills, and treatment, as well as cultural implications of senior care. Prerequisite: COMP 1500. Frequency: Every Winter, Every Summer I and Every Summer II.

BHS 4130 Statistics for Health Sciences (3 credits)
This course is designed to introduce the conceptual foundation of statistical analysis & statistical reasoning of health sciences data, and prepare the student to calculate, interpret and utilize appropriate software packages for basic statistical analysis. Prerequisite: COMP 1500. Frequency: Every Winter, Every Summer II.

BHS 4150 The Science of Sound (3 credits)
This course is designed to introduce students to acoustics. Students will study production of sound waves in general, and more specifically the production of sound waves during speech. Students will also study the characteristics of sound waves, how sound waves are propagated through a medium, and the perception of sound. Prerequisite: COMP 1500. Frequency: Every Fall.

BHS 4151 Linguistics & Psycholinguistic Variables of Normal Language Development (3 credits)
This course will provide an overview of speech and language development as it relates to the typically developing child from birth through adolescence. This course will include topic areas related to the dimensions of communication, neurological and anatomical basis of communication, models of speech and language development, and speech-language differences and diversity. Prerequisite: COMP 1500. Frequency: Every Winter.

BHS 4153 Speech and Language Disorders for Health Care Practitioners (3 credits)
Overview of speech and language delays

and disorders, their etiology, and treatment. How health-care practitioners can identify persons with possible disorders and make appropriate referrals. Consideration of the communication needs within health-care system of persons with speech-language disorders. Prerequisite: COMP 1500. Frequency: Every Winter

BHS 4160 Education for the Health Professions (3 credits)
This course will provide an opportunity to explore learning theories, learning styles, testing and assessment, education trends, and utilizing technology in instruction as it relates to the health professional and professions. Prerequisite: COMP 1500. Frequency: Every Winter and Every Fall.

BHS 4500 Clinical Externship I (6 credits)
This course will mainly be provided through immersion in a clinical setting assigned by the end of the first year. Students will be a daily integral part of the operations of the diagnostic ultrasound department they have been assigned to for the length of the term. Students will report to the clinical coordinator or an assigned professor of the program at NSU.

BHS 4600 Clinical Externship II (7 credits)
This course is a continuation of Clinical Externship I.

BHS 4700 Clinical Externship III (1–8 credits)
The final clinical externship is designed to insure the student has gained an independent level of competency with both normal and abnormal studies with greater technical expertise and efficiency. The student will be expected to complete abnormal studies completely independently, present cases to the technical and medical director, and write technical impressions on the studies performed. Students will continue to complete competency based assessment reports each week to the clinical instructor and clinical coordinator.

BHS 5105 Basic Life Support / CPR (1 credit)
An American Heart Association course that includes both didactic material, including methods of reducing cardiovascular risk, and instruction in the psychomotor skills necessary for the initial resuscitation of the cardiac arrest patient.

BIOL—Biology

BIOL 1040 Environmental Studies (3 credits)
Overview of environmental science that integrates social, economic, technical, and political issues. Problems of ecological disruptions, growth of human populations, land use, energy, water supplies, food supplies, pesticides, and pollution are covered. Frequency: Every Fall and Winter.

BIOL 1060 Amoebas to Zebras: Life on Earth (3 credits)
Tiptoe through the tulips, tapeworms, toadstools, tiger sharks, and tarantulas. This course is an overview of the diversity of life on earth, introducing the major groups of living things, from bacteria to mammals, with introductions to basic concepts in ecology, evolution, and life processes. Frequency: Every Winter.

BIOL 1070 Basics of Human Heredity (3 credits)
This course examines basic concepts of genetics and their application to human heredity and diversity. Topics covered include structure and function of DNA, genes and chromosomes, the role of genes in heredity, tracing of genetic traits in family trees, and advances in genetic technologies as applied to human medicine. This course is not intended for biology majors. Prerequisite: MATH 1030. Frequency: Every Fall and Winter.

BIOL 1080 Human Biology (3 credits)
This course explores the biology of the human organism and is designed to provide a framework in which the student can understand human biology at the cellular, molecular, and organismal levels, both in the healthy state and in the diseased and/or malfunctioning state. The course will emphasize the process of recognizing choices and the application of biological knowledge in the decision-making process. Topics will include a study of the organ systems, immunity, and reproductive development. This course is not intended for biology majors. Frequency: Every Fall and Winter.

BIOL 1100 Concepts and Connections in Biology (3 credits)
Focuses on the fundamental concepts in the life sciences and helps students make connections to the real world. Basic functions of life are compared and contrasted among the five kingdoms. Connections are made between the various life forms and humans. Life is studied at all levels, from the cell to the ecosystem. The complementarity of structure and function is stressed. Evolution is the guiding theme throughout the course. Prerequisite: MATH 1000 or higher. Frequency: Every Fall and Winter.

BIOL 1400 Introductory Cell Biology (3 credits)
This course is an introduction to the basic principles of cell and molecular biology. It includes the study of atomic, molecular, cellular structure and function; biochemical processes and pathways; molecular and classical genetics. Prerequisite: MATH 1000 or higher. Frequency: Every Fall and Winter.

BIOL 1500 Biology I/Lab (4 credits)
An introduction to the biological sciences for students interested in pursuing a career in this area. Includes subcellular and cellular organization, structures/function, biochemistry, classical/molecular genetics, and population dynamics -all arranged around evolution as a major theme. Includes laboratory sessions. Prerequisites: MATH 1040 or higher and COMP 1000 or higher. Frequency: Every Fall and Winter.

BIOL 1510 Biology II/Lab (4 credits)
This course and related labs, the second part of a two-part sequence, introduces the basic principles of biological science at the level of the organism and above. It focuses on a survey of the five kingdoms and compares the structure and function of organ systems in plants and animals. It includes the study of evolution, phylogenetic relationships, species diversity and ecological interactions. Prerequisites: BIOL 1500 and MATH 1040 or higher and COMP 1000 or higher. Frequency: Every Fall and Winter.

BIOL 1510H Biology II/Lab Honors (4 credits)
This course and related labs, the second part of a two-part sequence, introduces the basic principles of biological science at the level of the organism and above. It focuses on a survey of the five kingdoms and compares the structure and function of organ systems in plants and animals. It includes the study of evolution, phylogenetic relationships, species diversity and ecological interactions. Prerequisites: BIOL 1500 and MATH 1040 or higher and COMP 1000 or higher. Honors students only. Frequency: Every Winter.

BIOL 2210 Introduction to Anatomy & Physiology (4 credits)
A lecture that covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. Introduces common human disease processes. Classroom activities in addition to lecture include but are not limited to utilizing virtual computer anatomy and physiology software to prepare

nursing and other allied-health profession students to take advanced anatomy and physiology courses. Fulfills part of the science credits of the college?s General Education requirements. This course does not satisfy program requirements in the Biology major. Pre-requisite: BIOL 1400. Frequency: Every Winter.

BIOL 2350 Human Nutrition (3 credits)
This course explores the various nutrients, their sources, digestion, absorption, metabolism, interaction, storage, and excretion. Current research is presented against a background of basic nutritional concepts. Special emphasis is given to the role nutrition plays in individual health and the welfare of the population. Prerequisites: BIOL 1400 or BIOL 1500. Frequency: Every Fall and Winter.

BIOL 2400 Applied Microbiology (3 credits)
This course is an introduction to the basic principles of applied microbiology. It provides an overview of medical microbiology. It introduces the diversity and importance of microbes and their physiology. Aspects of pathogenicity and immunology are stressed. Prerequisites: BIOL 1400 or BIOL 1500; and MATH 1030 or higher. Frequency: Every Fall and Winter.

BIOL 2600 Medical Terminology (3 credits)
This course covers the basic structure of medical terms, including roots, prefixes, and suffixes. Emphasis will also be placed on the terminology of body systems. Medical terms related to anatomy, physiology, pathology, clinical procedures, laboratory tests, and medical abbreviations will be covered. Also, students will learn medical terminology related to specialized areas of medicine such as cancer medicines, nuclear medicines, radiology/radiotherapy, pharmacology, and psychiatry. Prerequisites: BIOL 1080, BIOL 1100, BIOL 1400, BIOL 1500, or BIOL 1510 or BIOL 1510H. Frequency: Every Fall and Winter.

BIOL 3200 General Ecology/Lab (4 credits)
Basic principles governing the interaction of organisms and their environment including food webs, energy flow, biogeochemical cycles, factors controlling distribution and abundance, biological and species interaction, species diversity, ecosystem stability, ecological succession, and impact of man. Includes laboratory sessions. Prerequisites: BIOL 1500 and BIOL 1510 or BIOL 1510H. Frequency: Every Winter.

BIOL 3220 Animal Behavior (3 credits)
This course focuses on the behavior of animals. Topics covered include foraging, mating, parental care, and conflict and cooperation. These behaviors are evaluated using the major theoretical models in the field, including game theory, optimal foraging, and multilevel selection. Through a combination of lectures and readings from classical and contemporary literature, students are given a solid foundation in the study of animal behavior, and the extent to which it is shaped by social and environmental conditions. Prerequisite: BIOL 1510 or BIOL 1510H. Frequency: Every Fall.

BIOL 3300 Invertebrate Zoology/Lab (4 credits)
Basic invertebrate zoology including introductory anatomy, physiology, phylogeny, and ecology of major animal phyla from protozoa through echinoderms with emphasis on marine organisms. Includes laboratory sessions. Prerequisites: BIOL 1500 and BIOL 1510 or BIOL 1510H. Frequency: Every Fall.

BIOL 3311 Vertebrate Zoology/Lab (4 credits)
This course introduces students to the identification, systematics, life history, anatomy, and adaptive strategies of the vertebrates. The course also exposes students to methods of collecting, preserving, and identifying local vertebrates, as well as the common techniques used in vertebrate research. Prerequisite: BIOL 1510. Frequency: Odd Year Winter.

BIOL 3312 Human Anatomy and Physiology/Lab (5 credits)
This course deals specifically with form and function of human systems. The lecture period stresses human physiology; the laboratory is devoted to anatomy, histology, and physiology. The lecture and laboratory are presented in a unified fashion with the aim that each reinforces the other in presenting a complete picture of functional morphology. Although lower vertebrates are used for comparative purposes, human systems receive major emphasis in both lecture and laboratory. Prerequisite: BIOL 1400 or BIOL 1500. Frequency: Every Fall and Winter.

BIOL 3320 Anatomy and Physiology I/ Lab (4 credits)
This is the first part of a two-part course that deals specifically with form and function of vertebrate organ systems. The lecture period stresses human physiology and the laboratory is mainly devoted to gross anatomy. However, the lecture and laboratory are presented in a unified fashion with the aim that each reinforces the other in presenting a complete picture of functional morphology. Although lower vertebrates are used for comparative purposes, mammalian systems receive major emphasis in both lecture and laboratory. Prerequisite: BIOL 1500 or equivalent. Frequency: Every Fall and Winter.

BIOL 3330 Anatomy and Physiology II/ Lab (4 credits)
This is the second part of a two-part course that deals specifically with form and function of vertebrate organ systems. The lecture period stresses human physiology and the laboratory is devoted to histology and gross anatomy. The lecture and laboratory are presented in a unified fashion with the aim that each reinforces the other in presenting a complete picture of functional morphology. Although lower vertebrates are used for comparative purposes, human systems receive major emphasis in both lecture and laboratory. Prerequisite: BIOL 3320. Frequency: Every Fall and Winter.

BIOL 3400 Microbiology/Lab (4 credits)
Introduction to basics of morphology, metabolism, growth, genetics, enumeration, and control and public health aspects of bacteria and viruses, with emphasis on marine processes and types. Includes laboratory sessions. Prerequisites: BIOL 1500 and CHEM 1310 or CHEM 1310H. Frequency: Every Fall and Winter.

BIOL 3450 Introduction to Virology (3 credits)
This course focuses on the introduction to basics of virus structure, replication, overview of diseases caused by viruses, metabolism, growth, genetics, enumeration, and control and public health aspects of viruses. Prerequisites: BIOL 1500 and CHEM 1310 or CHEM 1310H. Frequency: Every Winter.

BIOL 3500 Histology/Lab (4 credits)
Histology is the study of tissues. It is the science of relating microscopic cell and tissue structure, to function. The lecture period is devoted to tissue structure and function. In the laboratory session, students will be taught a systematic process in identifying histological sections, and how structure directly relates to function. The lecture and laboratory sessions will complement each other to provide a complete understanding of microscopic anatomy and function. Prerequisites: BIOL 1500 and CHEM 1310 or CHEM 1310H. Frequency: Every Fall.

BIOL 3600 Genetics/Lab (4 credits)
Review of principles of Mendelian and quantitative inheritance considered at a morphological and molecular level,

including a survey of population genetics, theories of natural selection, the study of amino acids, and nucleotide substitutions as "evolutionary clocks. Prerequisites: BIOL 1500 and CHEM 1310 or CHEM 1310H or CHEM 2310 or CHEM 2310H and, MATH 3020 or MATH 3020H or MATH 2020 or MATH 2020H. Frequency: Every Fall and Winter.

BIOL 3800 Evolution (3 credits)
This course provides the fundamental principles of evolutionary biology. Coverage will include history of evolutionary thought, population and quantitative genetics, paleobiology and experimental evidence, adaptations and radiation, biodiversity, evolution and development (evo-devo), molecular evolution, the impact of neo-darwinian synthesis, genome evolution, phylogenetics, human evolution, macroevolution and coevolution. Prerequisites: BIOL 1500 and BIOL 1510 or BIOL 1510H. BIOL 3600 must be taken either as a prerequisite or concurrently with BIOL 3800. Frequency: Every Fall.

BIOL 3900 Introduction to Parasitology/Lab (4 credits)
Through lectures and the examination of prepared slides in the laboratory, this course will survey the diversity, morphology, life cycles, and pathology of major protist and metazoan parasites of humans and domesticated animals. Pre-requisite: BIOL 1510 or BIOL 1510H. Frequency: Every Fall.

BIOL 4100 Genomics / Lab (4 credits)
This course provides students with an overview of high throughput technologies in biology. It focuses primarily on the fundamental methodologies associated with the modern studies of genomes, transcriptomes and proteomes. The computer-based analysis of the massive data sets generated by these technologies will also be introduced. The rise of technologies, and their impact on general biological research, as well as applied medical and pharmaceutical field, will be discussed. This course also includes laboratory sessions. Prerequisite: BIOL 3600. Frequency: Every Fall.

BIOL 4200 Neurobiology (3 credits)
This course is an introductory survey that covers nerve function from the molecular level to behavior. The objective is to give the advanced student in the biological sciences insight into fundamental mechanisms of nervous integration. The instructional format will consist of lectures, discussion groups, computer simulations, and guest lectures by practicing neuro-scientists. Prerequisite: BIOL 3312 or BIOL 3320 or NEUR 2500. Frequency: Every Winter.

BIOL 4300 Microbial Pathogenesis (3 credits)
An introduction into the molecular mechanisms used by various microbes (including bacteria and viruses) to infect and cause disease in their hosts. The course will cover microbial attachment, virulence factors, host-parasite interactions, treatment strategies, and mechanisms of drug resistance. Prerequisites: BIOL 3400 and BIOL 3600. Frequency: Every Fall.

BIOL 4321 Systems and Synthetic Biology (3 credits)
This course will discuss the principles of systems and synthetic biology, two fields that integrate the disciplines of biology, mathematics and computation. It will touch upon how molecular biology and mathematics can be used to determine how multiple parts of the cell or environment work together to allow a behavior. Furthermore, it will discuss how synthetic biology can be used to program novel behavior in cells. This course serves as an excellent introduction for those wanting to understand how biological questions, including those pertaining to medicine, can be answered using an interdisciplinary approach. Prerequisites: MATH 2100 OR MATH 2100H and BIOL 3600. Frequency: Every Winter.

BIOL 4340 Cellular and Molecular Biology (3 credits)
Molecular and biochemical basis of cell structure and function. Topics covered include modern methods for studying cells; cell architecture, growth and divisions; structure and expression of prokaryotic and eukaryotic genes; chromosome structure; development; immune system and cancer biology. This course does not include laboratory sessions. Prerequisites: BIOL 1500 and CHEM 1310 or CHEM 1310H or CHEM 2310. Frequency: Every Fall and Winter.

BIOL 4360 Immunology (3 credits)
A survey of, and introduction to, immunology, which includes innate and specific immunity, recognition of antigens, antibodies, the complement system, cytokines, cancer and the immune system, and autoimmunity. Prerequisite: BIOL 3400. Frequency: Every Winter.

BIOL 4400 Developmental Biology (3 credits)
Principles of human cellular differentiation, morphogenesis, and development, with comparisons to lower animal forms. Prerequisite: BIOL 3330 or BIOL 3312. Frequency: Every Fall.

BIOL 4700 Advanced Human Physiology (3 credits)
Physiology is the study of the function of the organ systems and how they relate to the human body. The course will begin with cellular physiology and use this as the basis for an integrated approach to organ system physiology. The relationship among the organ systems will be emphasized in order to demonstrate homeostasis. Prerequisites: BIOL 3330 or BIOL 3312 and CHEM 2400 or CHEM 2400H. Frequency: Every Winter.

BIOL 4900 Special Topics in Biology (1–3 credits)
Topics in advanced biology that are not included in a regular course offering. Prerequisites may be required. Specific content and prerequisites are announced in the course schedule for the given term. Students may re-enroll for Special Topics covering different content. Prerequisite: BIOL 1500. Frequency: Upon request and see academic department chair.

BIOL 4901 APS Capstone Course in Biological and Physical Sciences (3 credits)
This course is reserved for students who are enrolled in the Applied Professional Studies Program. Through a series of written assignments, this course provides students with an opportunity to integrate previous learning and experience with a concentration in biological or physical sciences to form a unique course of academic study. Given that the APS major is individualized to a large extent based on a student's interests and past experiences, this course ordinarily will be conducted as an independent study and will be taken during the student's last semester prior to receipt of their degree. Prerequisite: To be determined by supervising faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4950 Internship in Biology (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: Cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon request and see academic department chair.

BIOL 4950A Internship in Biology (A) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: Cumulative GPA of 2.5

or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon request and see academic department chair.

BIOL 4950B Internship in Biology (B) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: Cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon request and see academic department chair.

BIOL 4950C Internship in Biology (C) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: Cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon request and see academic department chair.

BIOL 4950D Internship in Biology (D) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: Cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon request and see academic department chair.

BIOL 4960 Practicum in Biology I (3 credits)
An initial field experience for biology majors at an approved site through the Office of Career Services under the supervision of an approved practicum site supervisor, with face-to-face class group lecture meetings for 3-hours weekly led by the biology faculty member (course instructor) throughout the semester. The format of the course will include both didactic and experiential learning in applied settings where students will immerse themselves in the primary scientific literature of their field of interest. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, and BIOL 1510 with the approval of the biology instructor and permission of the biology department chair. Frequency: Every Fall.

BIOL 4990 Independent Study in Biology (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4990A Independent Study in Biology (A) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4990B Independent Study in Biology (B) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4990C Independent Study in Biology (C) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4990D Independent Study in Biology (D) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BIOL 4990E Independent Study in Biology (E) (1–12 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Upon request and see academic department chair.

BMS—Medical Sonography

BMS 3110 Introduction to Diagnostic Medical Sonography (3 credits)
This course is designed to introduce students to the equipment used in diagnostic ultrasound. The course will be primarily taught in the ultrasound training laboratory in small groups. The focus of the course will be to lead students toward proficiency and competency in using the tools available on the ultrasound equipment for the production of quality images, as well as proper ergonomics and scanning techniques. This course is the foundation for all the following core courses.Frequency: Every Summer I.

BMS 3120 Ultrasound Cross–Sectional Anatomy (4 credits)
This course is designed to expand upon student's present knowledge and understanding of normal human anatomy through developing spatial relationships of organs, vessels, bones, muscles and connective tissues. Normal size, shape, internal and external anatomic landmarks, and imaging characteristics using Computed Tomography, Sonography and other imaging modalities will be examined. Normal spatial relationships of anatomic structures will be presented using standard imaging planes in two and three dimensions. An introduction to the imaging planes used in common sonographic exams along with basic sonographic characteristics of the normal structures will be included. This course serves as the foundation in preparation for the clinical specialty ultrasound courses. Frequency: Every Summer I.

BMS 3130 Ultrasound Physics I/Lab (3 credits)
This course is designed to help the student acquire knowledge of all the fundamental principles and concepts necessary to understand the properties of sound and ultrasound as used in diagnostic imaging. These principles and concepts will span from basic properties of sound in soft tissue to advanced techniques such as Doppler, spectral analysis, M-mode, etc. as they pertain to evaluation for abdominal, ob-gyn, small parts, vascular, and cardiac ultrasound imaging. The students will also learn about artifacts, safety, and the concepts of bioeffects, as well as quality assurance and image storage. Frequency: Every Summer I.

BMS 3140 Small Parts Sonography (4 credits)
This course will focus on the use of ultrasound for the evaluation of superficial structures such as the thyroid and parathyroid glands, breast, male reproductive system, superficial soft tissue structures, shoulder, hand and wrist; as well as the neonatal brain, pediatric spine, pediatric hip/pelvis, and pediatric abdomen. The students will have a have a strong hands-on component

spending several hours in the laboratory. Lectures will focus in relevant normal and abnormal anatomical and physiological aspects as well as on clinical findings, signs and symptoms of disease related to these areas. Frequency: Every Summer I.

BMS 3150 Obstetrics and Gynecology Ultrasound I (4 credits)
This course will focus on the use of ultrasound for the evaluation of the organs contained in the human female pelvic cavity in both, normal and abnormal, gravid and non-gravid anatomy and physiology. This course will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. The lectures will focus on the aspects previously mentioned as well as on fetal abnormalities and abnormal conditions of the ferns. The course will explore infertility and assisted reproductive technologies. Frequency: Every Fall.

BMS 3160 Abdominal Sonography I (4 credits)
This course will review the abdominal anatomy and physiology with a focus on cross-sectional anatomy. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory learning to recognize normal sonographic anatomy. Lectures will focus on the above mentioned aspects, as well as on how to collect patient information relevant to the different ultrasound studies and other imaging techniques. This course provides a foundation that will help students understand the clinical exam and the elements contributing to their role and the scope of practice as general sonographers. Frequency: Every Fall.

BMS 3170 Venous Testing/Lab (4 credits)
This course will focus on the use of ultrasound for the evaluation of the venous circulation of the upper and lower extremities. This course will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound, as well as some other imaging techniques. Frequency: Every Fall.

BMS 3190 Peripheral Arterial Testing/ Lab (4 credits)
This course will focus on the use of ultrasound for the evaluation of the arterial circulation of the upper and lower extremities. This course will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound and other technologies specific to vascular laboratories, as well as some other imaging techniques. Frequency: Every Winter.

BMS 3230 Ultrasound Physics II/SPI Exam (1 credit)
This course is designed to expand upon a student's present knowledge and understanding of normal anatomy through developing spatial relationships of organs, vessels, bones, muscles, and connective tissues. Frequency: Every Fall.

BMS 3250 Obstetrics and Gynecology Ultrasound II (4 credits)
This course is a continuation of Obstetrics and Gynecology Ultrasound I. It is a further comprehensive approach to in-depth studies of the organs contained within the human female pelvic cavity in both, normal and abnormal, gravid and non-gravid anatomy and physiology. The course will focus on fetal abnormalities and abnormal conditions of the fetus. Frequency: Every Winter.

BMS 3260 Abdominal Sonography II (4 credits)
This course will review abnormal abdominal anatomy and physiology with a focus on clinical correlations. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory strengthening the skills learned from Abdominal Sonography I. Lab assignments will incorporate case studies, clinical correlations, and other imaging modalities (e.g., MRIs, nuclear medicine, CTs, etc.). Lectures will focus on the above mentioned aspects, as well as on how to collect patient information relevant to the different ultrasound studies and pathologies. This course provides a foundation that will help students understand the clinical exam and the elements contributing to their role and the scope of practice as general sonographers. Frequency: Every Winter.

BMS 3270 Cerebrovascular Testing/ Lab (4 credits)
This course will focus on hemodynamic principles and the use of ultrasound for the evaluation of the extracranial and intracranial cerebrovascular circulation. This course will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound, as well as some other imaging techniques. Frequency: Every Summer I.

BMS 3280 Clinical Preparation and Review (4 credits)
This course will provide and reinforce the nontechnical aspects of the profession of diagnostic medical sonography. This will include, but is not limited to, patient care, professionalism, and clinical rationale. This course will also prepare students for the clinical experience that follows in the second year. Frequency: Every Summer I.

BMS 4500 Clinical Externship I (6 credits)
This course will mainly be provided through immersion in a clinical setting assigned by the end of the first year. Students will be a daily integral part of the operations of the diagnostic ultrasound department they have been assigned to for the length of the term. Students will report to the clinical coordinator or an assigned professor of the program at NSU. Frequency: Every Fall.

BMS 4600 Clinical Externship II (7 credits)
This course is a continuation of Clinical Externship I.

BMS 4700 Clinical Externship III (8 credits)
The final clinical externship is designed to ensure the student has gained an independent level of competency with both normal and abnormal studies with greater technical expertise and efficiency. The student will be expected to complete abnormal studies completely independently, present cases to the technical and medical director, and write technical impressions on the studies performed. Students will continue to complete competency based assessment reports each week to the clinical instructor and clinical coordinator.

CARM—CARM-Conflict Anal&Resol-MS

CARM 6450 M.S. Capstone (3 credits)
This course will expose students to the practical aspects of the scholarship of engagement approach. It will provide students with a unique opportunity to examine real cases of conflict resolution programs from the moment an idea emerges, through the design, implementation, execution, to the evaluation stage, all with the guidance and commentary of the authors of the projects. The course will focus on interventions in the areas of teaching, research and service, and the specific examples studied will reflect the past and ongoing scholarship of engagement initiatives undertaken by all

faculty of the department. Class activities will involve a close collaboration between the course participants and all faculty at the department of DCRS. The delivery methods will include reading, lectures, and experiential learning exercises.

CENG—Computer Engineering

CENG 1600 Digital Logic/Lab (4 credits)
This course introduces how different types of numbers are represented and operated upon in binary systems. It provides fundamentals of Boolean algebra, basic logic gates, and how Boolean expressions and circuits are minimized using various methods. Students will learn how to design various types of combinational logic circuits including arithmetic circuits (i.e., adders, subtractors, and comparators), multiplexers, demultiplexers, encoders, decoders, programmable logic arrays (PLAs), read only memory (ROMs), and programmable array logic (PALs). They will also understand the operation of basic types of flip-flops, and how they are stacked together to create registers. They will design finite state machines (FSMs) using Mealy vs. Moore models and analyze them using state diagrams, state tables, timing diagrams, and algorithmic state machine charts. Prerequisites: MATH 1040 or higher. Frequency: Every Winter.

CENG 3720 Computer Systems Engineering (3 credits)
This course covers an array of topics such as system level modeling and evaluation of computer systems, life cycle cost analysis, requirements analysis and elicitation, specifications, architectural design, reliability and performance evaluation, testing, maintenance, project management, concurrent hardware and software design, implementation, and specialized systems. Prerequisite: CSIS 3750. Frequency: Every Fall.

CENG 4710 Embedded Systems (4 credits)
This course introduces a variety of topics such as embedded microcontrollers and microprocessors, embedded programming, real-time operating systems, low power computing, reliable system design, networked embedded systems, design methodologies, interfacing and mixed-signal systems, and tool support. Laboratory projects are oriented so that students have to successfully design, implement, debug and document computer solutions involving hardware and software. Each student is required to design various projects. Prerequisites: CSIS 3810 and EENG 3310. Frequency: Every Fall.

CENG 4750 VLSI Design (4 credits)
This course introduces how to design chips using high-level programming languages, and stresses the underlying circuits principles necessary to build high performance and low power systems. The course focuses on VLSI circuit design for modern CMOS technologies. The topics covered in this course include: logic design, high level design languages, basic transistor operation, circuit families (static CMOS, dynamic circuits, and domino), clocking, circuit simulation, physical design, and computer-aided design tools. Prerequisites: EENG 3710 and CSIS 4050. Frequency: Every Winter.

CENG 4900 Senior Capstone Design (4 credits)
This course covers a general design methodology and consideration of alternative solutions in project planning and design. Teams of students will be assigned a major design problem that will be the focus of the capstone design project throughout the course. Oral presentation and report writing are required. Prerequisite: Consent of department chair. Frequency: Even Year Winter.

CENG 4910 Engineering Ethics Seminar (1 credit)
This course aims at teaching computer engineering students how to avoid and, if possible, resolve any harmful situations in the workplace while being fully aware of legal constraints, implications, and the organizational structure of a business. This seminar will briefly review the current framework of ethics and discuss examples of ethical dilemmas in computer engineering practice, present an established, systematic method for resolving ethical situations, and discuss issues prevalent in professional ethics caused by cultural differences. Prerequisite: Junior or senior standing. Frequency: Every Winter.

CENG 4950 Internship in Computer Engineering (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.0 or higher, major GPA of 2.25 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon Request see academic Department Chair.

CENG 4990 Independent Study in Computer Engineering (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and the division director. Frequency: Upon Request see academic Department Chair.

CHEM—Chemistry

CHEM 1100 Fundamentals of Chemistry (3 credits)
The fundamental laws, principles and theories of atomic structure, molecular structure and bonding, stoichiometry, states of matter/solutions, energy changes, and oxidation-reduction reactions are presented along with an introduction to organic chemistry and biochemistry. Prerequisite: MATH 1040 or higher. Frequency: Every Fall and Winter.

CHEM 1150 Essentials of Chemistry (3 credits)
A one-semester study of the essentials in chemistry with a foundation of energy and the nature of matter. Upon this foundation students will investigate chemical compounds, chemical reactions, chemical nomenclature, and reaction stoichiometry. It continues with chemical periodicity, chemical bonding, and gases. The course concludes with an introduction to kinetics, equilibrium, acid/base theory, and redox reactions. Prerequisite: MATH 1040 or higher. Frequency: Every Winter.

CHEM 1200 Survey of Forensic Science/Lab (4 credits)
This course is structured to introduce the basic disciplines of forensic science such as fingerprints, drug analysis, arson investigations and DNA analysis. This course is appropriate for non-science major students and students who are looking to pursue the field of forensic science. Frequency: Odd Year Fall.

CHEM 1300 General Chemistry I/Lab (4 credits)
This course and the related lab is the first part of a two-semester sequence that studies the laws, principles and theories of atomic structure, molecular structure and bonding, stoichiometry, states of matter/solutions, energetics, oxidation reduction, and laboratory chemistry, including their applications. Prerequisite: MATH 1200. Frequency: Every Fall and Winter.

CHEM 1300H General Chemistry I/Lab Honors (4 credits)
This course and the related lab is the first part of a two-semester sequence that studies the laws, principles and theories of atomic structure, molecular structure and bonding, stoichiometry, states of matter/

solutions, energetics, oxidation reduction, and laboratory chemistry, including their applications. Prerequisites: MATH 1200; Honors students only. Frequency: Every Fall.

CHEM 1310 General Chemistry II/Lab (4 credits)
This course and the related lab is the second part of a two-semester sequence that studies atomic structure, molecular structure and bonding, states of matter/solutions, dynamics (kinetics and thermodynamics), equilibrium, electrochemistry, and laboratory chemistry including their applications. Prerequisite: CHEM 1300 OR CHEM 1300H. Frequency: Every Fall and Winter.

CHEM 1310H General Chemistry II/ Lab Honor (4 credits)
This course and the related lab is the second part of a two-semester sequence that studies atomic structure, molecular structure and bonding, states of matter/solutions, dynamics (kinetics and thermodynamics), equilibrium, electrochemistry, and laboratory chemistry including their applications. Prerequisite: CHEM 1300 or CHEM 1300H. Honors students only. Frequency: Every Winter.

CHEM 1500 Introduction to Environmental Chemistry (3 credits)
This course teaches the basic principles of chemistry using examples from the environment. Through a brief introduction to areas of inorganic, organic, and biochemistry, the diversity of chemical pollutants in the environment will be explored. Emphasis will be placed on environmental issues such as the sources of chemical pollutants, the reactions that produce them, and their toxicity. A basic level of algebra is essential. Prerequisite: MATH 1030 or higher. Frequency: Every Fall.

CHEM 2200 Essentials of Organic Chemistry (4 credits)
A one-semester study of the structure, nomenclature, preparation, properties, and reactions of organic compounds, organized by functional groups and reaction mechanisms. Includes laboratory sessions. Prerequisite: CHEM 1310 or CHEM 2310 or CHEM 1310H. Frequency: Every Winter.

CHEM 2400 Organic Chemistry I/Lab (4 credits)
This course and the related lab is the first part of a two-semester sequence that studies the chemistry of carbon compounds, including their structure, nomenclature, preparation, reactions, analysis, spectroscopy, and properties. Reaction mechanisms are stressed within a functional group framework. The laboratory session introduces basic laboratory techniques frequently utilized in organic syntheses. Prerequisite: CHEM 1310 or CHEM 1310H. Frequency: Every Fall and Winter.

CHEM 2400H Organic Chemistry I/Lab (4 credits)
This course and the related lab is the first part of a two-semester sequence that studies the chemistry of carbon compounds, including their structure, nomenclature, preparation, reactions, analysis, spectroscopy, and properties. Reaction mechanisms are stressed within a functional group framework. The laboratory session introduces basic laboratory techniques frequently utilized in organic syntheses. Prerequisite: CHEM 1310 OR CHEM 1310H. Honors students only. Frequency: Odd Year Fall.

CHEM 2410 Organic Chemistry II/Lab (4 credits)
This course and the related lab is the second part of a two-semester sequence that studies the chemistry of heteroatom-containing carbon compounds, including their structure, nomenclature, preparation, reactions, analysis, and properties. Reaction mechanisms within a functional group framework are stressed. Stability, nucleophilicity and electrophilicity, and structurereactivity relationships will also be examined. The laboratory session practices basic organic syntheses. Prerequisite: CHEM 2400 OR CHEM 2400H. Frequency: Every Fall and Winter.

CHEM 2410H Organic Chemistry II/ Lab (4 credits)
This course and related labs, the second part of a two-part sequence, study the chemistry of carbon compounds, including their structure, nomenclature, preparation, reactions, analysis, and properties. Reaction mechanisms within a functional group framework are stressed. Stability and reactivity, nucleophilicity and electrophilicity, spectroscopy, and structure-activity relationships will also be examined. Prerequisite: CHEM 2400 or CHEM 2400H. Honors students only. Frequency: Even Year Winter.

CHEM 3000 Chemical Literature (1 credit)
The history and structure of chemical literature will be covered. The history, structures and use of literature search tools will also be covered. The use of chemical literature searches and the literature itself in the preparation of scientific proposals and papers will be emphasized. Prerequisite: CHEM 2410 or CHEM 2410H. Frequency: Every Fall

CHEM 3101 Chemistry Seminar (3 credits)
This chemistry seminar course is designed to familiarize students with the availability and expectations of different chemistry professions, the basic nature of science and chemistry, ethical issues in chemistry, and the preparation and critical analysis of research seminars. This will be done through lectures by departmental faculty, as well as, seminars by guest speakers and literature research projects. Prerequisite: CHEM 3000. Frequency: Every Winter.

CHEM 3150 Environmental Chemistry (3 credits)
In this course, fundamental principles of chemistry, such as kinetics, equilibrium and bonding, are used to understand the sources, fates and transformations of chemical components in the natural and polluted environments. The topics to be discussed include energy utilization, stratospheric ozone depletion, climate change, air pollution and control, water pollution and treatment, toxic chemicals. Some focus will be placed on environmental implications of energy utilization, chemistry of the atmosphere, hydrosphere, lithosphere, and biosphere. Prerequisite: CHEM 2200 or CHEM 2400 or CHEM 2400H. Frequency: Odd Year Fall.

CHEM 3215 Survey of Rational Drug Design (3 credits)
This course aims to provide students with an understanding of the process of drug discovery and development from the identification of novel drug targets to their introduction into clinical practice. It covers the basic principles of how drugs are discovered with emphasis on lead identification, lead optimization, classification and kinetics of molecules targeting enzymes and receptors, prodrug design and applications, as well as structure-based drug design methods. Recent advances in the use of computational and combinatorial chemistry in drug design will also be presented. Prerequisite: CHEM 2410 or CHEM 2410H. Frequency: Odd Year Fall.

CHEM 3400 Biophysical Chemistry (3 credits)
Biophysical Chemistry covers thermodynamics concepts, electrochemistry, and introduction to statistical mechanics and their relation to thermodynamics functions. This course will explore a range of topics at the intersection between chemistry and biology. Prerequisites: MATH 2100 OR MATH

2100H, AND PHYS 2360 OR PHYS 2500, AND BIOL 1510 OR BIOL 1510H, AND CHEM 2410 OR CHEM 2410H. Frequency: Every Fall.

CHEM 3410 Biophysical Chemistry II/ Lab (4 credits)
Biophysical Chemistry II is an introduction to the principles of Statistical Mechanics, and Quantum Mechanics. This course will explore a range of topics at the intersection between chemistry and biology. Prerequisite: CHEM 3400. Frequency: Every Winter.

CHEM 3460 Quantitative Analysis/Lab (4 credits)
The quantitation of chemical substances in complex mixture is the focus of this lab intensive course. Methods of sample preparation and analysis will be examined. The mathematical treatment of data to produce quantitative information for chemical substances will also be emphasized. Prerequisite: CHEM 2400 OR CHEM 2400H OR CHEM 2200. Frequency: Every Fall.

CHEM 3650 Biochemistry/Lab (4 credits)
The chemical properties of amino acids,monosaccharides, lipids and nucleotides are discussed. The structure of proteins, carbohydrates and biological membranes are studied. Mechanisms of enzymatic catalysis are outlined in detail with an emphasis on the structure/function of cofactors. Glycolysis and citric acid cycle are described. Electron transport and ATP synthesis are discussed in both mitochondria and chloroplasts. Metabolism of lipids, amino acids and nucleotides are presented. In addition to mechanistic studies of biochemical pathways and cycles, regulation of these processes is also covered. Prerequisites: BIOL 1500 and CHEM 2200 or CHEM 2410 or CHEM 2410H. Frequency: Every Fall and Winter.

CHEM 3700 Physical Chemistry I/Lab (4 credits)
Physical Chemistry I covers thermodynamics, chemical equilibrium, phase equilibrium, chemistry of solutions, kinetic theory, and reaction kinetics. Prerequisites: MATH 3200 OR MATH 3400 AND PHYS 2500 AND CHEM 2410 or CHEM 2410H. Frequency: Every Fall.

CHEM 3710 Physical Chemistry II/Lab (4 credits)
Physical Chemistry II is a continuation of the study of physical chemistry and covers chemical statistics, quantum mechanics, atomic and molecular spectroscopy, and molecular structure. This course also includes a lab which explores lab techniques used in physical chemistry. Prerequisite: CHEM 3700. Frequency: Every Winter.

CHEM 4005 Inorganic Chemistry I (3 credits)
In this course modern inorganic chemistry topics including the principles of molecular structure, bonding periodicity, band theory, and chemical reactivity with application to compounds of the main group and transition elements are studied. Prerequisite: CHEM 2410 or CHEM 2410H. Frequency: Every Fall.

CHEM 4010 Inorganic Chemistry II/ Lab (4 credits)
In this course will cover advanced modern inorganic chemistry topics including ligand field, reactions mechanisms, and the 18 electron rule for inorganic and organometallic compounds are studied. The lab component covers modern techniques of inorganic and organometallic chemistry including experience with glovebox, Schlenk line, and vacuum line methods. Prerequisites: CHEM 3460 and CHEM 4005. Frequency: Every Winter.

CHEM 4101 Senior Chemistry Seminar (1 credit)
This senior seminar course is designed for chemistry major students in their senior year. It prepares students to give a seminar on their undergraduate research or a literature investigation of a related area. Prerequisite: CHEM 3101. Frequency: Every Winter.

CHEM 4150 Chemical Instrumentation (4 credits)
This is an applied chemistry course designed to emphasize the typical instrumentation methods used in chemistry. The course will focus on chemical analysis and chemical instrumentation. Classical methods such as gas chromatography, liquid chromatography, potentiometry, and electrochemistry will be supplemented with more modern and analytical instrumental methods such as UV-visible spectrophotometry, FT-IR, GC, fluorimetry, NMR, and atomic spectroscopy (absorption and emission). Prerequisite: CHEM 2410 or CHEM 2410H. Frequency: Every Winter.

CHEM 4200 Plant Drug Analysis (3 credits)
This course introduces the chemical techniques used to extract, separate, and identify medicinal drugs derived from plants. Eleven major drug classes--essential oils, alkaloids, anthracene derivatives, argutin, bitter principle, coumarin, flavinoids, cardic glycoside, saponin, pungent principle, and mustard oil--will be covered. The course also examines the botanicals they are derived from. By the end of the course, the student is expected to execute a qualitative screening of an unknown drug and identify its class and the major pharmaceutical components present. Prerequisite: CHEM 2200 or CHEM 2410 or CHEM 2410H. Frequency: Even Year Winter.

CHEM 4300 Clinical Chemistry (3 credits)
This course examines the application of chemistry and biochemistry to the diagnosis of human disease Clinical laboratory scientists (also known as medical technologists) perform chemical, microbiological, and immunological tests on body fluids in a medical laboratory. The results of these tests are used by physicians and clinicians in preventing, diagnosing, and treating disease. This course will review these techniques as they apply to diagnosis and treatment of disease, organ transplants, therapeutic drug monitoring, crime investigation, genetic studies, and home testing kits. The impact of technology on the application of clinical chemistry will also be examined. Prerequisite: CHEM 2200 or CHEM 2410 or CHEM 2410H. Frequency: Odd Year Winter.

CHEM 4900 Special Topics in Chemistry: Principles of Medicinal Chemistry (3 credits)
The organic chemistry of medicinal agents: understanding the relationships between chemical structure and their individual mode of action. Including the principles involved in drug discovery and development, and in enzyme-inhibition. The first half will focus on the chemical and biochemical background needed to understand modern medicinal chemistry, whereas the second half will concentrate on the medicinal chemistry of select receptor-agent interactions. Prerequisite: CHEM 2410 or CHEM 2410H. Frequency: Upon request and see academic department chair.

CHEM 4900A Special Topics in Chemistry: Principles of Medicinal Chemistry (3 credits)
The organic chemistry of medicinal agents: understanding the relationships between chemical structure and their individual mode of action. Including the principles involved in drug discovery and development, and in enzyme-inhibition. The first half will focus on the chemical and biochemical background needed to understand modern medicinal chemistry, whereas the second half will concentrate on the medicinal chemistry of select receptor-agent interactions. Prerequisite: CHEM 2410. Frequency: Upon request and see academic department chair.

CHEM 4900B Special Topics in Chemistry: Nutritional Biochemistry and Metabolism (3 credits)
This course will provide a firm foundation of the biochemical functions of the macronutrients, micronutrients and trace nutrients in humans. Starting with the processes of digestion and absorption of the nutrients, and proceeding through their participation in the various metabolic pathways that occur inside cells, the focus will be on the precise enzymatic steps that require each vitamin and mineral, and the biochemical consequences of a lack of each nutrient in humans. These will then be related to the physiological and pathological features of deficiency for each nutrient in humans. The nutritional requirements for each nutrient will be related to guidelines promulgated by the U.S. Government (e.g. Dietary Reference Intakes) and other bodies that are used to assess human nutritional sufficiency. Prerequisite: CHEM 3650. Frequency: Upon request and see academic department chair.

CHEM 4950 Internship in Chemistry (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4950A Internship in Chemistry (A) (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4950B Internship in Chemistry (B) (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4950C Internship in Chemistry (C) (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990 Independent Study in Chemistry (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990A Independent Study in Chemistry (A) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990B Independent Study in Chemistry (B) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990C Independent Study in Chemistry (C) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990D Independent Study in Chemistry (D) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990E Independent Study in Chemistry (E) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990F Independent Study in Chemistry (F) (1–12 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the Department Chair. Frequency: Upon request and see academic department chair.

CHEM 4990G Independent Study in Chemistry (G) (1–12 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the Department Chair. Frequency: Upon request and see academic department chair.

COMM—Communication

COMM 1100A Communication Practicum A (1 credit)
In this hands-on course, students learn, develop, and apply the skills necessary to function in a professional media setting. Students will gain practical experience related to the field of media by working in the Office of Student Media, under the supervision of a communication studies faculty member. Students will be able to work in fields such as newspaper, television, radio, web, public relations, and event planning. Frequency: Every Fall and Winter.

COMM 1100B Communication Practicum B (1 credit)
In this hands-on course, students learn, develop, and apply the skills necessary to function in a professional media setting. Students will gain practical experience related to the field of media by working in the Office of Student Media, under the supervision of a communication studies faculty member. Students will be able to work in fields such as newspaper, television, radio, web, public relations, and event planning. Frequency: Every Fall and Winter.

COMM 2010 Introduction to Print Journalism (3 credits)
This course centers on instruction in the forms, methods, and styles of news and information writing for print publications. Emphasis will be placed on journalistic research methods, style conventions, and journalistic ethics. Prerequisite: COMP

2000 or 2020 or COMP 2000H. Frequency: Every Fall.

COMM 2040 Public Relations Writing (3 credits)
This course focuses on the process of writing in the practice of public relations, including research and composition of the following types of documents/publications: annual reports, news releases, brochures, communication audits, direct mail campaigns, newsletters, PSAs, and organization profiles. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Every Fall.

COMM 2100 Mass Media (3 credits)
An examination of the impact of technology on the way we receive and process information and images, the basic legal and economic structure of the mass media, historical precedents and events of mass media, the new cultural forms that have emerged from mass media, and the nature and implications of developing media technologies. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

COMM 2200 Introduction to Broadcast Journalism (3 credits)
Training in the elements of broadcast reporting with emphasis on the modern electronic news story. Students will learn the elements of broadcast news, the style and structure of broadcast news writing, and the technology of radio production. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

COMM 2300 Intercultural Communication (3 credits)
The purpose of this course is to develop an understanding of communication across cultural boundaries and the role of diversity in interpersonal, public, and mass communication. Students will study communication differences across cultures and the importance of being rhetorically sensitive when communicating with diverse audiences. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

COMM 2400 Principles of Advertising (3 credits)
This course examines the efficacy of advertising in modern society. It provides students with a fundamental understanding from which to interpret, understand, and create advertising. The course also provides a foundation for further study of advertising. Prerequisite: COMP 1500 or COMP 1500H. Course Frequency: Every Fall.

COMM 2500 Introduction to Video Editing (3 credits)
This course provides students hands-on opportunities to learn the art and craft of digital video editing through the use of various software programs. Course Frequency: Every Fall

COMM 2800 Introduction to Field Video Production (3 credits)
This course offers an introduction to electronic field production equipment and techniques for various types of microphones, cameras, and editing equipment, including portable field camera set-up, operation, transportation, and maintenance video editing, lighting, scripting, media aesthetics, and logistics. Students will learn how to produce top-quality audio and video footage using shoot preparation, direction, and production techniques. Students will develop both their creative and technical skills by engaging in a combination of production exercises, projects, readings, and critiques. Frequency: Every Fall and Winter.

COMM 2900 Research Methods in Communication (3 credits)
This course teaches the student to understand and interpret research applications, methods and results, and practice basic research writing skills. Students will become familiar with qualitative and quantitative research methods commonly required in communication studies. Prerequisites: One COMM or SPCH course and COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Every Fall.

COMM 3100 Gendered Images in Popular Culture (3 credits)
This course examines gendered images in popular media other than literature, including film, music videos, television, and comic books, and their impact on mainstream America. Prerequisites: one GEST or COMM course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

COMM 3110 Communication Theory (3 credits)
This course focuses on different theories of communication at the levels of interpersonal, public, and mass communication. Students will learn numerous perspectives on the role and value of human interaction from fundamental communication theories and models to contemporary theoretical approaches for understanding the connection between human communication and human behavior. Prerequisites: one COMM course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

COMM 3200 Principles of Public Relations (3 credits)
This course focuses on the nature, role, and scope of public relations on national and international levels. Topics introduced are organizational behavior and the ways in which it is shaped, public relations ethics, public relations practice in private and public arenas, emphasizing management and public relations strategy. Prerequisites: COMM 2040 and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Winter.

COMM 3300 Multimedia Writing (3 credits)
Due to the convergence of media, this course will survey the different formats and styles used in multimedia writing. Students will learn to tailor messages to their intended audiences and produce effective writing across various mediums, including print, radio, television, and the web. It will familiarize students with the ever-changing media environment and help students acquire the skills necessary to communicate effectively across multiple mediums. The course will also discuss how students can prepare to transition from the classroom to a multimedia career. Prerequisites: COMP 2000 or 2020 or COMP 2000H; and COMM 2010 or COMM 2200. Frequency: Odd Year Winter.

COMM 3310 Organizational Communication (3 credits)
This course examines the interrelationships of communicative behavior and attitudes with organizational policies, structures, and outcomes, and it uses case studies to teach theoretical principles. Prerequisite: COMM 2040 or COMM 2400. Course Frequency: Every Fall

COMM 3400 Strategic Visual Communication (3 credits)
Students gain insight into how visual components contribute to effective strategic communication by investigating the roles visuals play in reaching audiences and building organizational identity. Students learn about the communication functions served by visual components: images, color choices, and graphic design. Prerequisite: COMM 2400 or COMM 3200. Course Frequency: Even Year Winter

COMM 3500 Media Regulation (3 credits)
Media Regulation: Survey of media policy and regulation emphasizing issues of libel, free speech, privacy, confidentiality of information and sources, as they pertain to mass media, advertising, and public relations. Prerequisites: one COMM course and COMP 2000 or 2010 or 2020 or COMP 2000H. Frequency: Every Winter.

COMM 3600 Persuasion (3 credits)
Students will learn theories and strategies relevant to the study of public persuasion and social influence. Topics will focus on the role of persuasion in public address, advertising, business, politics, government, and social movements. Students will study the tools and techniques used to understand audiences for the purposes of marketing communication messages. Prerequisites: One COMM course and COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Every Winter.

COMM 3700 Documentary Filmmaking (3 credits)
This course is designed to provide students with a framework for understanding the production of various documentary styles. Students will engage in readings, screenings, analysis, discussion and field production/editing. This course guides students through the pre-production, production and post-production processes. Media production skills will be developed through orientation to and working with various types of equipment. Prerequisites: COMP 1500 or COMP 1500H and COMM 2800. Frequency: Every Winter.

COMM 3710 Audio/Radio Production (3 credits)
This course introduces audio as a communication medium. Students learn audio production, including the principles of sound, announcing, scriptwriting, microphone technique, board operation, storytelling, program production, leadership, and organization. Prerequisite: COMM 2800 or COMM 2500. Course Frequency: Even Year Fall

COMM 3720 Advanced Video Editing (3 credits)
This course provides advanced training and practice in video editing. Students utilize appropriate software to create professional projects that utilize animation, color correction, and compositing techniques. Prerequisite: COMM 2500. Course Frequency: Every Winter.

COMM 3800 Advanced Field Video Production (3 credits)
This course offers instruction in advanced electronic field production techniques, including scripting, lighting, portable field audio and video recording equipment operation, directing, and video editing. Students will master advanced creative, production, and aesthetic skills through a combination of readings, production exercises, individual and ensemble projects, and portfolio development. As television is a labor-intensive medium, students should expect to spend considerable time outside of class to complete the assignments. Prerequisite: COMM 2800. Frequency: Every Fall and Winter.

COMM 3820 Sports Reporting and Writing (3 credits)
This writing-intensive course prepares students to cover, report, and write sports stories that include game coverage, columns, features, and news. Students complete the course with an expanded writing portfolio. Prerequisite: COMM 2010. Course Frequency: Every Fall.

COMM 3900 Web, Mobile, and Interactive Design for Communication (3 credits)
Students learn the historical background of the web's evolution, basic design guidelines for creating effective visual presentations, and essential design and building techniques for creating web sites and mobile applications. Using this foundational knowledge, students plan, design, and develop a website. Prerequisite: ARTS 2410. Course Frequency: Even Year Winter.

COMM 4020 Media Planning (3 credits)
This course provides an introduction to strategic media planning, the process used to place messages in media in order to reach specific audiences. It combines concepts and skills as it engages critical thinking in the process of media planning for advertising, public relations, and health and political communication campaigns. Prerequisite: COMM 2400 or COMM 3200. Course Frequency: Every Winter.

COMM 4100 Feature Writing (3 credits)
In this workshop-based class, students produce newspaper, magazine, and/or online feature stories for The Current and other markets. Types of stories may include personality profiles, travel, how-to, participatory, etc. Students complete the course with an expanded writing portfolio. Prerequisite: COMM 2010. Course Frequency: Every Fall

COMM 4200 Public Relations Campaigns (3 credits)
This course is designed to familiarize students with public relations agencies, their structures and how they function as counseling and consulting services for many types of organizations. The preparation of problem-solving campaigns, programs and projects will be emphasized. Students will implement the four-step public relations process in the form of group and individual proposals. Students will utilize skills in critical thinking, writing, reading, research and new technologies. Prerequisite: COMM 3200. Frequency: Every Fall.

COMM 4300 Social Media Theory and Practice (3 credits)
This course will serve as both a primer for the context and forms of social media as well as an introduction to the various skills necessary to navigate social media effectively and collaboratively. Not simply a course designed for one specific technology or medium, the goal will be to learn how the digital world operates and is assessed, so that students attain the knowledge, critical thinking ability, and practical skills necessary to meet the personal, professional, and civic challenges posed by social media in an ever-changing landscape. Prerequisite: COMP 2000 or 2020 or COMP 2000H; and one COMM course. Frequency: Even Year Winter.

COMM 4400 Copy Editing (3 credits)
Students sharpen their journalistic skills as they learn about traditional and contemporary editorial roles and engage in the editing process. Because the news is fluid, students in this class learn to adapt to change and make informed decisions within the realm of solid journalistic standards. Prerequisites: COMP 2000 or COMP 2000H and COMM 3820 or COMM 4100. Course Frequency: Every Winter

COMM 4500 Media and Cultural Studies (3 credits)
This course will provide students with a comprehensive examination of social theories and their relationship to the critical understanding of mass communication. The course will address issues raised by the contemporary communication environment in relation to people's complex interactions with popular media. Students will explore the relationship between the media and modernity and will analyze the impact of media on modern societies. The course will explore some key issues of social theories as applied to media phenomena, including the concepts of ideology, hegemony, culture and the public sphere through the work of key theorists and case study analysis. Prerequisites: COMM 2900 and COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Odd Year Winter.

COMM 4900 Special Topics in Communication (3 credits)
This course offers a cross-sectional view of the media through a focus on a particular medium, theme, or genre. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one COMM course or one SPCH course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every

Fall and Winter.

COMM 4950 Internship in Communication (1–12 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic department for specific details and requirements. Prerequisites: COMM 1100A, COMM 1100B, cumulative GPA of 2.5 or higher, completion of 60 or more credit hours and permission of department chair. Frequency: Every Fall and Winter.

COMM 4990 Independent Study (3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and department chair required. Prerequisite: one COMM course; and COMP 2000, 2020, or COMP 2000H. Frequency: Upon Request; see academic department chair.

COMP—Composition

COMP 1000 Basic Writing (3 credits)
A writing workshop emphasizing the writing process, reflection, and the production of proficient writing at the sentence, paragraph, and document level. This course prepares students for COMP 1500 through hands-on experience with college-level writing conventions. Frequency: Every Fall and Winter.

COMP 1500 College Writing (3 credits)
A writing workshop emphasizing recursive writing and reflection within a variety of contexts. This course provides instruction in writing rhetorically, researching and documenting sources, and composing in multiple media. Prerequisites: SAT Verbal score of 520, ACT English score of 22, a TOEFL score of 650 (paper) or 280 (computer), a passing Writing Challenge Exam, or COMP 1000. Frequency: Every Fall and Winter.

COMP 1500H College Writing Honors (3 credits)
A writing workshop emphasizing recursive writing and reflection within a variety of contexts. This course provides instruction in writing rhetorically, researching and documenting sources, and composing in multiple media. Prerequisites: Honors students only. SAT Verbal score of 520, ACT English score of 22, a TOEFL score of 650 (paper) or 280 (computer), a passing Writing Challenge Exam, or COMP 1000. Frequency: Every Fall.

COMP 2000 Advanced College Writing (3 credits)
A writing workshop emphasizing inquiry-based research in academic and professional settings. This course challenges students to engage in substantive projects drawing on multiple methods of research and asks students to document, present, and reflect on their findings. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

COMP 2000H Advanced College Writing Honors (3 credits)
A writing workshop emphasizing inquiry-based research in academic and professional settings. This course challenges students to engage in substantive projects drawing on multiple methods of research and asks students to document, present, and reflect on their findings. Prerequisite: Honors students only. COMP 1500 or COMP 1500H. Frequency: Every Winter.

COMP 2020 Writing About Literature (3 credits)
A writing workshop emphasizing inquiry-based research in one or more of the following literary genres: fiction, poetry, drama, and essays. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

CRJU—Criminal Justice

CRJU 1100 Introduction to Criminal Justice (3 credits)
This course includes an overview of the agencies and individuals that comprise the American criminal justice system. Students will examine the theories that seek to explain the "causes" and "cures" of crime. The major focus is on the development and operation of law enforcement, courts, and corrections. Topics include history, structure, functions, and philosophy of the criminal justice system and its relationship to life in our society. Frequency: Every Fall and Winter.

CRJU 1200 Criminal Law (3 credits)
This course covers the study of substantive criminal law. Students learn the elements of major crimes and defenses. Students also examine the distinctions between various state statutes, the common law, the Bill of Rights, and the Model Penal Code. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, and matters of criminal responsibility. Frequency: Every Fall and Winter.

CRJU 2000 Constitutional Issues (3 credits)
This course will provide a general review of the U.S. Constitution and Bill of Rights, especially the constitutional basis for criminal law and the impact of the Constitution and its amendments on the criminal justice system. Students also examine the constitutional aspects of criminal procedure, including searches, seizures, arrests, interrogation, the pretrial process, trial, sentencing and appeal. Prerequisite: CRJU 1100. Frequency: Every Fall.

CRJU 2220 Criminology (3 credits)
This course is designed to familiarize students with theories of criminal behavior and basic research methodology in criminal justice and criminology. Specifically, students will examine the scientific study of crime and criminals. Throughout the course various topics will be covered, including criminological theory, defining and measuring crime, contemporary crime patterns and types of crime. Prerequisite: CRJU 1100. Frequency: Every Fall and Winter.

CRJU 2400 Court Systems and Procedures (3 credits)
The court process is complex and affects both policing and corrections, this course will delve into the authority, power, and limitations of the court systems of America. While focusing on the dynamics of American court systems, each class will accentuate crucial aspects of law and procedure on-the-books contrasted with law-in-practice. The key personnel of court system will be highlighted, with an emphasis placed on authentic real-life situations, not just participant's ideal behaviors and actions. Further, controversial issues and technological changes will be addressed, including their impact on the contemporary American court systems and procedures. Prerequisite: CRJU 1100. Frequency: Every Fall.

CRJU 2500 Ethical Dilemmas and Decisions in Criminal Justice (3 credits)
This course is designed to acquaint students with an understanding of the importance of ethics within the United States Criminal Justice System through applying basic ethical principles to the three components of the criminal justice system: the police, the courts and corrections. Prerequisite: CRJU 1100. Frequency: Every Winter.

CRJU 2600 Multiculturalism and Crime (3 credits)
This course examines the interplay between race, ethnicity, gender, sexual orientation, social class, and crime by exploring the contemporary and historical experience of marginal groups in the criminal justice system. Widely held beliefs regarding the

treatment of minority groups by the criminal justice system will be critically evaluated to understand the relationship between crime and marginality in theory and practice. The political influence of minority groups on criminal justice practice and policy formulation is also examined. Substantive areas explored include racial profiling, hate crimes, disparate arrest rates and sentencing, (including the death penalty) of marginal groups, and the experience of minority practitioners in the criminal justice system. Prerequisite: CRJU 1100. Frequency: Every Fall and Winter.

CRJU 3100 Juvenile Delinquency (3 credits)
An orientation to the issues, policies and procedures that make up the juvenile justice system. This course will cover the historical and theoretical principals of juvenile justice, including the functions and legal responsibilities of the police, probation, juvenile court, and the juvenile corrections system in the United States. Emphasis will be placed on the social forces that cause children to become involved in the juvenile justice system. Prerequisite: CRJU 1100. Frequency: Every Winter.

CRJU 3220 Policing (3 credits)
This course covers the historical development of policing, current trends, education, training, models of policing and ethical implications. Students will explore the role that police play in society as well as their relationship with the communities that they serve. Additionally, state and federal levels of law enforcement will be reviewed. Prerequisites: CRJU 1100. Frequency: Every Fall.

CRJU 3250 Interviewing, Interrogation, and Report Writing (3 credits)
This course will cover the gathering of information by law enforcement officials from individuals in both an interview and interrogation environment. Emphasis will be placed upon preparation for questioning, discussion setting, general questioning techniques, specific offender type strategies, recognition of deception, obtaining admissions, documentation of confessions, ethical aspects of investigations and legal rights of those interviewed/interrogated. Further, the composition and writing of reports will be covered with an emphasis on clarity, precision and brevity. Prerequisites: CRJU 1100. Frequency: Every Winter.

CRJU 3300 Corrections in America (3 credits)
An analysis of corrections with an in-depth view of the major components of the field. Emphasis is placed on the various systems of corrections, the practice of corrections, institutional custody, community-based corrections, probation and parole, the correctional client and the death penalty. Special attention will be given to trends in incarceration rates, including race, ethnicity, sex, special offenders and enhanced sentencing. Prerequisite: CRJU 1100. Frequency: Every Fall.

CRJU 3400 Criminal Investigations (3 credits)
This course will cover the fundamentals of investigation, crime scene search and recording, the collection, documenting and submission of evidence, scientific aids to criminal investigation, interviews and interrogation, follow-up investigation and case preparation. Emphasis is placed on the investigation of specific crimes, identification of information sources and procedures required for the handling of evidence. Also discussed are the legal elements of the crimes and field techniques for the gathering of data and presentation of cases to the courts. Prerequisites: CRJU 1100. Frequency: Every Fall.

CRJU 3500 Probation, Parole, and Community Corrections (3 credits)
This course explores the historical development and current administration of probation, parole, and other community corrections strategies in the United States. Topics covered include sentencing structures, supervision strategies, the pre-sentence investigation report, and the role and function of probation and parole officers. Students are exposed to current research and evaluate factors that may contribute to success or failure of community corrections programs. Prerequisite: CRJU 3300. Frequency: Every Fall.

CRJU 3600 Comparative Criminal Justice: Spain (3 credits)
This course examines the legal and criminal justice systems of select nations with a special focus on the criminal justice system of Spain. It highlights the differing approaches used by various countries to "the crime problem", as they compare to the U.S. justice model. This course also addresses the influence of different historical, political, economic, social and cultural factors on the structures of legal institutions and systems of justice. Given the course's special focus on Spain's criminal justice system, required Spring Break travel to Spain will include visits to criminal justice agencies and facilities, along with interactions with criminal justice professionals and students. Students will identify and analyze points of convergence and divergence between the United States and Spain on perceived causes of crimes and approaches to crime prevention and control. Prerequisites: CRJU 1100 or LGST 2500 or LEGS 1150 or INST 1500 or POLS 1200 or INB 3550. Frequency: Odd Year Winter.

CRJU 3700 The CSI Effect: Media and Criminal Justice (3 credits)
This course illustrates how media coverage and television programs influence the public's perception of criminal justice. Fiction is often mistaken for reality, and this phenomenon, known as the "CSI Effect," adds to the assumption that all criminal cases can be easily solved by the employment of high-tech forensic science, as depicted on television crime shows. This course explores the common misperceptions and their consequences, through real-world examples, providing students with the ability to critically analyze and assess information promoted by the media and entertainment television. Prerequisite: CRJU 1100. Frequency: Every Fall.

CRJU 4000 Victimology (3 credits)
This course will examine both the institutional and social factors and the issues and developments within the legal process that are relevant to the study of victims of crime. This includes an examination of the definition of a victim, crime, and a historical review of the role of the victim in the criminal justice system. Topics in this course may include psychological impacts of crime, the impact of victimization, legal approaches to victims, services provided to victims, restorative justice and emerging trends in the field of victimology. Prerequisite: CRJU 2220. Frequency: Every Winter.

CRJU 4200 Terrorism and Homeland Security (3 credits)
This course will provide students with a comprehensive introduction to terrorism and homeland security. The first section of the course will provide students with a basic understanding of terrorism as a definitional, theoretical and criminological issue. The second section of the course presents a detailed historical discussion of the birth and evolution of terrorism movements. The third section focuses on contemporary international and domestic terrorism. The final section concentrates on issues surrounding the prevention of terrorism through homeland security. Critical thinking will be encouraged through class discussions of controversial issues where students will be asked to consider various positions, choose their own approach, and cite evidence to support their positions. Students will also have the

opportunity to study a specific terrorist group of interest through the writing of an in-depth research paper. Prerequisites: CRJU 1100. Frequency: Every Winter.

CRJU 4400 Police Organizational Behavior and Management (3 credits)
This course is an introduction to management principles as applied to law enforcement agencies. The student will explore how the organizational structure and occupational values of policing affect management actions and organizational outcomes. Case studies will be used to illustrate and analyze management issues and decision-making in a police environment. Topics include police organizational structure, police personality and occupational values, motivation, police discipline, police unionization, decision-making, leadership, and organizational change. Prerequisite: CRJU 3220. Frequency: Every Winter.

CRJU 4500 Research Methods in Criminal Justice (3 credits)
This is an introductory course in research methodology in criminal justice. It is designed to introduce the student to basic concepts and problems encountered in quantitative and qualitative investigation, including types of data and measurement, sampling, probability, and research design. This course will emphasize examples of methodology in the field and utilize actual data. Prerequisite: CRJU 2220. Frequency: Every Fall.

CRJU 4600 Gangs in America (3 credits)
This course will cover various aspects of the gang problem that involve the criminal justice system, including gang enforcement by law enforcement, gang laws and pending legislation, gang prosecution, and the effect of the gang culture on the streets of America. Also discussed are issues dealing with gang theory, including concepts of street gangs, graffiti, violence, and gang structure and organization. Students will explore the reasons why gangs exist, how they are formed, and the impact of gang crime and victimization on society. Prerequisite: CRJU 1100. Frequency: Every Winter.

CRJU 4880 Senior Seminar in Criminal Justice (3 credits)
This course provides an in-depth analysis of historical and contemporary literature in the field of criminal justice. Students will read classic and contemporary literature and apply this literature to real life dilemmas in the criminal justice system. This course challenges students to integrate and critically examine theories and concepts from criminal justice literature, appreciate the relationship between theory and policy, and challenges students to build on skills and knowledge acquired through earlier academic experience. Prerequisite: CRJU 4500. Frequency: Every Winter.

CRJU 4900 Special Topics in Criminal Justice (3 credits)
Topics in criminal justice that are not included in regular course offerings. Specific content is announced in the course schedule for a given term. Students may re-enroll for special topics covering different content. Prerequisites: CRJU 1100 and any other prerequisite deemed appropriate by the instructor depending on the course topic.

CRJU 4950 Internship in Criminal Justice (3 credits)
This course is designed to provide students with an opportunity to integrate academic and experiential knowledge. Students will be placed in an agency or organization, of their choice, related to the practice of criminal justice. Additionally, students are required to complete a minimum of 140 hours at the internship placement site during the 16 weeks of enrollment. Prerequisites: (1) a minimum grade point average of 2.5 as calculated by NSU; (2) completion of 60 credit hours and CRJU 4500; (3) an approved placement site prior to enrolling in the course; and (4) permission from the academic director. Frequency: Every Winter.

CRJU 4950A Internship A in Criminal Justice (3 credits)
This course is designed to provide students with an opportunity to integrate academic and experiential knowledge. Students will be placed in an agency or organization, of their choice, related to the practice of criminal justice. Additionally, students are required to complete a minimum of 140 hours at the internship placement site during the 16 weeks of enrollment. Prerequisites: (1) a minimum grade point average of 2.5 as calculated by NSU; (2) completion of 60 credit hours and CRJU 4500; (3) an approved placement site prior to enrolling in the course; and (4) permission from the academic director. Frequency: Every Fall and Winter.

CRJU 4950B Internship B in Criminal Justice (3 credits)
This course is designed to provide students with an opportunity to integrate academic and experiential knowledge. Students will be placed in an agency or organization, of their choice, related to the practice of criminal justice. Additionally, students are required to complete a minimum of 140 hours at the internship placement site during the 16 weeks of enrollment. Prerequisites: (1) a minimum grade point average of 2.5 as calculated by NSU; (2) completion of 60 credit hours and CRJU 4500; (3) an approved placement site prior to enrolling in the course; and (4) permission from the academic director. Frequency: Every Fall and Winter.

CRJU 4990 Independent Study in Criminal Justice (3 credits)
The student selects and carries out independently library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: CRJU 1100 or CRJU 1200 and written consent of instructor and division director. Frequency: Every Fall and Winter.

CRJU 4990B Independent Study B in Criminal Justice (1–3 credits)
The student selects and carries out independently library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: CRJU 1100 or CRJU 1200 and written consent of instructor and division director. Frequency: Every F

CRJU 4990C Independent Study C in Criminal Justice (1–3 credits)
The student selects and carries out independently library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: CRJU 1100 or CRJU 1200 and written consent of instructor and division director. Frequency: Every Fall and Winter.

CRJU 4990D Independent Study D in Criminal Justice (1–3 credits)
The student selects and carries out independently library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: CRJU 1100 or CRJU 1200 and written consent of instructor and division director. Frequency: Every Fall and Winter.

CSAD—Comm Sci & Disorders

CSAD 2010 Communication Disorders Through Film and Media (3 credits)
Overview of communication disorders through a representation in films, literature, and media. This course provides an overview of speech, language, and hearing disorders from a clinical perspective. Communication disorders will be examined through the perception of society. Prerequisite: COMP 1500. Frequency: Every Winter.

CSAD 2015 Introduction to American Sign Language One (3 credits)
Students will learn background and historical information related to American

Sign Language (ASL) and the Deaf Community. Students will learn the basic parameters, components, linguistic principles, and syntax of ASL. Students will learn how to execute finger-spelled words correctly. Students will demonstrate, both expressively and receptively, mastery of signed vocabulary words totaling approximately 300 concepts. Frequency: Every Winter and Every Fall.

CSAD 3010 Phonetics (3 credits)
This class will cover the study of the history, theory and application of phonetics. Students review sampling and transcription techniques and applications to clinical practice. Prerequisite: CSAD 2010. Frequency: Every Fall.

CSAD 3020 Anatomy & Physiology of the Speech and Hearing Mechanism (3 credits)
This course is an introduction to the anatomy and physiology of the auditory and vocal mechanisms. Prerequisite/s: BIOL 1100 and PHYS 1020. Frequency: Every Winter.

CSAD 3025 Language Science (3 credits)
This course will provide the foundation for understanding the morphological and syntactic processes in typical language development. Students will learn to apply this knowledge to the clinical analysis of language. The study of syntactic and morphological processes as it relates to clinical analysis of language. Prerequisite: CSAD 2010. Frequency: Every Fall.

CSAD 3030 Speech & Language Development (3 credits)
Study of prelinguistic and psycholinguistic variables related to normal development from infancy through adolescence. Prerequisites: CSAD 3025 and PSYC 1020. Frequency: Every Winter.

CSAD 3035 Foundations of Language and Literacy (3 credits)
This course will explore the foundations of language and literacy development as content background for effective language and literacy instruction, birth to age 5. Topics include theories of language and literacy development, history of reading and writing instruction, literacy and technology, cultural and linguistic aspects of literacy, and various perspectives and models of literacy learning. Prerequisite: CSAD 3030. Frequency: Every Fall.

CSAD 3040 Neuroanatomy (3 credits)
This course provides an introduction to the gross structure of the brain and spinal cord and functional relationship of their parts with emphasis on the auditory and vestibular peripheral and central nervous systems. Pre-requisite: CSAD 3020. Frequency: Every Fall.

CSAD 3050 Hearing and Speech Science (3 credits)
This course covers the nature of sound, sound transmission, and units of measurement necessary to understand the physiologic, acoustic, and perceptual parameters of hearing and speech production. A basic review of instrumentation and technology available and utilized in speech, hearing, and language research, intervention and assessment is provided. Prerequisite: CSAD 3020. Frequency: Every Winter.

CSAD 3060 Directed Observation (1 credit)
Students must observe twenty-five clinical clock hours of evaluation and treatment by an ASHA certified and state licensed SLP as an orientation to the clinical aspect of speech-language pathology. Observation hours must be completed at university-affiliated sites and must precede clinical assignments. Prerequisites: CSAD 4010 and CSAD 4030. Frequency: Every Winter.

CSAD 3080 Introduction to Research in Communication Sciences and Disorders (3 credits)
This course will provide an introduction to research methods used in speech-language and communication disorders. Research studies will be used to illustrate research designs used in the discipline. Ethics of research will be discussed. Academic writing and APA style will be highlighted. Prerequisites: MATH 1040 and MATH 1060 or MATH 2020, and COMP 1500 and CSAD 4010 and CSAD 4030. Frequency: Every Fall.

CSAD 4010 Evaluation of Speech and Language Disorders (3 credits)
Principles of screening and evaluation of clients typically seen in a clinic, school, hospital or nursing home settings, including administration of specific evaluation instruments. Prerequisites: CSAD 3010 and CSAD 3030. Frequency: Every Winter.

CSAD 4030 Treatment of Speech and Language Disorders (3 credits)
Overview of communication disorders, professional terminology, and intervention strategies. Prerequisites: CSAD 3010 and CSAD 3030. Frequency: Every Winter.

CSAD 4050 Audiology (3 credits)
Instruction in test administration and interpretation of standard and specialized tests of auditory function. Prerequisite: CSAD 3050. Frequency: Every Fall.

CSAD 4070 Rehabilitation for the Hearing Impaired (3 credits)
Prevention and remediation of communication problems resulting from hearing impairment, in populations from birth to geriatrics. Prerequisites: CSAD 3030, CSAD 4010, CSAD 4030, and CSAD 4050. Frequency: Every Winter.

CSAD 4080 Capstone (2 credits)
A culminating experience which incorporates knowledge gained in coursework in speech/language and communication science and disorders. The capstone experience offers students the opportunity to bridge theory-to-practice. This experience may be a service-learning project, research paper, or clinical experience. Prerequisites: CSAD 3080, CSAD 4010, and CSAD 4030. Frequency: Every Winter.

CSIS—Computer & Info Systems

CSIS 1800 Introduction to Computer and Information Sciences (3 credits)
An introductory course to study computer systems layer by layer. The material covers Information Layer, Hardware Layer, Programming Layer, Operating Systems Layer, Application Layer, and Communication Layer. Each layer is covered in great detail and the concepts are supplemented by real examples. Frequency: Every Fall and Winter.

CSIS 2000 Introduction to Database Systems (3 credits)
This course will give students an introduction to the structured query language (SQL). The course introduces relational, object-oriented, distributed, and multimedia database systems. This course covers concepts and tools necessary to analyze a business scenario, then design and implement a database system that is in 3rd Normal Form. Students will build, populate, query, and write transactions for a relational database. The students also learn how to interface Web based data access via database connection using modern languages and tools. Prerequisite: CSIS 1800 or TECH 1800. Frequency: Every Fall.

CSIS 2050 Discrete Mathematics (3 credits)
An introduction to the concepts and techniques of discrete mathematical structures that are used in the theory and application of computer science and computer information systems. Topics covered include set theory, relations, functions, proof techniques, predicate logic, combinational and sequential logic

and circuitry, recurrence relations, boolean algebra, graph theory, trees, and discrete probability. Prerequisite: MATH 1200. Frequency: Every Fall and Winter.

CSIS 2101 Fundamentals of Computer Programming (4 credits)
This course provides an introduction to computer programming using a modern programming language. Major topics to be covered are: syntax, expressions, variables and data types, blocks and scope, input/output and file handling, conditional selection statements, loops and iteration statements, functions, pointers and arrays, classes, inheritance, and aggregation, all through program development. Prerequisite: MATH 1040. Frequency: Every Fall and Winter.

CSIS 3020 Web Programming and Design (3 credits)
This course will introduce the essentials of Internet programming. Students will design and write WWW pages in HTML, JavaScript, and shell scripting languages. Programs will manipulate many forms of data, including hypertext, graphics, audio, and video. Students will develop interactive/executable Web pages. Other topics covered will include clickable image maps, cgi-bin scripting, and security. Prerequisite: CSIS 2100 or CSIS 2101. Frequency: Every Fall.

CSIS 3023 Legal and Ethical Aspects of Computers (3 credits)
This course focuses on issues that involve computer impact and related societal concerns. Topics covered include computer ethics, computer crime, software ownership, privacy risk management, professional codes, transborder data flow, Telecommunications Act of 1996, the national computer policies of other nations, and the status of regulation and emerging standards. Frequency: Every Fall.

CSIS 3050 Assemblers and Assembly Language Programming (4 credits)
A detailed analysis of the operations of assemblers. Assembler features, assembly language programming, and marc facilities. Assembly language programs will be written as part of this course. Prerequisites: CSIS 2050 and CSIS 2101 or CSIS 2100. Frequency: Every Winter.

CSIS 3060 Digital Design (3 credits)
Register transfer-level design of digital computers, data transfer hardware, organization of the central processing unit, design of the controller, and a complete design example. Prerequisite: CSIS 3050. Frequency: Upon Request see academic Department Chair.

CSIS 3101 Advanced Computer Programming (4 credits)
The course addresses advanced programming concepts that are specific to generic programming languages that require understanding of how data and objects are represented in memory. Pointers, overriding of data types and operators, dynamic memory allocation and management, reliable and secure programming issues and templates are discussed. Illustration of difference between structured programming and object oriented programming are discussed by examples. Prerequisites: CSIS 2101 or CSIS 2100. Frequency: Every Fall and Winter.

CSIS 3110 Foundations of Computer Science (4 credits)
Included are the mechanization of abstraction in computer science, prepositional logic and predicate logic, induction versus recursion, countable and non-countable sets, finite state automata and regular expressions, pushdown automata and context-free languages, Turing machines, decidability and computability, and computational complexity. Prerequisites: CSIS 2950 or CSIS 3100 and CSIS 1400 or CSIS 2050. Frequency: Upon Request see academic Department Chair.

CSIS 3200 Organization of Programming Language (3 credits)
Development of an understanding of the organization of programming languages, introduction to formal study of programming language specification and analysis, comparison of two or more high-level modern programming languages. Prerequisites: CSIS 3101 or CSIS 3100. Frequency: Upon Request see academic Department Chair.

CSIS 3400 Data Structures (4 credits)
A course in fundamental data structures and their application. Advanced data structure concepts are developed including linked data representation, pointers, binary trees, B trees, AVL trees, queues, stacks, hashing, searching, directed and undirected graphs, and priority queues. Recursive algorithms are investigated. Quantitative analysis of algorithms is employed. Advanced sorts are studied and analyzed for order of magnitude. Abstract data types are introduced. Prerequisites: CSIS 2950 or CSIS 3100 or CSIS 3101 and CSIS 1400 or CSIS 2050. Frequency: Every Fall and Winter.

CSIS 3460 Object Oriented Design (3 credits)
This course provides an introduction to object oriented design using a modern OO friendly programming language. Objects, class implementations, types, aggregation, inheritance, and polymorphism will be covered. Complete OO software development paradigm, that includes preparing functional specifications using use cases, design and implementation will be introduced. Prerequisites: CSIS 2101 or CSIS 2100. Frequency: Every Fall and Winter.

CSIS 3500 Networks and Data Communication (3 credits)
This course provides an introduction to basic data communications and how the Internet and World Wide Web work. It develops the fundamentals essential to understand wired and wireless network topologies, connection-oriented and connection-less protocols, and routing. Students develop an understanding of how protocols are layered and the concepts of services available at each layer, as well as, how errors affect communication and various mechanisms to mitigate the errors. They will also learn how to appropriately apply various reliable and unreliable protocol based services to various high-level applications including text, data, images, speech, and video streams for both real-time and non-real-time communications. The course will introduce security related issues. It places specific emphasis on the TCP/IP protocol stack and the protocols that are currently critical. Prerequisites: CSIS 1800 or TECH 1800 and MATH 1040. Frequency: Every Fall.

CSIS 3530 Artificial Intelligence (3 credits)
Introduction to the basic concepts and techniques of AI and expert systems. Topics include logic, problem solving, knowledge and representation methods, reasoning techniques, search strategies, and heuristic methods applied in AI and expert systems. Techniques for natural language processing, modeling, and pattern matching are developed. Symbolic languages like Scheme and Prolog are used. Prerequisite: CSIS 3400. Frequency: Odd Year Winter.

CSIS 3600 Computational Algorithms in Bioinformatics (3 credits)
Students will be introduced to the basic concepts of bioinformatics, a study of sequence and genome analysis. Students will learn computational methods for analyzing DNA, RNA, and protein data, with explanations of the underlying algorithms, the advantages and limitations of each method, and strategies for their application to biological problems. Prerequisites: CSIS 2100 and MATH 3020 or MATH 3020H or

MATH 2020 or MATH 2020H. Frequency: Every Fall.

CSIS 3610 Numerical Analysis (3 credits)
A numerical analysis course that introduces students to computing issues regarding the implementation of algorithms and high performance computing. The algorithms are used extensively in all computing and engineering fields. Topics include matrix computations, interpolation and zero finding, linear least squares problems, quadrature analysis, Fourier analysis, and eigenvalue and singular value decompositions. Prerequisites: CSIS 3400, MATH 2200 or MATH 2200H, and MATH 3300. Frequency: Even Year Fall.

CSIS 3750 Software Engineering (4 credits)
An introduction to the process of developing software systems. Topics include software life-cycle models, quality factors, requirements analysis and specification, software design (functional design and object-oriented design), implementation, testing, and management of large software projects. Prerequisite: CSIS 3460 or CSIS 3100. Frequency: Every Winter.

CSIS 3810 Operating Systems Concepts (3 credits)
Operating Systems Concepts: History of operating systems, operating system concepts including fundamental topics such as computer organization, operating system structure, resource allocation and scheduling, processes and threads, synchronization principles, system calls, input/output, memory management, file systems, protection mechanism, and security are discussed. Prerequisites: CSIS 3400. Frequency: Every Fall and Winter.

CSIS 4010 Computer Security (3 credits)
Overview of technical and theoretical aspects of computer and data security with emphasis on attacks and defenses on host machines, access control mechanism, viruses and anti-viruses, cryptography, intrusion detection algorithms, and application security. Students will learn how to configure secure databases, applications and machines. Prerequisites: CSIS 2050 and CSIS 2101 or CSIS 2100 or TECH 2100. Frequency: Every Winter.

CSIS 4020 Mobile Computing (3 credits)
This hands-on course is designed for individuals who wish to design and build mobile applications using an advanced mobile Application Development Framework. The following features will be covered: development environment and tools; the setup of the IDE-based development environment; the mobile SDK; all the essential features to create basic and advanced applications using services, accelerometers, graphics, internet access, multimedia, mapping, and GPS; as well as what you need to know to publish your application on the mobile market. Prerequisite: CSIS 3101 or CSIS 3100. Frequency: Every Winter.

CSIS 4030 Information Security Technologies (3 credits)
This course presents a comprehensive overview of the issues surrounding information assurance and computer security. Risk assessment, designing and implementing security policies and maintaining a secure technological organization are the primary foci. A solid grounding in the most important encryption standards, including private, symmetric encryption technology, will be discussed. It will be seen why AES (Advanced Encryption Standard) is important and will review the issues leading to its development. Prerequisite: CSIS 4010. Frequency: Upon Request see academic Department Chair.

CSIS 4050 Computer Architecture (3 credits)
A structured approach to the architecture of computers is presented as the interrelation of software and hardware design: digital logic, machine level, assembly language level, and operating system level. Memory, input/output and storage devices are covered in detail. Alternative architecture, such as CISC/RISC computers, parallel architectures, embedded systems, and quantum computing are discussed. Performance measurement and analyses techniques are introduced. Prerequisites: CSIS 3810 and CSIS 3050. Frequency: Every Winter.

CSIS 4100 Design Patterns (3 credits)
Design patterns help designers utilize the past experience of designers in the field, thus providing solutions to common software design problems. It provides a methodical approach by describing abstract systems of interaction between classes, objects, and communication flow. Students will review principles of object-oriented design and learn reusable patterns that solve recurring problems. Key software design patterns will be reviewed. Some patterns will be applied through examples and case studies. Prerequisite: CSIS 3460. Frequency: Even Year Winter.

CSIS 4310 Distributed Data Processing (4 credits)
Concepts and mechanisms in the design of distributed systems; process synchronization, reliability, distributed resource management, deadlock, and performance evaluation. Case studies of selected distributed systems are covered. Prerequisites: CSIS 2000 and CSIS 3020 and CSIS 3460 and CSIS 3500. Frequency: Every Winter.

CSIS 4320 Web User Interface Programming (3 credits)
Modern web user interface programming is done most efficiently by using frameworks that employ automatic code generators, and multiple dynamic connections with the server. In this course students will learn how to use one such framework to create highly dynamic and interactive web applications that are also capable of dynamically updating data without user interaction. They will build and optimize complex browser-based applications with focus on those main principles, heuristics and approaches for effective web design. Prerequisites: CSIS 3101 or CSIS 3100 and CSIS 3020. Frequency: Even Year Fall.

CSIS 4350 Robotics (3 credits)
Principles and concepts of modern robots and automated systems are developed: robot's intelligence, drive methods, motion control, and software and hardware support. Prerequisite: CSIS 3530. Frequency: Upon Request see academic Department Chair.

CSIS 4500 Network Security (3 credits)
This course provides an overview of technical and theoretical aspects of network security with emphasis on the Internet. It discusses topics such as design of secure networks, concerns at all architectural levels, modern security protocols and their applications, public key infrastructure (PKI) infrastructure and digital certificates. The course teaches students how to secure open source web servers, secure shell (SSH) servers, virtual private networks (VPN), and to setup subnets with firewalls. It prepares student for providing protection against internal and external attacks in an enterprise. Prerequisite: CSIS 3500. Frequency: Every Fall.

CSIS 4530 Database Management (3 credits)
Concept and structures necessary to design and implement a database system, including logical and physical file organization and data organization techniques, data models, networks, data integrity, and file security. Topics covered include transition of legacy systems, modern database frameworks based on modern higher languages, Web access, logical and user's viewpoint, theoretical

foundations, decision support systems, data warehousing, data mining and physical system implementation. Prerequisite: CSIS 2000. Frequency: Every Winter.

CSIS 4600 Systems Programming (4 credits)
A study of various system-programming techniques, hardware-software interface, and software-controlled hardware. A comparison of several existing computer systems will be made. Prerequisites: CSIS 2410 or CSIS 3050 and CSIS 3810. Frequency: Every Fall.

CSIS 4610 Design and Analysis Algorithms (3 credits)
Topics include algorithmic paradigms such as divide-and-conquer, greedy methods, and concepts relating to analysis such as asymptotic notation and NP-completeness. Sorting and searching algorithms are designed and analyzed, as are algorithms for manipulating trees, graphs, and sets. Prerequisites: CSIS 3400 and MATH 2200 or MATH 2200H. Frequency: Every Winter.

CSIS 4650 Computer Graphics (3 credits)
An introduction to the principles of interactive computer graphics. Topics include fundamentals of raster graphics (scale-conversion, clipping, fill methods, and anti-aliasing), 2D and 3D transformations, projections, 3D modeling, hidden surface removal methods, ray tracing, and graphical user interfaces. The hardware of graphic environments is defined and new development platforms for graphics in windows are investigated. Prerequisite: CSIS 3400. Frequency: Every Fall.

CSIS 4800 Introduction to Compilers and Interpreters (3 credits)
An introduction to compiler/interpreter design. Topics include lexical analysis, parsing, intermediate code, final code generation, optimization, and error recovery. Prerequisites: CSIS 3110 and CSIS 3400. Frequency: Upon Request see academic Department Chair.

CSIS 4840 Unix Operating System Environment (3 credits)
The concepts of the UNIX operating system are presented. Topics include system commands, system editors, awk, set, text formatting tools, and shell programming. The use of modem and terminal software and system maintenance utilities are covered as well as system calls in C, LEX, YACC, AR, and make. Prerequisite: CSIS 3101 or CSIS 3100. Frequency: Every Fall.

CSIS 4880 Special Topics in Computer Science (3 credits)
Topics in computer science that are not included in regular course offerings. Specific contents are announced in the course schedule for a given term. Prerequisites: requires senior standing and consent of instructor. Frequency: Upon Request see academic Department Chair.

CSIS 4890 Special Topics in Computer Information Systems (3 credits)
Topics in computer information systems that are not included in regular course offerings. Specific contents are announced in the course schedule for a given term. Prerequisite: requires senior standing or consent of instructor. Frequency: Infrequent: less than once every two years.

CSIS 4900 Directed Project (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

CSIS 4900A Directed Project (A) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

CSIS 4900B Directed Project (B) (3 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

CSIS 4900C Directed Project (C) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

CSIS 4900D Directed Project (D) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

CSIS 4901 APS Capstone Directed Independent Study (3 credits)
This course is reserved for students who are enrolled in the Applied Professional Studies Program. Through a series of written assignments, this course provides students with an opportunity to integrate previous learning and experience with a concentration in computing field to form a unique course of academic study. Given that the APS major is individualized to a large extent based on a student's interests and past experiences, this course ordinarily will be conducted as an independent study and will be taken during the student's last semester prior to receipt of their degree. Prerequisite: to be determined by supervising faculty and the division director. Frequency: Every Fall and Winter.

CSIS 4902 Capstone Project for Computer Information Systems (3 credits)
This course is one way to satisfy the capstone requirement for Computer Information Systems major and must be taken in her senior year, preferably in the last semester of their graduation. In the semester before, the student should work with a faculty member to first develop a proposal for the project and obtain a written agreement from a faculty member to serve as your project instructor during the semester to report on progress. This proposal is approved by the faculty member and approved by the chair. The student will be required to report routinely to the project instructor during the semester to report on progress. During the project the student will write the functional specifications, design instructions, and implementation plans, as considered appropriate by your project instructor. The student will also be required to present the project orally and write a project report at the conclusion of the semester. Prerequisites: Completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Every Winter.

CSIS 4903 Capstone Project for Computer Science (0–3 credits)
This course must be taken by students in the senior year, preferably in the last semester of their study. Prior to taking this course, the student should develop a project proposal that covers concepts and skills learned in more than one upper division Computer Science courses. The proposal should be approved by a faculty member supervising the project and the chair. The student will be required to routinely report progress to the project instructor during the semester, write a final project report and to present the project orally at the end of the semester. Prerequisites: Senior standing, supervision of instructor, and permission of department chair. Frequency: Every Winter.

CSIS 4950 Internship in Computer Science and Information Systems (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission

of academic director. Frequency: Upon Request see academic Department Chair.

CSIS 4950A Internship in Computer Science and Information Systems (A) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon Request see academic Department Chair.

CSIS 4950B Internship in computer Science and Information Systems (B) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon Request see academic Department Chair.

CSIS 4952 Capstone Internship in Computer Information Systems (3 credits)
This course is one way to satisfy the capstone requirement for Computer Information Systems major for students who are not already employed. It can be taken in the last semester of their graduation. It constitutes a work experience for 16 weeks in the area of Computer Information Systems. Consult academic division for specific details and requirements. Prerequisites: Senior standing, cumulative GPA of 2.5 or higher, major GPA of 3.0, written internship offer, approval of the job description by the internship instructor, and permission of department chair. Frequency: Every Winter.

CSIS 4953 Internship in Computer Science (3 credits)
Computer Science majors who are not already employed can use this course to satisfy capstone requirement. It can be taken senior year of their graduation preferably in the last semester of their graduation. An Internship constitutes a relevant work experience for 16 weeks based on a project with specific goals agreed on by the work supervisor, student and the instructor before enrolling in this course. The project should cover concepts and skills learned in more than one upper division Computer Science course and should be approved by Computer Science chair. Prerequisites: Senior standing, cumulative GPA of 2.5 or higher, major GPA of 3.0, written internship offer, approval of the job description by the internship instructor, and permission of department chair. Frequency: Every Winter.

CVS—CVS-Cardiovascular Sonography

CVS 3000 Introduction to Cardiovascular Sonography Instruments (3 credits)
This course is designed to introduce the students to the equipment used in cardiovascular ultrasound. The course will, therefore, be primarily taught in the ultrasound training laboratory in small groups, with supplemental online content and challenge-based learning assignments. The focus of the course will be to lead the students toward proficiency and competency in using all the tools available on the ultrasound equipment for the production of quality images, as well as proper ergonomics, patient handling, and care of the equipment. This course is the foundation for all the following core courses. Frequency: Every Summer.

CVS 3001 Correlative Imaging & Anatomy (4 credits)
"This course will meet twice a week for a nominal 16-week semester. The course will consist of dynamic guided exercises in the classroom and computer lab, combined with instructor-led case study and image analysis. The course will teach the student detailed normal anatomy in various planes used during all of the common imaging examinations of ultrasound and other medical imaging modalities. Information will weighted towards normal structures which are sonographically visible. Structures will be described according to relative location, proportionality, sonographic characteristics, and appearance under other imaging modalities. Anatomy will be identified in both gross-anatomy and cross-sectional imaging modes. Anatomic correlation subject areas will include; intracranial, cervical, thoracic, cardiac, abdomen, pelvis, and extremities. Imaging modalities will include; Sonography, MRI, CT, Nuclear Medicine, PET scanning, Plain film Radiography and Angiography. Emphasis will be placed on teaching the students to identify normal cross sectional anatomy based on the characteristics of each imaging modality, the position of other relative anatomy (anatomical landmarks), proportionality of size and correlation with other imaging modalities. Frequency: Every Summer.

CVS 3010 Adult Echocardiography I (3 credits)
This course will provide an introduction to techniques, measurements, and normal function of the adult heart as evaluated with ultrasound. It will have a strong hands-on component and students will spend several hours per week in the ultrasound training laboratory acquiring skills in basic imaging, patient positioning, and ergonomics to form a solid foundation for later, more-advanced courses. Lectures will include, but not be limited to, a review of the normal anatomy and physiological function of the heart, commonly encountered pathology, pathophysiology, basic treatment options, and beginning analysis of data obtained by ultrasound, as well as introduction to other cardio-focused techniques. Frequency: Every Fall.

CVS 3020 Adult Echocardiography II (3 credits)
This is an intermediate course on the use of ultrasound for the evaluation of the adult heart and heart function. It will have a strong hands-on component and students will spend several hours per week in the ultrasound training laboratory acquiring advanced imaging skills to begin mastery of the adult echocardiography examination. Lectures will continue with advanced subjects including, but not limited to, acquired and congenital pathologies, pathophysiology, and treatment options. In-depth analysis of echocardiographic findings and presentation of same in preliminary reporting will also be covered in detail. Prerequisite: CVS 3010. Frequency: Every Winter.

CVS 3030 Echocardiography III (4 credits)
"This is an advanced course on the use of specialized ultrasound techniques for the evaluation of the adult heart, with additional content for pediatric echocardiography and other advanced imaging techniques and considerations. It will have a strong hands-on component and students will spend several hours per week in the ultrasound training laboratory acquiring advanced imaging skills. Lectures will cover special considerations for advanced imaging, specific pathologies and anatomical considerations for pediatric imaging, pediatric congenital pathologies, pathophysiology, treatment options, and analysis of data obtained by ultrasound, as well as other cardio-focused techniques. Additional topics will cover procedures and other considerations surrounding the performance of the echocardiography exam that will be encountered in a clinical setting, preparing the student for clinical externships in year two of the program. Prerequisite: CVS 3020. Frequency: Every Summer.

CVS 3040 Ultrasound Physics (4 credits)
This course is designed to help the student acquire knowledge of all the fundamental principles and concepts necessary to understand the properties of sound and ultrasound as used in diagnostic imaging. These principles and concepts will span from basic properties of sound in soft tissue to advanced techniques such as Doppler, spectral analysis, M-mode, etc. as they pertain to evaluation for vascular and cardiac ultrasound imaging. The students will also learn about artifacts, safety, and the concepts of bio-effects. Key physics principles will be illustrated with hands-on exercises and activities in the classroom and lab, utilizing both the imaging equipment and more everyday materials to facilitate understanding. Challenge-based learning physics assignments will also be given to further the learning process. Frequency: Every Summer.

CVS 3050 Ultrasound Physics Review (2 credits)
This course reviews the principles and concepts learned in CVS 3040 through quizzes and exams to help the student prepare for the Sonography Principles and Instrumentation (SPI) exam administered by the ARDMS. The students will take the exam after completion of the course. Prerequisite: CVS 3040. Frequency: Every Fall.

CVS 3060 Cerebrovascular Testing (3 credits)
This course will focus on the use of ultrasound for the evaluation of the extracranial and intracranial cerebrovascular circulation. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies,treatment options, and analysis of data obtained by ultrasound and other diagnostic techniques. Frequency: Every Fall.

CVS 3070 Peripheral Arterial Testing (3 credits)
This course will focus on the use of ultrasound for the evaluation of the arterial circulation of the upper and lower extremities. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound and other technologies specific to vascular laboratories. Frequency: Every Winter.

CVS 3080 Peripheral Venous Testing (3 credits)
This course will focus on the use of ultrasound for the evaluation of the venous circulation of the upper and lower extremities. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound and other techniques. Frequency: Every Fall.

CVS 3090 Abdominal Vascular Testing (3 credits)
This course will focus on the use of ultrasound for the evaluation of the arterial and venous circulation of organs of the abdomen. It will have a strong hands-on component with students spending several hours per week in the ultrasound training laboratory. Lectures will focus on anatomy, pathologies, treatment options, and analysis of data obtained by ultrasound and other diagnostic imaging techniques. Frequency: Every Winter.

CVS 4000 Clinical Preparation (3 credits)
This course will provide for and reinforce the nontechnical aspects of the profession of diagnostic medical sonographers. This will include, but is not limited to, professionalism, billing, quality assurance, image storage, and reporting. The course will prepare students for the clinical experience that follows in the second year. Embedded in this course will also be a certification training seminar for Basic Life Saving (BLS) for Health Care Providers, and required HIPAA training. Frequency: Every Summer.

CVS 4500 Clinical Externship I (12 credits)
The first clinical externship is designed to introduce the student to the vascular and/or adult echocardiography laboratory and health care environment. The student will be expected to prepare patients for examination, complete normal studies under direct supervision of the clinical instructor and write technical impressions on the studies performed. Students will complete competency based assessment reports each week to the clinical instructor and clinical coordinator. Prerequisite: CVS 4000. Frequency: Every Fall.

CVS 4600 Clinical Externship II (9 credits)
This segment of the externship is designed to transition the student into less directly supervised vascular and/or adult echocardiography testing and more independent scanning. The student will be expected to complete normal and abnormal studies and write technical impressions on the studies performed and present and document findings of the study. Students will continue to complete competency based assessment reports each week to the clinical instructor and clinical coordinator. Prerequisite: CVS 4500. Frequency: Every Winter.

CVS 4700 Clinical Externship III (9 credits)
The final clinical externship is designed to ensure the student has gained a level of competency with both normal and abnormal studies with greater technical expertise. The student will be expected to complete abnormal studies independently, present cases to the clinical site mentor instructor(s), technical director, and/or medical director, and write technical initial impressions on the studies performed. Students will continue to complete competency-based assessment reports each week to the clinical instructor and clinical coordinator. Prerequisite: CVS 4600. Frequency: Every Summer.

DANC—Dance

DANC 1200 Ballet I (3 credits)
A beginning performance-based course designed to develop an understanding of ballet as a technique and an art form. This class will also focus on basic anatomy and movement principles related to ballet. Students will be introduced to a ballet vocabulary and will build a strong technical foundation as preparation for more advanced ballet work. Frequency: Every Fall and Winter.

DANC 1400 Jazz Dance I (3 credits)
A beginning performance-based course designed to develop an understanding of jazz dance as a technique and an art form. This class will also focus on basic anatomy and movement principles related to jazz dance. Students will be introduced to a jazz dance vocabulary and will build a strong technical foundation as preparation for more advanced jazz dance work. Frequency: Every Fall and Winter.

DANC 1500 Contemporary Dance Techniques (3 credits)
A performance-oriented course designed to introduce students to contemporary techniques in modern, jazz, hip-hop, and folk styles. Frequency: Every Fall.

DANC 1600 Modern Dance I (3 credits)
A beginning performance-based course designed to develop an understanding of modern dance as a technique and an art form. This class will also focus on basic anatomy and movement principles related to modern dance. Students will be

introduced to a modern dance vocabulary and will build a strong technical foundation as preparation for more advanced modern dance work. Frequency: Every Fall and Winter.

DANC 2101 Dance Laboratory I (1 credit)
Participation in one or more of NSU's dance productions. Pass/fail only. Frequency: Every Fall and Winter.

DANC 2102 Dance Laboratory II (1 credit)
Participation in one more of NSU's dance productions. Pass/fail only. Prerequisite: DANC 2101. Frequency: Every Fall and Winter.

DANC 2103 Dance Laboratory III (1 credit)
Participation in one or more of NSU's dance productions. Pass/fail only. Prerequisite: DANC 2102. Frequency: Every Fall and Winter.

DANC 2104 Dance Laboratory IV (1 credit)
Participation in one ore more of NSU's dance productions. Pass/fail only. Prerequisite: DANC 2103. Frequency: Every Fall and Winter.

DANC 2201 Ballet II (3 credits)
A performance-based course designed to develop a deeper understanding of ballet as a technique and an art form. This class will focus on technical skills and movement principles related to ballet. Students will continue to build a strong technical foundation in ballet at the intermediate/advanced level and increase knowledge of ballet terminology and history. Pre-requisites: DANC 1200 Ballet I or Permission of Chair.Course Frequency: Odd Year Fall.

DANC 2400 Jazz Dance II (3 credits)
An intermediate performance-based course designed to expand upon Jazz Dance I and the understanding of jazz dance as a technique and an art form. Prerequisite: DANC 1400 and Permission of Chair. Frequency: Odd Year Winter.

DANC 2600 Modern Dance II (3 credits)
An intermediate performance-based course designed to expand upon Modern Dance I and the understanding of modern dance as a technique and an art form. Prerequisite: DANC 1600 and Permission of Chair. Frequency: Every Winter.

DANC 3100 Dance Improvisation (3 credits)
A performance-based course that provides a variety of methods and resources for generating improvised movement material. Class will culminate in the creation of an improvised score for performance. Prerequisite: Any DANC, MUSC or THEA course. Frequency: Even Year Winter.

DANC 3200 Dance History (3 credits)
A theory-based course designed to introduce students to the development of Western concert dance with particular focus on ballet and modern. The course examines the historical origins and social context of ballet and modern dance, by highlighting significant choreographers, performers, artistic periods and aesthetics for each genre from the 15th century to the present. Prerequisite: COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

DANC 3500 Global Dance Perspectives (3 credits)
A theory-based course designed to introduce students to various dance forms from around the world. This course will focus on social, ritual, folk and concert dance forms and will examine the social context, cultural/aesthetic values and significant historical events that helped shape them. In addition, the course will explore the power of dance to build community, promote change and preserve tradition. Prerequisite: One DANC course and COMP 2000 or COMP 2000H or COMP 2010 or COMP 2020. Frequency: Even Year Fall.

DANC 3550 World Dance (3 credits)
A performance-based course aimed at developing the understanding of a specific World Dance style as a technique and an art form. Prerequisite: ANY DANC course. Frequency: Every Fall.

DANC 3600 Modern Dance III (3 credits)
An advanced performance-based course designed to further develop an understanding of modern dance as a technique and an art form. Prerequisite: DANC 2600. Frequency: Every Fall.

DANC 3700 Solo Dance Composition (3 credits)
A performance-based course that provides a variety of methods and resources for generating innovative movement ideas. Students will work on dance compositional elements such as time, space and energy and will discover new ways to communicate ideas through movement. Students will develop solo studies as an initial approach to structure choreography. Pre-requisites: DANC2600 Modern Dance II or DANC3100 Dance Improvisation. Course Frequency: Odd Year Winter.

DANC 3900 Advanced Studio Technique (3 credits)
An advanced level course designed to further develop technical and performance skills in a particular dance genre. Pre-requisites: DANC 2200, DANC 2400 or DANC 3600. Frequency: Even Year Winter.

DANC 4000 Dance Composition (3 credits)
A performance-based course that provides a variety of methods and resources for generating movement ideas. Students will work on basic dance compositional elements such as time, space and energy and will discover new ways to communicate ideas through movement. Prerequisite: DANC 2200 OR DANC 2400 OR DANC 2600 OR DANC 3100. Frequency: Even Year Fall.

DANC 4300 Dance Choreography (3 credits)
A performance-based course designed to develop choreographic ability. In this course, students create and direct an original dance that is performed at the end of the semester. Students participate in regular workshops where they exchange feedback on their choreographed dances. Prerequisite: DANC 4000. Frequency: Even Year Fall.

DANC 4900 Special Topics in Dance: (3 credits)
An advanced course in a particular dance genre or related area of interest. Specific focus to be announced. May be repeated for credit if content changes and with written consent of the division director. Prerequisites: One DANC course and COMP 2000, COMP 2010 or COMP 2020. Frequency: Every Winter.

DANC 4950 Internship in Dance (3 credits)
Focused dance or dance related study with a professional dance company, nationally recognized dance festival, choreographer or dance-presenting organization. Prerequisites: Cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and written consent from the division director. Frequency: Every Fall and Winter.

DANC 4990 Independent Study in Dance (3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One DANC course and COMP 2000, COMP 2010 or COMP 2020. Frequency: Upon Request; see academic department chair.

DANC 4990A Independent Study in Dance A (3 credits)
The student selects, and carries out independently, library and/or empirical research as it relates to dance practices. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One DANC course and COMP 2000 or 2010 or 2020. Frequency: Upon Request; see academic department chair.

ECA—Early Childhood

ECA 0101 Introduction to Early Childhood Education: Professionalis, Safety, Health, and Learning Environment (3 credits)
In this course students learn about the development needs of children from birth to age five. Students learn to ensure safety and health of children in early childhood programs, and to establish developmentally appropriate learning environments for young children. Students examine avenues of ongoing professional development for teachers and caregivers of young children. This course covers the CDA-Child Development Associate Functional Areas of Professionalism, Safety, Health, and Learning Environment. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0112 Introduction Early Childhood Education: Physical, Cognitive, Communication, and Creative Development (3 credits)
In this course students learn about the developmental needs of children from birth to age five. Students learn to support children's physical development, encourage cognitive learning and the development of communication skills and enhance creative expression. This course covers the Child Development Associate-CDA Functional Areas of Physical, Cognitive, Communication, and Creativity. Prerequisite: ECA 101. Frequency: Every Fall and Winter.

ECA 0114 Introduction to Early Childhood Education: Families, Schools and Communities (CDA III) (3 credits)
In this course students learn about the developmental needs of children from birth to age five. Students learn to support the social and emotional development of young children and to provide positive guidance. Students explore ways to work effectively with families, and develop program management skills related to observing children and delivering appropriate curriculum. This course covers the Child Development Associate-CDA Functional Areas of Self, Social, Guidance, Families, and Program Management. Prerequisites: ECA 0101 and ECA 0112. Frequency: Every Fall and Winter.

ECA 0203 Foundations of Early Care and Education (3 credits)
This course introduces the students to the historical, philosophical, and sociological foundations of programs for young children. Professional and ethical behavior in early childhood education will be discussed. Students will be engaged in the analysis of different program models and instructional strategies. Appropriate field experiences are integrated and required. Prequisite: None. Frequency: Every Fall and Winter.

ECA 0215 Creative Activities for Young Children (3 credits)
In this course students will explore creative activities in several curriculum areas and adapt plans to meet the needs of all children. The classroom environment will be discussed as a means of children?s learning. Prerequisites: None. Frequency: Every Fall and Winter.

ECA 0218 Child Observation, Record Keeping, and Assessment (3 credits)
In this course students will have the opportunity to observe children in structured and unstructured situations, record their observations, and use their records as a way of assessing strengths and needs of individual children. Guidelines will provide for properly conducting observations, keeping records and using assessment data for curriculum planning. Appropriate field experiences are integrated and required. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0227 Developmental Curriculum: Language, Literacy, and Social Studies (3 credits)
This course will focus on the elements of developmentally appropriate curriculum for children. Students explore ways in which children, beginning in infancy, acquire language, develop the basis of literacy, and come to understand their social world. Students learn ways of creating appropriate activities that foster concept and increase and promote social and scientific awareness. Appropriate field experiences are integrated and required. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0228 Developmental Curriculum: Math and Science (3 credits)
This course focuses on the ways in which children construct knowledge through play and exploration. Students learn ways of helping children develop early math concepts. Engage in scientific explorations, and engage in creative problem solving. Appropriate field experiences are integrated and required. Prerequisite: None. Frequency: Every Winter.

ECA 0241 Child Guidance (3 credits)
Students will develop appropriate ways to guide children's behavior through effective organization of the environment (emphasizing schedule, activities, and materials) and guidance techniques that minimize conflict and encourage children to play and learn cooperatively. Appropriate field experiences are integrated and required. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0242 Foundations of Literacy Development (3 credits)
This course provides students with the opportunity to explore the emergent literacy process during the early childhood years. Exploration of classroom teaching practices that encourage expressive and receptive language will engage students in a variety of field activities. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0252 Managing Early Literacy (3 credits)
In this course students will examine appropriate ways to create and organize the classroom for effective language and literacy development. Use of classroom centers, selection of materials, and resources for planning and teaching literacy experiences are discussed. Field experiences are integrated. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0267 Literacy Development in Multilingual Communities (3 credits)
Through this course students will have opportunities to discuss how to support children's native languages as they transition into the acquisition of a second language. Students explore the role of culture, home and classroom context in the acquisition and development of language. Appropriate ESOL activities, resources, and teacher's role in literacy development are explored. Home, school and community connections to language development are discussed. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0270 Administration of Child Care and Education Program (3 credits)
In this course students develop skills required in the operation and management of an early care and education program. Students learn about organizational management, financial, legal and ethical issues, establishing operational systems, and programming for children and families. (This course meets the training

requirements for the Florida Child Care and Education Program Director Credential.) Prerequisite: None. Frequency: Every Fall and Winter.

ECA 0275 Early Childhood Administration: Financial and Legal Issues (3 credits)
This 3-credit course presents an examination of the skills and knowledge required to manage and direct an early care and education program with a focus on the major responsibilities of the director/manager to ensure sound fiscal and legal policies and procedures. Prerequisite: None. Frequency: Every Winter.

ECA 0278 Curricular Programming in Early Childhood Centers (3 credits)
This course explores the essential elements to maintain and support developmentally appropriate curricular practices in early childhood centers. The course provides center directors with the required skills and competencies to promote quality learning practices for young children and establish ways to assess progress on an ongoing basis. This course meets the early childhood curricular programming competencies for the Advanced level credential for Directors (Florida). Prerequisite/s: None. Frequency: Every Winter.

ECA 0285 Professional Behavior in Early Childhood (3 credits)
This course examines competencies and demonstration of skills necessary for professional performance in early childhood education. Students examine standards for professional behavior and teaching of young children as defined by professional associations (National Association for the Education of Young Children, Division of Early Childhood Education, OMEP-World Early Childhood Organization). Students are engaged in self-reflection of individual skills and knowledge leading to the development of a professional portfolio. Prerequisite: None. Frequency: Every Fall and Winter.

ECA 2273 Child Care Administration: Organizational Leadership and Management (3 credits)
This course presents an examination of the skills and knowledge required to manage and direct an early care and education program with a focus on the major responsibilities of the director/manager to ensure an ethically responsive organization. Students will be able to articulate the importance of a clear, well-communicated vision, policies and procedures that reflect that vision, and employment practices that support a positive work climate. This course meets the requirements for the Advanced Level Florida Director?s Credential in the area of Child Care and Education Organizational Leadership and Management as defined by the Florida Department of Children and Families. Prerequisite: None. Frequency: Every Fall.

ECDP—Early Child Development

ECDP 3321 Child Development: Prenatal, Infancy and Toddler years (Birth–Age 3) (3 credits)
In this course, students examine the process of development during the prenatal, infancy and toddler years. Findings from current developmental research are discussed. Field experience are integrated. Prerequisite: None. Frequency: Every Fall and Winter.

ECDP 3334 Child Development during the Preschool and Primary Age Years (Ages 4–8) (3 credits)
This course explores the development of children ages four through eight across the physical, socio-emotional, cognitive, and language domains. Field experiences are integrated into the course. Prerequisite: ECDP 3321. Frequency: Every Fall and Winter.

ECDP 3338 Diversity and Multiculturalism in Child Development (3 credits)
Students explore the role of culture and diversity in the process of child development. Attention is placed on the study of the cognitive, social and emotional domains. Field experiences are integrated. Prerequisite: ECDP 3321. Frequency: Every Fall and Winter.

ECDP 3340 Psychosocial Development during the Preschool Years (3 credits)
Students examine developmental theories related to the psychosocial development of children during the preschool years (birth -age five). Field experiences are integrated into the course. Prerequiste: ECDP 3321 or ECDP 3334. Frequency: Every Fall and Winter.

ECDP 3345 Parent–Child Relationships during the Early Childhood Years (3 credits)
This course presents an analysis of current parenting principles and strategies that foster positive relationships between children and their parents. Prerequisite: None. Frequency: Every Fall and Winter.

ECDP 3349 Fatherhood: Cross–Cultural Perspectives (3 credits)
In this course, students analyze the role of fathers in the process of child development. Students engage in the discussion of fatherhood roles across selected cultural groups. Field experiences are integrated into this course. Prerequisite: ECDP-3345. Frequency: Every Fall and Winter.

ECDP 3678 Assessment of Young Children with Special Needs (3 credits)
Students will gain knowledge of the process and recommended practices in the assessment of young children with special needs ages birth to five. In addition, special concerns in the assessment of young children with special needs will be addressed. The assessment of cognitive, motor, communication, social interaction, and play skills with this population will be examined. Finally, the use of assessment information to plan instructional programs for young children and the use of assessment in progress monitoring will be discussed. Prerequisite: None. Frequency: Every Fall.

ECDP 4367 Play and Children Curricular Applications (3 credits)
This course examines the role of play as a developmentally appropriate teaching and curricular strategy for children ages birth to eight. Students explore ways to use and apply play as a curricular strategy. Field experiences are integrated. Prerequisite: None. Frequency: Every Winter.

ECDP 4423 Issues in Child Abuse and Neglect (3 credits)
This course discusses the nature, causes and effects of child abuse and neglect. Reporting responsibilities, child protection legislation and services are analyzed. Field experiences are integrated. Prerequisites: ECDP 3321 and ECDP 3334. Frequency: Every Fall and Winter.

ECDP 4990 Advanced Senior Year Seminar (3 credits)
This is a senior year capstone course where students analyze advocacy and policy issues in the field of child development (birth to age eight). Students examine and identify issues related to children and their families and propose actions. Prerequisites: ECDP 3321, ECDP 3334, ECDP 3338, ECDP 3340, ECDP 3345, ECDP 3349, EDEC 4320, EDCP 4423. Frequency: Every Fall and Winter.

ECN—Economics

ECN 2020 Principles of Microeconomics (3 credits)
Microeconomics focuses on how market systems function as opposed to alternative economic systems. This course will

investigate the factors which influence consumer choice and how consumers react to changes in the factors, the costs of production for the firm and production decisions for firms operating in various types of market structures, the impact of market structure on society, regulation and de-regulation of business, environmental issues and labor markets. Prerequisite: MATH 1040 or higher except MATH 2020 and/or other statistics classes. See advisor for specific prerequisites. Frequency: Every Fall and Winter.

ECN 2020H Principles of Microeconomics Honors (3 credits)
Microeconomics focuses on how market systems function as opposed to alternative economic systems. This course will investigate the factors which influence consumer choice and how consumers react to changes in the factors, the costs of production for the firm and production decisions for firms operating in various types of market structures, the impact of market structure on society, regulation and de-regulation of business, environmental issues and labor markets. This course is open to HONORS students only. Prerequisites: MATH 1040 or higher. Frequency: Every Fall.

ECN 2025 Principles of Macroeconomics (3 credits)
This course is designed to acquaint the student with the tools and methodology utilized by economists to analyze how the macro economy functions in both the short and long terms. The course will begin with a study of how market systems and nonmarket systems address the problem of scarcity and unlimited wants. Theories of consumption, investment, the public sector and foreign trade will be developed to illustrate their role in determining the levels of output, employment and prices in both a closed and open economy. The role of Fiscal and Monetary Policies and their short and long run impacts as well as supply side economic theories will be followed by the study of investment in Human and Physical Capital and how these investments influence economic growth and development. The course will conclude with the study of international trade and finance and their impact on the domestic economy. Prerequisite: MATH 1040 or higher. Frequency: Every Winter.

ECN 2025H Principles of Macroeconomics Honors (3 credits)
This course is designed to acquaint the student with the tools and methodology utilized by economists to analyze how the macro economy functions in both the short and long terms. The course will begin with a study of how market systems and nonmarket systems address the problem of scarcity and unlimited wants. Theories of consumption, investment, the public sector and foreign trade will be developed to illustrate their role in determining the levels of output, employment and prices in both a closed and open economy. The role of Fiscal and Monetary Policies and their short and long run impacts as well as supply side economic theories will be followed by the study of investment in Human and Physical Capital and how these investments influence economic growth and development. The course will conclude with the study of international trade and finance and their impact on the domestic economy. This course is open to HONORS students only. Prerequisites: MATH 1040 or higher. Frequency: Every Winter.

ECN 3020 Intermediate Microeconomics (3 credits)
This course expands upon the tools of economic analysis covered in ECON 2020 Principles of Microeconomics. Mathematical tools will be employed to further analyze the theory of consumer choice, elasticity, costs and production industry structure, regulation and deregulation. Prerequisites: ECN 2020 and ECN 2025. Frequency: Odd Years, Fall.

ECN 3025 Intermediate Macroeconomics (3 credits)
This course expands upon the tools of economic analysis covered in Principles of Macroeconomics. An overview of current macroeconomics events is followed by an in-depth study of the methodologies used to predict economic activity. Prerequisites: ECN 2020 and ECN 2025. Frequency: Every Fall and Winter.

ECN 3040 Law and Economics (3 credits)
This course introduces students to the economic approach to the analysis of law. The approach confronts challenges by seeking to identify how best to design legal rules in order to maximize social welfare. To do so, the course will ask (i) how do legal rules affect the behavior of individuals and of organizations? and (ii) how do legal rules compare to each other, in terms of promoting overall social welfare? Prerequisite: ECN 2025. Frequency: Odd Year Winter.

ECN 3210 Monetary Theory & Policy (3 credits)
Examines the structure and function of the American banking system, the Federal Reserve System, and the function of monetary policy in the regulation of the national economy. Prerequisite: ECN 2025. Frequency: Every Fall and Winter.

ECN 4210 Econometrics I (3 credits)
The purpose of this course is to introduce students to the theory and application of econometric methods to test economic relationships. It will familiarize students with the various sources of economic data and with the difficulties encountered in empirical testing of economic models. It covers the basic tools of estimation and inference in the context of the single-equation linear regression model, and deals primarily with least squares methods of estimation. The course emphasizes the intuitive understanding and practical application of these basic tools of regression analysis, as distinct from their formal development. Prerequisites: MATH 2020 and ECN 3025. Frequency: Even Year Fall.

ECN 4215 Econometrics II (3 credits)
Advanced topics in econometrics. Topics include estimation of linear regression models with endogeneity, economic methods designed for panel data sets, estimation of discrete choice models, time series analysis, and estimation in the presence of auto correlated and heteroskedastic errors. Prerequisite ECN 4210. Frequency: Even Year Winter.

ECN 4300 International Economics (3 credits)
Reviews theories and practices of trade, comparative advantage, trade barriers, balance of payments, economic development, and regional economic integration. Prerequisite: ECN 3025. Frequency: Every Winter.

ECN 4310 Economic Development 1 (3 credits)
Economic Development 1 (3 Credits):This course is designed to provide a working familiarity with the theoretical and empirical investigations used for understanding economic development. It will examine the economic structural shift that usually accompanies economic growth when human development occurs. It will also survey the statistical resources used to measure and analyze performance among developing countries. Topics include: income distribution and human resources, investment and capital flows, production and international trade. Prerequisite ECN 2025. Frequency: Odd Year Fall.

ECN 4320 Latin American and Caribbean Economics (3 credits)
This course examines the dynamics of economic development in Latin America and the Caribbean. Topics include primary product export dependence, industrialization, macroeconomic

stabilization and trade liberalization. The focus then shifts to the economic integration of the Western Hemisphere. The course will finish with a survey of the economic relations between Latin America and other emerging markets. Prerequisite: ECN 2025. Frequency: Odd Year Winter.

ECN 4500 Principles of Health Economics (3 credits)
This course is designed to acquaint the student with applying the economic tools and methodology utilized by economists to analyze how a specific industry, health care, functions in both the short and long terms. Theories of consumption, investment, the public sector and comparative systems will be developed to illustrate their role in determining the critical contributions and dependency of the national economy on levels of output, employment and prices of the health care sector. This elective course will study the economics of health care and the impact on national and international policy issues. Students will be required to write a 30 page paper on the economics of one sector of the health economy. The paper will be prepared over the term and students will be prepared to lead presentations and panel discussions. Prerequisite: ECN 2025. Frequency: Even Year Fall.

ECN 4600 Law and Economics (3 credits)
This course introduces students to the fundamentals of economic approach to law, focusing on the common law areas of torts, contracts, and property, as well as legal procedure, criminal law, and antitrust law. Among the important issues we will study throughout this course are: (i) how does the legal system shape economic incentives in ways that lead to socially optimal behavior? (ii) how does one measure the benefits and costs of changes in legal rules? (iii) what is the nature of private property in a market economy?, and (iv) what is the appropriate role of a legal system in settling private disputes? Upon completing this course, students should be able to understand the effects of the legal system on economic behavior and understand discussions involving law and economics. Frequency: Even Year Winter.

ECN 4910 Advanced Special Topics I (3 credits)
Examines advanced topics in economics that are not included in regular course offerings. Specific content and prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Upon Request see academic Department Chair.

ECN 4920 Advanced Special Topics II (3 credits)
Examines advanced topics in economics that are not included in regular course offerings. Specific content and prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Upon Request see academic Department Chair.

EDEC—Education

EDEC 2405 Children with Special Needs (3 credits)
This course provides an overview of disabilities and their impact on young children. Students examine the nature of disabilities and how they impact development during the early years. Legislation, history of programs and services available for children with special needs and their families are discussed. Prerequisite: None. Frequency: Every Fall and Winter.

EDEC 3420 Families of Children with Special Needs: Challenges and Opportunitie (3 credits)
This course examines practices to support and engage families of young children with special needs. Students explore the diversity of issues and needs experienced by families of young children with disabilities and examine programs and services available in the community. Field experiences are integrated (10 hours). Prerequisite: ECA 203. Frequency: Every Fall and Winter.

EDEC 3530 Diagnosis, Assessment, and Evaluation of Young Children (3 credits)
Students in this course will be introduced to a philosophic overview of the assessment process, including transdisciplinary assessment teams and provisions for appropriate information gathering techniques-formal and informal-which include the construction, selection, interpretation, and evaluation of diagnostic instruments. The role of technology in testing, record maintenance, and composition of IEP/IFPS will be discussed/modeled. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting is required. Prerequisite: ECA 0203. Frequency: Every Fall and Winter.

EDEC 4320 Cultural Diversity and Family–Community Development (3 credits)
Students in this course will learn how to work with families and practice how to use materials in the home and community environment to foster development and the acquisition of skills. Students will examine information that can create a vital link among school, community, and home in our multiethnic society. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting is required. Prerequisites: EDEC 3420, EDEC 3530, and EECP 3550. Frequency: Every Fall and Winter.

EDUC—Education

EDUC 1000 General Knowledge Preparation Mathematics (0 credits)
This course is designed to review the mathematics skills necessary to be successful on the General Knowledge Test (GKT). These skills are included in the four broad areas; Arithmetic; Geometry; and Measurement; Algebra; and Statistics and Probability. Logical Reasoning, test-taking strategies and problem-solving techniques will also be addressed in this course. Prerequisite: None. Frequency: Upon request. See academic Department Chair.

EDUC 1010 Writing Skills for General Knowledge Test (0 credits)
Students will learn and practice writing and English usage strategies to prepare for the General Knowledge Test. Prerequisite: None. Frequency: Upon request. See academic Department Chair.

EDUC 1100 Exploration of the Education Profession (3 credits)
Exploration of the Education Profession is designed to provide teacher candidates with an orientation to the education profession, including the examination of the institution of schooling in its social, legal, historical, and philosophical contexts. Teacher candidates engage in self-reflection and analysis of their perceptions of education and develop a general understanding of the realities of American education. Prerequisite: None. Frequency: Every Winter.

EDUC 1200 Guidance Purpose Success (GPS) for Life (3 credits)
This course addresses how to take students who have had challenges with school, home or behavioral issues, and help them change their mindset to become successful. This course goes through the first half of an evidence-based platform that teaches how to use intrinsic motivation when working with youth, how to help youth develop and maintain purpose, fulfilment, and self-esteem. The course also provides the necessary mentoring tools and techniques toward being an effective mentor who will achieve lasting results for the youth with whom they work. Prerequisites: None. Frequency: Every Fall and Winter.

EDUC 2500 Education Pre–enrollment

Seminar (0 credits)
This seminar provides an orientation to technology and program skills necessary for successful participation in the undergraduate programs. Students will be introduced to university systems designed to provide support and services to the undergraduate student during the formal program of study. An overview of all facets of the undergraduate programs will be provided, including how to locate course schedules online, how to contact academic advising, and how to access resources. Students will learn interactive technology skills, such as using e-mail and sending attachments, navigating the Internet, accessing the electronic library, using APA format, locating and using the undergraduate website and using Blackboard for online classes.

EDUC 3330 Integrating Instructional Technology in the Classroom (3 credits)
Integrating Instructional Technology in the Classroom presents strategies for technological integration into the classroom curriculum in elementary/ secondary learning environments. Hands-on experiences will allow students to apply teachng practices and research to specific learning needs of typical and atypical learners.Prerequisites: COMP 1500, COMP 2000 or COMP 2020, and MATH 1040. Frequency: Every Fall and Winter.

EDUC 3350 Survey of Exceptional Student Education (3 credits)
Foundations in exceptional student education in which historical perspectives, student characteristics, prevalence, incidence, etiology and medical aspects of exceptional learners are discussed. Techniques of prevention and intervention, from infancy through adulthood, are explored through classification processes, the continuum of services and the utilization of community services. Current trends and issues will be investigated. In addition to class meetings, a minimum of 10 hours of observation and participation in a field setting is required. Prerequisites: COMP 1500, COMP 2000 or COMP 2020, MATH 1040, MATH 1050, and passing scores on the Florida Teacher Certfication Examination General Knowledge Test. Frequency: Every Fall and Winter.

EDUC 3360 Educational Psychology (3 credits)
Educational Psychology focuses on how to improve the teaching and learning process based on research in the field. Teacher candidates will gain knowledge of principles and theores that relate to human development, diversity, and motivation. Additionally, candidates will analyze teacher codes of ethics and solve ethical scenarios appropriately. Prerequisites: None. Frequency: Every Fall and Winter.

EDUC 3525 Practices of Instruction (3 credits)
Practices of Instruction focuses on building teacher candidates' repertoire of instructional practices and lesson planning skills. Candidates learn about six pedagogical models: presentation, concept teaching, direct instruction, cooperative learning, problem-based instruction, and discussion. Candidates apply their knowledge of the instructional practices as they learn how to plan a lesson that promotes students' achievement. This course is ESOL infused. Prerequisite: EDUC 3360. Frequency: Every Fall and Winter.

EDUC 3535 Educational Assessment (3 credits)
Assessment of students for instructional planning purposes is stressed for students in the K-12 setting. Topics include formal and informal evaluation techniques. Emphasis will be placed on observation, screening, evaluations, interpretation and communication of evaluation results. This is an ESOL infused course. In addition to class meetings, a minimum of 10 hours of observation and participation in a field setting is required. Prerequisites: EDUC 3330, EDUC 3350, ESOL 3340, and passing scores on the Florida Teacher Certification Examnation General Knowledge Test. Frequency: Every Fall and Winter.

EDUC 4200 Simulation Experience – Diversity and Ethics (0–3 credits)
The Simulation Experience is a three credit, eight week course that all students must complete prior to internship. Students (in teams) are ?placed? in simulated school settings and required to recommend interventions relating to issues that arise relating to diversity. The Simulation Experience takes place over three phases; these phases take place in a kindergarten, middle school, or high school setting. The Simulation Experience is directly related to the QEP (Quality Enhancement Plan) within the Abraham S. Fischler School of Education at Nova Southeastern University. Prerequisite: EECP 3550 or ELEM 4320, or ESED 4320, or SECE 4320. Frequency: Every Fall and Winter.

EDUC 4514 General Methods in Field Experiences (3 credits)
The focus of this course is a 45-hour field experience that allows the teacher candidate to conduct classroom observations in his/ her content area and participate in the instructional process. The field experience emphasizes instructional delivery and facilitation, continuous professional improvement, and ethics in teaching. The candidate prepares and delivers effective lessons, acquires the necessary vocabulary/educational terminology, uses techniques and strategies that meet the needs of diverse student populations, and uses effective classroom instructional management techniques. Teacher candidates are placed in classrooms with experienced cooperating teachers who have clinical educator training and a history of successful teaching. This placement occurs through the Office of Placement Services in cooperation with school districts. Prerequisite: None. Frequency: Every Fall and Winter.

EDUC 4900 Undergraduate International Arts & Culture Infusion (3–6 credits)
This course introduces a unique interdisciplinary arts education methodology and demonstrates how its techniques and activities can be infused into an international setting. The Lovewell Method is an applied arts-education philosophy and pedagogy. This methodology not only trains students in creative, conceptual academic and performing arts skills, it develops higher levels of social, organizational and motivational skills. Interfacing with the culture and artists of the host country, participants will explore arts education built on authentic experience, cognitive thinking, and problem solving. Students will have the opportunity to observe three primary components of the Lovewell Process: the educational, the artistic, and the social/ therapeutic as they interweave various arts disciplines such as drama, music, design, dance, video, stage management and technology. This course provides an opportunity to experience the arts as a vehicle for learning in all subject areas. Prerequisite/s: None.

EDUC 4910 Introduction to Drivers' Education (3 credits)
This course will be a study of basic content, methodology, and appropriate activities for the purpose of teaching high school students basic drivers? education. Participants will review basic driving rules and procedures associated with driving as well as how to implement these procedures using engaging instructional strategies. Participants will be introduced to the highway transportation system and be provided with an in-depth study of the scope and nature of accident problems and their solutions. Teaching strategies to assist the participant with classroom implementation will be used throughout the course. Sample teaching strategies and

curriculum connections are included in this syllabus. The course objectives will be taken from the Florida Department of Education Drivers' Education outlined expectations. Prerequisite: None. Frequency: Every Fall.

EDUC 4911 Instructional Strategies and Methods for Teaching Advanced Driver Education (3 credits)
This course will be a study of basic content, methodology, and appropriate activities for the purpose of teaching high school students basic drivers? education. Participants will review basic driving rules and procedures associated with driving as well as how to implement these procedures using engaging instructional strategies. Participants will be introduced to the highway transportation system and be provided with an in-depth study of the scope and nature of accident problems and their solutions. Teaching strategies to assist the participant with classroom implementation will be used throughout the course. Sample teaching strategies and curriculum connections are included in this syllabus. The course objectives will be taken from the Florida Department of Education Drivers' Education outlined expectations. Prerequisite: None. Frequency: Every Winter.

EDUC 4912 Administration and Supervision of Driver Traffic Safety Education (3 credits)
This course will be a study of basic content, methodology, and appropriate activities for the purpose of teaching high school students basic drivers? education. Participants will review basic driving rules and procedures associated with driving as well as how to implement these procedures using engaging instructional strategies. Participants will be introduced to the highway transportation system and be provided with an in-depth study of the scope and nature of accident problems and their solutions. Teaching strategies to assist the participant with classroom implementation will be used throughout the course. Sample teaching strategies and curriculum connections are included in this syllabus. The course objectives will be taken from the Florida Department of Education Drivers' Education outlined expectations. Prerequisite: None. Frequency: Every Winter.

EECP—Early Chldhd Ed Primary

EECP 3330 Integrating Instructional Technology in the Classroom (3 credits)
Integrating Instructional Technology in the Classroom presents strategies for technological integration into the classroom curriculum in elementary/ secondary learning environments. Hands-on experiences will allow students to apply teachng practices and research to specific learning needs of typical and atypical learners.Prerequisites: COMP 1500, COMP 2000 or COMP 2020, and MATH 1040. Frequency: Every Fall and Winter.

EECP 3550 Child Guidance and Classroom Management (3 credits)
Students in this course will examine appropriate and developmentally sensitive strategies for managing behavior in typically and atypically developing children ages three through eight years. Performance of functional analysis of behavior and collaboration with support specialties will be discussed. The importance of consistency and proactive strategies and understanding the affective domain of the child will be stressed. Prerequisite: ECA 0203. Frequency: Every Fall and Winter.

EECP 4330 Health, Nutrition, Safety, and Physical Development in Early Childhood (3 credits)
Students in this course will study how to promote maximum growth and psychological safety of young children. Emphasis is placed on the indicators and procedures to ameliorate child abuse and neglect. Sources of community support and resources to support prevention and family strength will be highlighted. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting is required. Prerequisite: None. Frequency: Every Fall and Winter.

EECP 4340 Developmentally–Appropriate Practices For Teaching Literacy And Language Arts In Early Childhood (3 credits)
Students will plan, implement and evaluate developmentally appropriate and integrated content and methodology in the area of emergent and developing language and literacy, including: pre-reading and reading, pre-writing and writing, and receptive, expressive, and interpretative communication. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting are required. Prerequisite: ECA 0203. Frequency: Every Fall and Winter.

EECP 4345 Principles & Practices Of Reading & Language Arts Assessment In Prekindergarten/Primary Education (3 credits)
Students will investigate a range of literacy and reading techniques and materials that assess reading progress in the early childhood classroom. Students will apply, implement, and evaluate developmentally appropriate methods for evaluating, improving and remediating individual prereading skills to ensure future success of all students within a diverse early childhood setting. In addition to class meetings, a minimum of 10 hours of clinical observation and participation within an early childhood setting (prekindergarten-grade three) is required. Prerequisite: EECP 4340 or EECP 4520 or ECA 0242. Frequency: Every Fall and Winter.

EECP 4520 Developmentally Appropriate Practices for the Teaching of Reading in Early Childhood (3 credits)
This course examines concepts in reading, including sequential development, skills in word recognition, and comprehension methods and materials. The rationale for each method is discussed and practical application with young children is stressed. This course is designed to focus on prereading and reading skills of students from age three to grade three. The relationship of writing, listening, and language to reading development is included. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting is required. Prerequisite: EECP 4340. Frequency: Every Fall and Winter.

EECP 4530 Developmentally–Appropriate Practices For The Integration Of Creative Arts Across The Early Childhoo (3 credits)
Students will plan, implement, and evaluate developmentally appropriate and integrated content and methodology in the area of emergent and developing understanding of art, drama, movement, and music. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting are required. Prerequisite: None. Frequency: Every Fall and Winter.

EECP 4545 Developmentally Appropriate Practices for Integrating Math and Science in Early Childhood Education (3 credits)
Students will focus on instruction and integration of mathematics and science content and methodology in the areas of emergent and developing mathematical and scientific principles. Theories of child development and learning will be reviewed as they apply to hands on instruction as well as assessment in both content areas for children in the age range 3 through 3rd grade. Students will plan, implement, and evaluate developmentally appropriate lessons while demonstrating best practices. Integration of both mathematics

and science content area throughout the curriculum in developmentally appropriate ways will be stressed. Additionally, strategies for involvement of family and community will be stressed. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting is required. Prerequisite: ECA 0203. Frequency: Every Fall and Winter.

EECP 4550 Developmentally Appropriate Practices for Teaching Social Studies in Early Childhood Education (3 credits)
Students will plan, implement, and evaluate developmentally appropriate and integrated content and methodology in the area of emergent and developing understanding of social science. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting are required. Prerequisite: ECA 0203. Frequency: Every Fall and Winter.

EECP 4560 Integrating Literacy Throughout the Early Childhood Curriculum (3 credits)
Students will be made aware of the vital role of early exposure to literature in developing voluntary, avid, and competent readers. The course will focus on components and types of literature, a review of varied literary samples and application of literature to the total curriculum. Elements of cultural, family involvement, and special needs students will be addressed. The course will further examine the teacher's role in evaluating and selecting appropriate and valuable literature to be used in the classroom. Techniques for fostering students' ability to understand, recall, integrate information and improve comprehension as independent learners will be presented through the world of literature. In addition to class meetings, a minimum of 10 hours of clinical interaction, observation and instructional participation in a early childhood setting (Pre-K -Gr. 3) is required. Prerequisite: EECP 4340 or ECA 0242. Frequency: Every Fall and Winter.

EECP 4570 PreK–Primary Internship (12 credits)
This course for PreK-Primary Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, ECA 0203, EECP 3330, EDEC 2405, EDEC 3420, EDEC 3530, EECP 3550, EDEC 4320, EECP 4330, EECP 4340, EECP 4345, EDUC 4200, EECP 4520, EECP 4530, EECP 4545, EECP 4550, EECP 4560, and passing scores on all sub-tests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

EENG—Electrical Engineering

EENG 2710 Electrical Circuits/Lab (3–4 credits)
This course covers the fundamentals of electrical circuit theory, through the application of Ohm's law and Kirchhoff's current and voltage laws to solve basic resistive circuit problems. It also covers mesh and nodal analysis, Thevénin and Norton equivalent circuits, the analysis of resistive circuits with inductors and capacitors in both DC and AC steady-state conditions. Reactive circuits and networks are also covered for sinusoidal currents and voltages. Transient analysis and variable frequency response concepts are also introduced. Prerequisites: MATH 2100 or MATH 2100H. Frequency: Every Fall.

EENG 3310 Signals and Systems (3 credits)
This course covers fundamentals of linear systems techniques for the analysis of signals and systems in both the discrete and continuous time domains. It also covers signal representation in the Fourier, Laplace, and Z transform domains, as well as the sampling theorem. The course also emphasizes basic operations of linear systems and its system theory interpretations, such as convolution, sinusoidal analysis, frequency response, window analysis, discrete Fourier transforms, and digital filters. Prerequisites: EENG 2710 and MATH 3400. Frequency: Every Winter.

EENG 3710 Electronic Circuits/Lab (4 credits)
This course introduces the electronic properties of semiconductor materials and basic electronic devices such as diodes, transistors, and amplifiers. The course also covers the operating principles of electronic devices, including the analysis of electronic circuits operating under DC bias and switching conditions. Both single and multistage analysis and designs are carried out. Computer aided design (CAD) software is used to reinforce concepts and to perform calculations specific to the application of devices in electronic circuits. Other topics include bipolar junction transistors, field effect transistors, operational amplifiers, amplifier frequency response, active filters, and circuit modeling and simulation. Prerequisites: EENG 2710. Frequency: Every Winter.

EENG 4950 Internship in Electrical Engineering (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.25 or higher, major GPA of 2.5 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon Request see academic Department Chair.

EENG 4990 Independent Study in Electrical Engineering (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and the division director. Frequency: Upon Request see academic Department Chair.

ELEM—Elementary Education

ELEM 3530 Methods of Teaching Social Studies in the Elementary School (3 credits)
This course is a study of content, methodology, program development, appropriate activities, and assessment techniques for elementary school social studies. In addition, students will implement ESOL strategies in planning and presenting lessons. Students will also become familiar with the Florida Accomplished Practices as appropriate. Students are required to teach a social studies lesson in an elementary school during the 10 hour clinical experience required for this class. This is an ESOL infused course. Prerequisites: EDUC 2500, EDUC 3330, EDUC 3350, EDUC 3360, EDUC 3525, and ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 3532 ONLINE SCIENCE CURRICULUM FOR ELEMENTARY EDUCATION (3 credits)
This online course explores the preK-12 science curriculum content based upon the National Research Council Science

Education Standards, InTASC Principles, and Clark County School District Curriculum Essentials Framework guidelines. Attention is given to the connections among science concepts with reference to vertical scope and sequence throughout the grade levels. The student will record the exploration of each science strand in a journal as a permanent record of the knowledge composing the preK-12 science curriculum. There will be a ten (10) hour field experience observing science standards practiced in a local community school. Prerequisite: EDUC 2500. Frequency: Upon request. See academic Department Chair.

ELEM 3550 Methods of Teaching Science in the Elementary School (3 credits)
The purpose of this course is to examine content and methods for teaching science in the elementary school. You will explore a variety of techniques and reflect on approaches most applicable to teaching and learning when working with students who are typical in learning styles, who are limited in English Proficiency (LEP) or who are exceptional learners. This is an ESOL-infused course. ?Hands-on? approaches, resources, materials, technology, and ideas drawn from the student?s experience will be discussed. There will be a Field experience in a community school. Prerequisites: EDUC 2500, EDUC 3330, EDUC 3350, EDUC 3360, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 4320 Elementary School Classroom Management for Typical and Atypical Learners in Multicultural Classrooms (3 credits)
This course examines research-based knowledge, skills, and strategies that promote effective classroom management at the elementary school level. Teacher candidates apply the content learned in the course by developing a classroom management plan that focuses on safety and instruction for diverse students. Ten hours of field experiences are required to further promote candidates' application of knowledge, skills, and strategies. This course is ESOL infused. Prerequisites: EDUC 2500, EDUC 3360, EDUC 3525, and EDUC 3535. Frequency: Every Fall and Winter.

ELEM 4330 Mathematics Curriculum for Elementary Education Majors (3 credits)
This course examines the pre-K through grade 12 math curriculum content that is based on National Council of Teachers of Mathematics guidelines. Specific attention is given to major math concepts necessary for appropriate scope and sequence in the elementary school curriculum. In addition to class meetings, a minimum of 10 hours of observation and participation in a clinical setting are required. Prerequisites: EDUC 2500, EDUC 3330, EDUC 3350, EDUC 3360, and EDUC 3525. Frequency: Upon request. See academic Department Chair.

ELEM 4340 Methods of Teaching Language Arts (3 credits)
This course examines content and teaching strategies for teaching language arts through the use of children's literature. Emphasis is on the identification of high-quality children's books and the development of teaching strategies for integrated language arts instruction. Students will implement ESOL strategies in planning and presenting language arts lessons. This is an ESOL infused course. In addition to class meetings, a minimum of 10 hours of observation and participation in a field setting is required. Prerequisites: EDUC 2500, EDUC 3350, EDUC 3360, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 4350 Methods of Teaching Mathematics in the Elementary School (3 credits)
This course will focus on methods of teaching mathematics to elementary children. Students will explore major concepts and procedures that define Number and Operation, Algebra, Geometry, Measurement, and Statistics and Probability using a variety of techniques (using various manipulatives as well as mathematics-specific technology) as they move from concrete to abstract conceptual and procedural understanding. They will reflect on approaches most applicable to teaching and learning when working with students who are typical in learning styles, who are limited in English Proficiency (LEP) or who are exceptional learners. In doing so, they will constantly engage in activities to develop several mathematical processes: problem solving, reasoning and proof, communication, connections, and representation. There will be a ten (10) hour field experience in an elementary school. Field experience activities include collecting observation data using pre-selected tools, teaching and reflecting on the delivery of a lesson, and working with the teacher and students. Prerequisites: EDUC 2500, EDUC 3350, EDUC 3525, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 4360 Methods of Teaching Literacy in the Elementary School (3 credits)
This course examines concepts in reading, including sequential development skills in both word recognition and comprehension methods and materials. The rationale for each method is discussed and practical application with an elementary school youngster is required. The relationship of writing, listening, and speaking to reading is included. Students will implement ESOL strategies in planning and presenting lessons. This is an ESOL infused course. In addition to class meetings, at least ten hours of field experience are required. Prerequisites: EDUC 2500, EDUC 3350, EDUC 3360, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 4530 Integrating Art, Music, PE, and Health Education Across the Curriculum (3 credits)
This course examines the methodology for the integration of art, music, physical education (PE), and health education into the elementary school curriculum based on the theory of multiple intelligences. Age and grade appropriate methods, materials, activities and assessment will be introduced through practical applications, which are based on current research. In addition to class sessions, field experience is required for this course. Prerequisites: EDUC 3350, EDUC 3360, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ELEM 4540 Reading Assessment (3 credits)
This course examines recent trends in testing of word recognition and comprehension techniques. Students learn the appropriate use of methods and materials to improve reading performance. The rationale for each assessment technique is discussed and practical application with an elementary school youngster is required. Students will consider ESOL influences when administering assessments and interpreting data. This is an ESOL infused course. In addition to class meetings, at least ten hours of field experience are required. Prerequisites: EDUC 2500, ELEM 4340, and ELEM 4360. Frequency: Every Fall and Winter.

ELEM 4560 Methods of Teaching Reading Across the Elementary Curriculum (3 credits)
This course addresses the significance of reading ability and study skills throughout the elementary school curriculum. The

emphasis is on identifying sources of difficulties experienced by elementary school students in reading and learning from instructional materials. General strategies for learning from textbooks are examined as well as study skills and specific strategies for dealing with text materials from particular content areas. Students will implement ESOL strategies in planning and presenting lessons. This is an ESOL infused course. In addition to class meetings, at least 10 hours of field experience are required. Prerequisites: EDUC 2500, ELEM 4340, and ELEM 4360. Frequency: Every Fall and Winter.

ELEM 4570 Elementary Education Internship (12 credits)
This course for Elementary Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours in an elementary classroom setting that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, ELEM 3530, EDUC 3535, ELEM 3550, ELEM 4320, ELEM 4340, ELEM 4350, ELEM 4360, EDUC 4200, ELEM 4530, ELEM 4540, ELEM 4560, ESOL 4565, and passing scores on all subtests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

ENT—Entrepreneurship

ENT 3100 Small Business Management (3 credits)
Studies management problems that relate to the small-scale entrepreneur. Examines the decisions to be made in initiating a business: implementing financial and administrative controls, operating systems, pricing and marketing strategy, and understanding the legal environment. Frequency: Every Fall and Winter.

ENT 4400 Franchise Management (3 credits)
This course emphasizes the important aspects of starting and managing a franchise business. Specific attention is placed on the characteristics of the franchisor and franchisee; evaluation of franchising opportunities; legal concerns of franchising; the development of appropriate strategies and the successful planning, implementation and launching of a new business. Frequency: Every Fall.

ENT 4800 Entrepreneurship Experience (3 credits)
Students will learn through the case study method, computer simulations, and from local businesses researching the issues and challenges facing entrepreneurs. The course includes finance, marketing, human resources, valuation techniques, turnaround management, exit strategies, and ethical considerations. Student teams will choose a function business for their term project. They will identify specific issues, problems, and recommend solutions through written and oral presentations. Frequency: Every Winter.

ENVS—Environmental Science

ENVS 1100 Environmental Science I (3 credits)
Environmental Science I provides students with a broad overview of a highly interdisciplinary subject by examining how man can best live with Earth's environment. The first semester concentrates on the biological nature of environmental science: NIMBY, environmental justice, eco-feminism, biological communities, biodiversity, population, food, and hunger. Frequency: Every Winter

ENVS 1200 Environmental Science II (3 credits)
Environmental Science II provides students with a broad overview of a highly interdisciplinary subject. The course examines how man can best live with the Earth's environment. The second semester concentrates on the issues surrounding the physical nature of environmental science: air and water urbanization, toxic waste, natural resource management, law, and politics. Frequency: Every Winter

ENVS 1500 Natural History of South Florida (4 credits)
Through classroom, field trip, and practical experience, this course provides instruction on the general ecology, habitats, vegetation types, wildlife, and conservation issues of Fresh Water Wetlands, Coastal Systems and Upland Systems in South Florida. The course addresses society's role toward various ecosystems and discusses environmental ethics. The course will provide students with examples of common behaviors that negatively affect local species and present simple alternatives that can be incorporated into their daily lives. Students will also be taught naturalist interpretation skills during hikes through local natural areas. Frequency: Every Fall

ENVS 2000 Biodiversity of Alaskan Ecosystems (3 credits)
This course is an introduction to Alaska's diverse wildlife in a biological, ecological and evolutionary context. The course will cover biological and ecological aspects of the diverse flora and fauna located throughout Alaska's ecosystems including such topics as natural history, geography and geology, ecosystem characterization and connections, and wildlife populations and conservation. This course is designed to prepare students for a 10 day field course to explore Alaska's wilderness and observe its biodiversity first hand. Prerequisite: BIOL 1100 or higher. Frequency: Every fall, odd Year

ENVS 2001 Biodiversity of Alaskan Ecosystems Field Course (1 credit)
This field-based course introduces Alaska?s diverse wildlife in a biological, ecological and evolutionary context. The course will provide students with an overview of the recent research and current issues related to the diverse flora and fauna of Alaska?s ecosystems, including effects of climate change, overconsumption and management of populations, and pollution effects of mining and fossil fuel extraction. Local culture and native tribes will be introduced, as well as geography and geology, ecosystem characterization and connections, and wildlife populations and conservation. Students will also meet with local scientists and participate in fieldwork and seminars. Students will be able to observe first-hand the ecological concepts and biological characteristics of Alaska?s wildlife. Prerequisites: ENVS 2000. Frequency: Summer, even years.

ENVS 2100 Environmental Science Laboratory (3 credits)
Environmental science laboratory presents students with an opportunity to experience the practical work of an environmental scientist. Students will work collaboratively and use hands-on approaches to gain practical experience in many areas of this interdisciplinary science. Through laboratory, classroom, and on-and off-campus field experiences, students will learn to use equipment, make observations, collect data and test hypotheses related to environmental problems. Specific topics

include population biology, biological diversity, geographic information systems, environmental quality/pollution, geology, environmental justice and environmental restoration. The course will include a collaborative capstone project investigating an ongoing, local environmental issue. Prerequisites: ENVS 1100 or ENVS 1200 or BIOL 1510 or BIOL 1510H. Frequency: Every Winter.

ENVS 3000 Environmental Geology/ Lab (4 credits)
Environmental geology is an applied science that uses geologic principles to identify, analyze and mitigate problems that occur where humans interact with geologic environments. This course covers basic concepts of physical geology including earth materials, plate tectonics, deformation and mountain building, and earth surface processes. Additional topics may include sustainability, environmental hazards, environmental policy, and transport and fate of environmental contamination. Students will examine environmental problems on a global and local scale. Prerequisite: CHEM 1300 or CHEM 1300H or CHEM 1500. Frequency: Every Winter.

ENVS 3100 Environmental Issues (3 credits)
Environmental Issues is designed to teach students that most of today's issues in environmental science are highly controversial and that advocating a policy stand on an environmental concern requires the balancing of the pros and cons of an issue. Several current areas will be introduced in an unbiased manner. The students will gain experience taking sides and debating issues by presenting objective perspectives on environmental topics. Prerequisites: BIOL 1040, ENVS 1100, or ENVS 1200. Frequency: Every Fall.

ENVS 3101 Introduction to Public Health (3 credits)
This course provides an introduction to the concepts, values, principles, and practice of public health. Frequency: Every Fall.

ENVS 3170 Everglades Ecology and Conservation (3 credits)
An overview of the Greater Everglades Ecosystem that integrates biological, geological, ecological, conservation, social, economic and political aspects to the ecosystem and its current restoration efforts. The course will examine the main biological and physical features of South Florida, and the ecological processes that make this a unique ecosystem. The course will also examine man's relationship with the ecosystem since the times of their earliest occupation in the region to present. The course incorporates classroom time and 4 all-day Saturday fieldtrips. Prerequisites: ENVS 1100 or BIOL 1510 or BIOL 1510H. Frequency: Every Fall.

ENVS 3201 Environment, Culture, Ethnicity and Health (3 credits)
This course introduces students to skills and insights necessary in promoting health in diverse populations. Issues discussed include the need for effective communication; understanding of cultural factors and how they impact preventive efforts; and health care status and utilization patterns on the health care system and expenditures. The course also explores traditional modalities of health maintenance among various populations. Frequency: Every Winter.

ENVS 4002 Health Promotion and Disease Prevention (3 credits)
Students learn health educational strategies that can be incorporated into multiple settings focusing on wellness and preventive interventions. This course addresses individual and social factors as well as behavioral issues, health detriments, and community resources. Prerequisite: ENVS 3201. Frequency: Fall, even years.

ENVS 4210 Environmental Epidemiology (3 credits)
Examines the history, principles, and uses of epidemiology for understanding and control of health and disease in relation to human environments. Emphases in this survey course include the natural history, prevention, and control of diseases, as well as monitoring and outbreak investigations. Prerequisites: BIOL 2400 or BIOL 3400. Frequency: Fall, odd years.

ENVS 4300 Industrial Ecology (3 credits)
This course will apply concepts of sustainability and sustainable development to analyze human activity, including manufacturing, agriculture, resource exploitation, consumption, and population growth. The goal is to prepare the student for inevitable reductions of resources due to limits of environmental carrying capacity, economic feasibility, and social justice. The course will emphasize analysis and modeling of human activities and environmental problems, development of sustainable solutions, and written and oral communication of results. Prerequisite: CHEM 1500 or CHEM 1300 or CHEM 1300H and ENVS 1100 or BIOL 3200. Frequency: Winter, even years.

ENVS 4310 Environmental Health (3 credits)
Environmental Health examines a multidisciplinary field. The study of environmental health sciences is concerned with the impact of environmental conditions on human health. Particular attention is given to the health effects in human populations that can arise from exposures to agents (chemical, biological, physical) through the air they breathe, the water they drink, and the food they eat. Prerequisite: ENVS 3101. Frequency: Even Year Winter.

ENVS 4900 Special Topics in Environmental Science and Studies (3 credits)
Topics in advanced environmental science and studies that are not included in a regular course offering. Prerequisites may be required. Specific content and prerequisites are announced in the course schedule for the given term. Students may re-enroll for Special Topics covering different content. Frequency: Upon request.

ENVS 4900A Special Topics in Environmental Science and Studies Biodiversity of Alaskan Ecosystems Field Course (1 credit)
This field based course introduces Alaska?s diverse wildlife in a biological, ecological and evolutionary context. The course will provide students with an overview of the recent research and current issues related to the diverse flora and fauna of Alaska?s ecosystems, including effects of climate change, over consumption and management of populations, and pollution effects of mining and fossil fuel extraction. Local culture and native tribes will be introduced, as well as geography and geology, ecosystem characterization and connections, and wildlife populations and conservation. Students will also meet with local scientists and participate in field work and seminars. Students will be able to observe first-hand the ecological concepts and biological characteristics of Alaska?s wildlife. Prerequisites: ENVS 2000. Frequency: Upon request.

ENVS 4900B Special Topics in Environmental Science and Studies: Environmental Hydrology (3 credits)
This course covers the global hydrological cycle and the influence of climate, geology, and human activity on the sustainable use of water resources. The course includes principles of precipitation, evaporation, and evapotranspiration; surface and groundwater flow; storage in natural and artificial reservoirs; water quality and pollution; and water resource management and regulation. There is an emphasis on use of best available technology for display and analysis of hydrologic data. Field trips may be a part of the course requirements. Prerequisites: CHEM 1500 or CHEM 1300

or CHEM 1300H and ENVS 3000

ENVS 4950 Internship in Environmental Science and Study (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

ENVS 4950A Internship in Environmental Science and Study (A) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

ENVS 4950B Internship in Environmental Science and Study (B) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

ENVS 4950C Internship in Environmental Science and Study (C) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

ENVS 4950D Internship in Environmental Science and Study (D) (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

ENVS 4990A Independent Study in Environmental Science/Study (A) (1–12 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and department chair. Frequency: Upon request.

ENVS 4990B Independent Study in Environmental Science/Study (B) (1–12 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and department chair. Frequency: Upon request.

ENVS 4990C Independent Study in Environmental Science/Study (C) (1–12 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and department chair. Frequency: Upon request.

ENVS 4990D Independent Study in Environmental Science/Study (D) (1–12 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and department chair. Frequency: Upon request.

ESED—Exceptional Student Ed

ESED 3540 Introduction to Language and Speech Disabilities (3 credits)
The study of language development and disorders, which includes the impact of language on learning and augmentative forms of communication, is investigated. Individual needs and remediation concerns are addressed from early childhood to adulthood in the area of Language development. Impact of inclusion and alternate strategies for delivery of services in the mainstream for exceptional language learners is investigated. In addition to class meetings, a minimum of ten (10) hours of field experience is required. Prerequisites: EDUC 3330, EDUC 3350, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall and Winter.

ESED 3561 Families, Professionals, and Exceptionality (3 credits)
A study of theory, research, and best practices related to family-professional partnerships from both general and special education is conducted. Families are studied as interactive systems from a multicultural perspective. Concepts and techniques of developing empowerment through collaboration are discussed and applied for it is through such partnerships that reliable alliances develop. In addition to class meetings, observation, and participation in a field setting is required. Prerequisites: ESOL 3340, EDUC 3330, and EDUC 3350. Frequency: Every Fall and Winter.

ESED 3570 Foundations of Learning Disabilities (3 credits)
This course is a study in the fundamental knowledge in the field of specific learning disabilities. Concepts, theories, characteristics, causes of specific learning disabilities as well as assessment and teaching methods are presented to the teacher candidate. Pre-requisite/s: EDUC 3350, EDUC 3360, and ESOL 3340. Frequency: Every Fall and Winter.

ESED 4320 Classroom Management for Typical and Atypical Learners in the Multicultural Classroom (3 credits)
This course examines classroom management as the interrelationship of appropriate curricula, methods, materials, student behavior, family factors, and teacher behavior from culturally diverse perspectives. Additionally, this course addressed the classroom management needs of students with Emotional/ Behavioral Disorders (EBD), focusing on the history, identification, and screening/ evaluation approaches. Academic and data-based ethical behavioral strategies for intervention are discussed and applied. A minimum of 10 hours of field experience in a classroom is required. This course is ESOL infused. Prerequisites: EDUC 3330, EDUC 3350, EDUC 3360, EDUC 3535, ESED 3570, and ESOL 3340. Frequency: Every Fall and Winter.

ESED 4360 Classroom Procedures for Emotional/Behavioral Disorders (3 credits)
This course addresses information about learners with Emotional/Behavioral Disorders (EBD). The nature, history of the problem and relevant conceptual approaches are presented along with specific identification, screening and

evaluation techniques. Additionally, factors related to family, school and culture are emphasized within a social systems perspective. Finally, academic and behavioral strategies for intervention are discussed and applied. In addition to class meetings, observation, and participation in a clinical setting are required. Prerequisites: EDUC 3330, EDUC 3350, and EDUC 3535. Frequency: Every Fall and Winter.

ESED 4530 Classroom Procedures for the Intellectually and Developmentally Delayed (3 credits)
Emphasis is placed on instructional strategies for teaching students who are intellectually and developmentally disabled. The development, implementation and evaluation of individualized educational plans are stressed. Special approaches to teaching functional skills, developmental programming, and data based management for students ranging in age from kindergarten through high school are investigated and applied. In addition to class meetings, a clinical experience is required. Prerequisites: EDUC 3330, EDUC 3350, EDUC 3535, and ESED 4320. Frequency: Every Fall and Winter.

ESED 4550 Methods and Materials for Teaching Learners with Specific Learning Disabilities (SLD) (3 credits)
Methods and Materials for Teaching Students with Specific Learning Disabilities (SLD) Emphasis is placed on instructional strategies for teaching students with specific learning disabilities. Specialized approaches to teaching basic skills and adaptation of curriculum and materials for students ranging in age from kindergarten through high school are investigated and applied. In addition to class meetings, a minimum of 10 hours of observation and participation in a field setting is required. This course has a mandatory university supervision component of the field experiences. This class will have a supervised lesson plan demonstration in the field placement. Prerequisites: ESED 4320, ESED 3570, EDUC 3535. Frequency: Every Fall and Winter.

ESED 4570 Exceptional Student Education Internship (12 credits)
This course for Exceptional Student Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, EDUC 3535, ESED 3540, ESED 3561, ESED 3570, ESED 4320, ELEM 4340, ELEM 4350, ELEM 4360, ESED 4360, EDUC 4200, ESED 4530, ELEM 4540, ESED 4550, ELEM 4560, ESOL 4565, and passing scores on all subtests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

ESOL—ESOL-Engl Speakers/ Other Lang

ESOL 2903 Cross Cultural Studies (3 credits)
This course will enable students to expand their knowledge of a multiplicity of cultural groups nationwide. This knowledge will allow them to identify culture-specific verbal and nonverbal communications and school behaviors resulting from cultural variations and their influence on student behavior/ attitudes. The use of recent research findings and cross-cultural awareness will assist participants in maximizing student learning and in designing culturally-sensitive instructional materials while exhibiting appropriate teacher behaviors in cross-cultural school settings. In addition to class meetings, a 10 hour virtual field experience is required for this course. Prerequisite: None. Frequency: Every Fall and Winter.

ESOL 3340 Survey of TESOL for Teachers (3 credits)
This course will assist participants in identifying and selecting instructional strategies, approaches, and materials for the development of listening, speaking, reading and writing skills in ESOL classrooms. Knowledge of these elements will be demonstrated by development and presentation of lesson plans appropriately based on age, language proficiency, cultural background and learning styles. A 10 hour field experience is required for this course. Prerequisite: ESOL 2903. Frequency: Every Fall and Winter.

ESOL 4565 Second Language Learning (3 credits)
This course will assist participants in identifying and selecting instructional strategies, approaches, and materials for the development of listening, speaking, reading and writing skills in ESOL classrooms. Knowledge of these elements will be demonstrated by development and presentation of lesson plans appropriately based on age, language proficiency, cultural background and learning styles. A 10 hour field experience is required for this course. Pre-requisites: ESOL 2903, and ESOL 3340. Frequency: Every Fall and Winter.

ESOL 4901 Methods of Teaching ESOL (3 credits)
This course will assist participants in identifying and selecting instructional strategies, approaches, and materials for the development of listening, speaking, reading and writing skills in ESOL classrooms. Knowledge of these elements will be demonstrated by development and presentation of lesson plans appropriately based on age, language proficiency, cultural background and learning styles. A 10 hour field experience is required for this course. Prerequisite: ESOL 2903. Frequency: Every Fall and Winter.

ESOL 4902 ESOL Curriculum and Materials Development (3 credits)
This course will assist participants in identifying and selecting instructional strategies, approaches, and materials for the development of listening, speaking, reading and writing skills in ESOL classrooms. Knowledge of these elements will be demonstrated by development and presentation of lesson plans appropriately based on age, language proficiency, cultural background and learning styles. A 10 hour field experience is required for this course. Prerequisite: ESOL 2903. Frequency: Every Fall and Winter.

ESOL 4904 Linguistics for ESOL Educators (3 credits)
This course provides insight into dialect diversity and the structure of language, including phonology, morphology, and syntax. Causes of linguistic interference for students from diverse language backgrounds are analyzed. An emphasis is placed on students being able to apply the International Phonetic Alphabet (IPA) for purposes of spoken language analysis. Students will analyze language and determine appropriate instructional strategies, using knowledge of phonology, morphology, syntax, semantics, and discourse. A course in applied linguistics is essential to understand how first and second languages develop in students. For the teacher of LEP students significant insights can be made regarding the student?s rate of progress in learning a new

language and the potential difficulties that student might encounter. This course is required by all students seeking their ESOL endorsement. Students should check with their advisors as to the full sequence of ESOL course that they may be required to take to obtain their ESOL endorsement. Prerequisite: ESOL 2903. Frequency: Every Fall and Winter.

ESOL 4905 Testing and Evaluation in ESOL (3 credits)
Participants will learn to identify suitable ESOL assessment instruments and placement tests for ESOL students. Identification of available tests and construction of necessary ESOL test items in the cultural and language arts areas will be learned. The design and interpretation of appropriate testing--proficiency and achievement measures--as well as the interpretation of such assessment, will be stressed. Traditional assessment procedures as well as authentic assessment will be incorporated into required activities. The bilingual/special education interface is also considered. A variety of necessary record keeping methods for different types of assessment will be discussed and used in assignments. A 10 hour field experience is required for this course. Prerequisite: ESOL 2903. Frequency: Every Fall and Winter.

EXSC—Exercise Science

EXSC 1200 Prevention and Care of Athletic Injuries (3 credits)
This course is designed to introduce the student to prevention, recognition, and acute care management techniques for athletic related injuries. Time will be spent addressing the art and science of appropriate taping and wrapping techniques for athletic injuries. Frequency: Every Fall and Winter.

EXSC 3700 Kinesiology (3 credits)
A study of the anatomy, physiology, and biomechanics of the muscle system as it relates to the principles of movement. Students will learn the muscle groups involved with specific movements and the results of the action of particular muscle groups on overall movement. Both normal and impaired movements will be analyzed. Prerequisite: BIOL 3312 or BIOL 3320. Frequency: Every Fall and Winter.

EXSC 3740 Exercise Physiology with Lab (4 credits)
Study of the integration of cardiopulmonary, neuromuscular, and musculoskeletal systems as they apply to the movement of the body through space. Studied at the chemical, cell, and organismal levels. Includes use of instrumentation and procedures commonly employed to measure and analyze cardiopulmonary, neuromuscular, and musculoskeletal systems. Prerequisite: BIOL 3312 or BIOL 3320. Frequency: Every Fall and Winter.

EXSC 3760 Biomechanics of Human Movement with Lab (4 credits)
This course provides the application of mechanical concepts to movement problems in sport, rehabilitation, and fitness. The anatomical and mechanical principles that dictate the limits and potential of human movement will be addressed. There is an overlying theme of movement observation, interpretation, and remediation with regard to biomechanics. Includes a laboratory component. Prerequisite: EXSC 3700. Frequency: Every Fall and Winter.

EXSC 3820 Exercise Prescription with Lab (4 credits)
This course is designed to assist the student with measurement and interpretation of health and fitness related factors necessary for prescribing preventative and rehabilitative exercise programs. Focus areas include cardiorespiratory fitness, flexibility, body composition, muscular strength and endurance, and risk stratification. Includes a laboratory component. Prerequisite: ATTR 2400. Frequency: Every Fall and Winter.

EXSC 3900 Sports Supplements for Athletic Performance (3 credits)
This course includes the study of macronutrient manipulation, nutrient timing, and the use of dietary supplements (e.g. creatine, beta-alanine, amino acids, etc) to enhance sports performance, increase skeletal muscle mass and muscle fiber cross-sectional area, decrease fat mass, and optimize recovery. This course thus explores the physiology of the human organism and is designed to provide a framework in which the student can understand how the human body adapts to various nutritional strategies at the cellular, molecular, and organismal levels in exercising individuals. The course will cover both the basic and applied science aspects of nutritional and supplemental strategies as they relate to the acute and chronic response to exercise. Prerequisite: EXSC 3740. Frequency: Every Fall.

EXSC 4100 Adapted Physical Education (3 credits)
This course allows students to study medical characteristics of common disabilities and methods for designing appropriate sport and exercise programs. Applied experiences with athletes/physically active individuals with disabilities will be available during the semester. Prerequiste: ATTR 1400, BIOL 3312 or equivalent. Frequency: Every Fall and Winter.

EXSC 4220 Motor Learning with Lab (4 credits)
This course provides students with the ability to analyze the emerging interrelationships among the motor, social, emotional, and cognitive forms of behavior and development. The course will discuss topics related to, but not limited to the developmental perspectives, physical growth, maturation and aging, perceptual motor development, physiological changes and exercise, sociocultural influences on motor development, theories, experimental studies and current issues in the acquisition, performance, and retention of motor skills, includes a laboratory component. Prerequisites: PSYC 3400 and EXSC 3700. Frequency: Every Fall and Winter.

EXSC 4300 Research Methods in Sport and Physical Education (3 credits)
This course offers a foundation for conducting research in the areas of exercise/physical activity and sport. Specific attention will be on structure and interpretation of the research structure and data analysis (qualitative and quantitative) for publication and presentation. Prerequisite: MATH 3020 or MATH 3020H or MATH 2020 or MATH 2020H.

EXSC 4400 Exercise and Sport Administration (3 credits)
This course offers an in-depth background of the standards, policies and practices of organization, supervision and administration for sport and exercise programs and facilities. Prerequisite: EXSC 3820. Frequency: Every Fall and Winter.

EXSC 4500 Advanced Strength and Conditioning (3 credits)
This course is designed to provide students with the scientific knowledge and practical skills to train various active populations for the primary goal of improving athletic performance. Specifically, students will learn to conduct sport-specific testing sessions, design and implement safe and effective strength training and conditioning programs and provide guidance regarding nutrition and injury prevention relative to strength and conditioning. The course is designed to enhance students? current level of knowledge of the material required to prepare for either the Certified Strength and Conditioning Specialist (CSCS) or Certified Personal Trainer (CPT) exams sponsored by the National Strength and Conditioning Association. Prerequisites: EXSC 3800 or EXSC 3820, and EXSC 3700.

Frequency: Every Winter.

EXSC 4901 Practicum in Exercise Science (3 credits)
This course offers the student an opportunity to earn course credit for a practicum/ internship in a sport and exercise program and/or facility. Prerequisite: EXSC 3740 and EXSC 4400; EXSC 4400 may be taken concurrently with EXSC 4901. Frequency: Every Fall and Winter.

EXSC 4950 Internship in Exercise and Sport Science (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

EXSC 4950A Internship in Exercise and Sport Sciences (A) (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

EXSC 4950B Internship in Exercise and Sport Sciences (B) (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Every Fall and Winter.

EXSC 4990 Independent Study in Exercise and Sport Science (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

EXSC 4990A Independent Study in Exercise and Sport Science (A) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

EXSC 4990B Independent Study in Exercise and Sport Science (B) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

EXSC 4990C Independent Study in Exercise and Sport Science (C) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: To be determined by the faculty and the division director. Frequency: Every Fall and Winter.

FCAP—Family Ctr Access Plus

FCAP 0173 Access Plus (0 credits)
Access Plus program is a college support program for students with Autism Spectrum Disorder, who are accepted and enrolled in NSU's undergraduate programs.

FILM—Film Studies

FILM 2000 Introduction to Film (3 credits)
This course focuses on understanding film as an art form through examining its history and stylistic elements. Emphasis will be on technological, aesthetic, and social elements of film; various genres and periods in film will be studied, along with the application of techniques and criticism and evaluation to film. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

FILM 3040 Women and Film (3 credits)
This course focuses on the application of film to examine how gendered images construct and marginalize women in both mainstream and independent cinema. Prerequisite: one FILM course; and COMP 2000 or 2010 or 2020 or COMP 2000H. Frequency: Odd Year Winter.

FILM 3050 Literature and Film (3 credits)
This course focuses on the adaptation of literary texts into film texts. Emphasis will be on the process and consequences of literary adaptation into film and the similarities and differences between the reading and analysis of literary texts and film texts. Prerequisite: one FILM course; and COMP 2000 or 2010 or 2020 or COMP 2000H. Frequency: Odd Year Fall.

FILM 3060 Film Noir (3 credits)
This course focuses on film noir, a series of films from the 1940's and 1950's that share characteristics of complex narrative, expressionistic photography, alienated characters, and psychological themes. Emphasis will also be on the study of the way these films were influenced by social, political, and economic factors of the time. Prerequisite: one FILM course, and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

FILM 3100 Black Cinema (3 credits)
This course focuses on the study of films made within or about the African Diaspora and considers the socio-political commentary made by these films. The course also examines how racially constructed images are developed in film and the connection between black and mainstream cinema. Prerequisite: one FILM course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

FILM 4000 History of Film (3 credits)
This course focuses on the history of film, from the silent era to the modern, digital era. Emphasis will be on the technological developments of film science, and the historical and social contexts that influenced the production of film over the last century. Prerequisites: one FILM course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

FILM 4500 Major Directors (3 credits)
This course examines the life and work of a major film director from a variety of critical perspectives and using a variety of films. Directors that may be focused on include Alfred Hitchcock, Stanley Kubrick, Martin Scorsese, and Woody Allen. Prerequisites: one FILM course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

FILM 4900 Special Topics in Film (3 credits)
Topics, which vary from year to year, may include a study of film in relation to a specific field (politics, philosophy, history), an exploration of a particular genre of film (comedy, western, musical, crime), or period (silent film). Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one FILM course; and COMP 2000 or

COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

FILM 4990 Independent Study in Film (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One FILM course and COMP 2000 or 2010 or 2020 or COMP 2000H. Frequency: Every Fall and Winter.

FIN—Finance

FIN 2000 Personal Finance (3 credits)
A course designed to help students cope with the financial aspects of life such as taxes, budgeting, insurance, savings, investing, credit and credit card financing, auto and home financing, retirement planning, and estate planning. Prerequisites: MATH 1040 or higher. Frequency: Every Fall and Winter.

FIN 2000H Personal Finance Honors (3 credits)
Excellent personal financial management is important for wealth creation. Students will get a comprehensive hands-on overview of the core areas of personal finance. This includes: a financial plan, personal financial statements, personal taxes, cash management, buying big items like a house and a car, credit score, credit card management, consumer loans, life, health and property insurance, investment planning, retirement planning, and estate planning. This knowledge will assist you to develop good personal financial management practices. This is an essential course for all students. This course is open to HONORS students only. Prerequisites: MATH 1040 or higher. Frequency: Every Winter.

FIN 3010 Corporation Finance (3 credits)
Applies financial management to organizations. Topics include ratio analysis, leverage, cash budgeting, and capital structure. Prerequisites: ACT 2200, ECN 2020, AND MATH 2020. Frequency: Every Fall and Winter.

FIN 3110 Financial Management (3 credits)
A continuation of Corporation Finance. Topics include risk and return, cost of capital, capital structure, dividend policy, short-term financial management, and international aspects of financial management. Prerequisite: FIN 3010

FIN 3120 Principles of Investments (3 credits)
This course covers modern investment theory with applications in the debt, equity and derivative markets, with an introduction to portfolio management. Topics include financial assets, risk/return, bond yields, durations, option pricing, and futures. The concepts can be applied to personal investing, but the course is geared more toward institutional investing. Prerequisite: FIN 3010 or FINC 3010. Frequency: Every Fall and Winter.

FIN 3130 Securities Analysis (3 credits)
Securities Analysis builds on the foundation of investment management developed in FIN 3120 by focusing on efficient diversification, portfolio management, fundamental and technical analysis, equity valuation, and portfolio performance evaluation. Prerequisite: FIN 3120. Frequency: Every Fal and Winter.

FIN 3150 Banking and Financial Institutions (3 credits)
Studies the operation in commercial banks, savings and loan associations, and saving banks. Topics include loans, mortgages, bonds, investments, trusts, marketing, and auditing. Discusses the impact of federal and state regulations on financial institutions. Prerequisite: FIN 3010 or FINC 3010 Frequency: Every Fall and Winter.

FIN 3900 Finance Internship (3 credits)
The Huizenga College internship fosters learning through the application of classroom theory in the workplace. During the course, the student also focuses on practical career skills and personal professional goals with individual guidance from the professor. The minimum work requirement is 180 hours during one semester (16 weeks). Contact Academic Advising for registration. ACADEMIC REQUIREMENTS: good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours. Frequency: Every Fall and Winter.

FIN 4120 Advanced Financial Management (3 credits)
This course explores the role of the financial manager in finding sources of corporate funds, valuation, and capital budgeting. This course also examines financial forecasting and short and long-term financing. Prerequisites: FIN 3115 OR FINC 3115 OR FIN 3110 OR FINC 3110. Frequency: Every Fall and Winter.

FIN 4130 Portfolio Theory (3 credits)
This course covers portfolio theory with an emphasis on capital asset pricing, arbitrage pricing, pricing of derivatives, interest rates, and bond management. Internet exercises will be used extensively. Prerequisite: FIN 3130. Frequency: Every Fall and Winter.

FIN 4550 International Finance (3 credits)
Topics include international monetary systems, foreign exchange markets, international parity conditions and currency rates, management of currency exposures, and multinational capital budgeting and capital structure. Prerequisites: FIN 3010 and ECN 2025. Frequency: Every Fall and Winter.

FIN 4910 Advanced Special Topics (3 credits)
Examines topics in finance that are not included in regular course offerings. Specific contents and prerequisites are announced in the course schedule for a given term. Students may reenroll for special topics covering different content. Frequency: Every Fall and Winter.

FIN 4920 Adanced Special Topics (3 credits)
Examines topics in finance that are not included in regular course offerings. Specific content and prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Every Fall and Winter.

FREN—French

FREN 1210 Elementary French I (3 credits)
Introduction to the essentials of French language with emphasis on grammar, vocabulary, writing, and oral skills. Introduction to the cultural practices of the Francophone world. Not open to native speakers. Frequency: Every Fall and Winter.

FREN 1220 Elementary French II (3 credits)
Continuation of the essentials of French language with emphasis on grammar, vocabulary, writing, and oral skills. Continuation of study of the cultural practices of the Francophone world. Not open to native speakers. Prerequisites: FREN 1210 or permission of instructor. Frequency: Every Fall and Winter.

FREN 2210 Intermediate French I (3 credits)
Readings in French literature and culture. Study of French idioms and syntax. Further development of oral and written French. Not open to native speakers. Prerequisite: FREN 1220. Frequency: Every Fall.

FREN 2220 Intermediate French II (3 credits)
Continuation of FREN 2210. Readings

in French literature and culture. Study of French idioms and syntax. Further development of oral and written French. Not open to native speakers. Prerequisite: FREN 2210. Frequency: Every Winter.

GENG—General Engineering

GENG 1000 Introduction to Engineering (1 credit)
Topics in this course include introduction to the engineering profession, engineering design, and problem solving. Focus on communications, collaborative learning, use of resources, development of engineering study skills, and strategies for student success.

GENG 1012 Engineering Graphics (3–4 credits)
Topics in this course include engineering graphics in a professional engineering context, including sketching and working drawings, multiple views, sections, solid modeling software, drawing standards, tolerance and dimensioning.

GENG 1016 Introduction to Engineering Design (3–4 credits)
Topics in this course include engineering design process including developing design requirements and constraints, determining feasible solutions, evaluating alternative solutions and testing implementing the best dilution. Utilizes case studies and hands-on-micro-processor and robotic based design problems in a team environment. Frequency: Every Winter.

GENG 2000 Engineering Design and Project Management I (2 credits)
Topics in this course include historical engineering achievements, focusing on the design process and project management issues; engineering failures, emphasizing the impacts on the engineering profession and society; and contemporary issues facing society, focusing on the role of engineering solutions. Frequency: Every Fall.

GENG 2022 Statics (3–4 credits)
Topics in this course include analysis of equilibrium of particles, addition and resolution of forces, equivalent system of forces, equilibrium of rigid bodies, centroid and moment of inertia, structural analysis, internal forces, friction, and virtual work. Frequency: Every Fall.

GENG 2050 Computer Applications in Engineering (3–4 credits)
Topics in this course include application of modern programming tools and languages to solve engineering problems.

GENG 2070 Materials and Processes (3–4 credits)
Topics in this course include study of the materials used in engineering and related manufacturing processes. Materials topics include the atomic structure of materials, alloys, phase diagrams, and heat treatment. Manufacturing processes include casting, forming, machining, and joining processes. Prerequisite: CHEM 1300. Frequency: Every Winter.

GENG 2450 Dynamics (3–4 credits)
Topics in this course include fundamental topics in particle and rigid body dynamics. Planar kinetics of a particle: force and acceleration, work and energy, and impulse and momentum, and planar kinematics of a rigid body. Prerequisites: GENG 2022 and MATH 2200. Frequency: Every Winter.

GENG 3000 Engineering Design and Project Management II (3–4 credits)
Topics in this course include integration of engineering design and project management. An example project demonstrates the steps of engineering design, development a project plan, project presentation, and a design report with supporting documents. Prerequisites: GENG 2000 and GENG 3420. Frequency: Every Winter.

GENG 3012 Thermal and Fluid Systems (3–4 credits)
Topics in this course include a systems approach to design, analysis, and engineering of thermal and fluid systems using mathematical and software tools. Frequency: Every Winter

GENG 3024 Mechanics of Materials (3–4 credits)
Topics in this course include the behavior of deformable bodies subjected to axial loading, torsion, and bending. Includes stress-strain relations, elastic deflections of beams, effects of combined loading, buckling of slender columns, and failure criteria for ductile and brittle materials. Frequency: Every Fall

GENG 3050 Sensors, Measurements, and Controls (3–4 credits)
Topics in this course include fundamental concepts of measurement and instrumentation at the system level. Measurement systems cover non-electrical parameters measurement, data acquisition, and signal conditioning. Controls systems cover application of mathematical and analytical tools to model, analyze, and design automated feedback control systems for dynamic processes. Frequency: Every Winter

GENG 3420 Engineering Economics (3–4 credits)
Topics in this course include analysis of cash flows including cost, revenue, and benefits that occur at different times. Evaluation of engineering projects using equivalent worth, benefit-cost, and rate of return including impact of depreciation, and taxes. Frequency: Every Fall

GENG 3800 Quality Control of Engineers (3–4 credits)
Topics in this course include analytical procedures associated with Statistical Quality and Process Control. Includes design of experiments, and system approaches to maintenance and improvement of process quality. Frequency: Every Winter.

GENG 4010 Senior Capstone Design Project I (3–4 credits)
The emphasis in this course is an open-ended design project that exposes students to the practice of engineering design and problem solving. An emphasis on real problems and working with real clients. Students are required to visit facilities, interact with client employees, determine on-site data measurement strategies, and perform any necessary literature search. Develop proposal for project to be performed in GENG 4020 Senior Capstone Design Project II. Frequency: Every Fall.

GENG 4020 Senior Capstone Design Project II (3–4 credits)
This course completes the project established in CENG 4010 and the preparation and completion of the Fundamentals of Engineering professions examination. Frequency: Every Winter

GENG 4910 Engineering Ethics Seminar (1–4 credits)
This course aims at teach computer engineering students how to avoid, and if possible resolve, any harmful situation in the workplace or profession, while being fully aware of the legal constraints, implications, and the organizational structure. This seminar course will briefly review the current frameworks of ethics and discuss examples of ethical dilemmas in computer engineering practice, present an established systematic method for resolving ethical situations, and discuss issues prevalent in professional ethics caused by cultural differences. Prerequisite: Consent of division director. Frequency: Every Fall.

GEOG—Geography

GEOG 2050 Survey of Geography (3 credits)
Study of geographic characteristics, area

relationships, and major regional problems, and their impact on the Western world. Study of physical, human, economic, and political resources. Frequency: Every Winter.

GEOG 2075 Geographical Information Systems (3 credits)
Geographical Information Systems is an introductory survey course that gives the student a comprehensive introduction to the basic design principles of data-based management systems for the capture, analysis, and display of spatial data. Frequency: Every Fall.

GEOG 2260 Geography of Natural Resources (3 credits)
Study of natural resources within the framework of the man-environment system. Included are problems related to pollution, populations, technology, growth, conservation of the environment, and developmental planning as they relate to the various geographic areas of the Western world and the non-Western world. Frequency: Every Fall.

GEOG 2900 Special Topics in Geography (1–3 credits)
Topics in geography that are not included in regular course offerings and may be taken without prerequisites. Specific content is announced in the course schedule for a given term. Students may reenroll for special topics covering different content. Frequency: Upon request.

GEOG 3000 Geography of Ecotourism (3 credits)
Geography of Ecotourism examines physical and cultural attributes of countries and regions in the context of tourism. A general emphasis provides a broad overview of tourism around the world, but the majority of the instruction deals with the examination of ecotourism from a thematic viewpoint so that practitioners can learn to identify geographic locations with specific attractions and apply concepts so as to construct activities in any country. Frequency: Evey winter.

GEOG 3010 Amazonian Cloud Forest Biogeography (3 credits)
This is a course for students traveling to Ecuador as part of a program to document the land, people, and cultures of this Latin America nation. Students will have the opportunity to explore Ecuador using a variety of themes: cultural, geographical, natural, and sustainable. Prerequisite: BIOL 1040 or higher or ENVS 1100. Frequency: Even Year Winter.

GEOG 3050 Applied Geographic Information Systems (3 credits)
The course will explore applied topics in GIS including: GIS database development, Web-based GIS applications, spatial and 3-D analysis, and model development. This course builds on basic principles and applications developed in GEOG 2075, and will prepare students from various disciplines to use advanced GIS analytical tools in project development. Prerequisite: GEOG 2075. Frequency: Every Fall.

GEOG 3075 Geospatial Field Methods (3 credits)
This course teaches students to geo-reference field observations, photos, and data for analysis and reports. Students are introduced to geospatial technology, including Global Positioning System (GPS), mobile Geographic Information System (GIS) tools, and basic GIS for field data gathering. The course consists of lecture, computer laboratory, student presentations, and field trips for data collection. This course is designed for students from diverse disciplines interested in using geospatial technology in their studies, research, and career. Prerequisite: GEOG 2050 or GEOG 2075. Frequency: Winter, odd years.

GEOG 4050 Space–Borne and Aerial Image Processing (3 credits)
This course is designed to introduce students to the principles of satellite and aerial remote sensing and to teach methods for analysis and interpretation of digital imagery. Students will explore digital image processing of color satellite imagery used for monitoring soil, vegetation and water resources. In addition, the integration of GIS technology with remote sensing will be discussed. Students will also be exposed to the latest developments in airborne and satellite remote sensing technology and how it enhances decision making in science, engineering, emergency management and agriculture. Students who take this course will gain essential training towards a career in the natural resource, urban planning, emergency management, or intelligence communities. Prerequisite: GEOG 2075. Frequency: Even Year Winter.

GEOG 4900 Advanced Special Topics in Geography (1–3 credits)
Advanced topics in geography that are not included in regular course offerings. Specific content and prerequisites are announced in the course schedule for a given term. Students may reenroll for special topics covering different content. Frequency: Upon request.

GEOG 4950 Internship in Geography (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

GERO—Gerontology

GERO 2000 Introduction to Gerontology (3 credits)
This course explores the demography of aging and its implications for society, social structure, work and retirement, health care and housing, and the effects of an aging society on public policy. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall.

GERO 2030 Gerontology and the Law (3 credits)
This course covers an overview of critical legal issues affecting the elderly. Topics will include the following: guardianship practice and procedure, alternatives to guardianships, such as durable powers of attorney, trusts, and health care surrogates; government benefits such as Social Security, Medicare, and Medicaid; and end of life decision making. Regulations and laws designed to protect the elderly against abuse and fraud are also covered. Prerequisite: GERO 2000. Frequency: Even Year Winter.

GEST—Gender Studies

GEST 2050 Introduction to Gender Studies (3 credits)
This course introduces students to the interdisciplinary field of gender studies. It is designed to help students develop a critical framework for thinking about questions relating to gender and the ways that gender is constructed and institutionalized. Attention is paid to ongoing debates concerning public and private, the politics of embodiment and sexuality, equality and difference, the intersection of gender with other axes of subordination, identity politics and essentialism. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

GEST 4900 Special Topics in Gender Studies (3 credits)
This course serves as a capstone to gender studies and provides the opportunity for treatment of special topics and/or internships combined with independent research projects. Prerequisites: GEST 2050; and COMP 2000 or COMP 2010, or COMP 2020 or COMP 2000H. Frequency:

Even Year Fall.

GEST 4990 Independent Study in Gender Studies (3 credits)
The student selects, and carries out independently, library and /or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: GEST 2050; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

GNST—General Studies

GNST 2901 Workshop in General Studies (1 credit)
This course is designed to introduce students to the multidisciplinary, general studies major. In this course students are introduced to the concept of multidisciplinary studies. The course assists students in identifying the concentrations that will comprise their major and will help them develop the rationale that links these concentrations into a coherent major. Prerequisite: COMP 1500 or COMP 1500H and completion of 30 undergraduate credits. Frequency: Every Fall and Winter.

GNST 4901 General Studies Capstone Experience (3 credits)
This course serves as the capstone for the General Studies major. Students will be required to complete a research project drawing on the two concentrations they have chosen for their program under the guidance of the instructor, employing appropriate methodologies for the disciplines selected. Students will select a faculty member with expertise in the relevant disciplines as a reader for their capstone project. The reader will provide guidance in the development of the capstone project. Students will also read and discuss scholarship relating to disciplines from a variety of disciplinary areas. Prerequisites: COMP 2000 or COMP 2000H or COMP 2010 or COMP 2020 and GNST 2901 and 90 or more earned credits. Frequency: Every Fall and Winter.

HDFS—Human Develop & Family Studies

HDFS 3000 Research Methods in Human Development and Family Studies (3 credits)
Introduction to quantitative and qualitative research methods used to study human development and families. Provides experience conducting observations and survey interviews, evaluating research results, and writing research reports. Prerequisites: SOCL 2130 and PSYC 2350. Frequency: Every Fall.

HDFS 3200 Child Welfare, Law, and Social Policy (3 credits)
This class will acquaint students with various areas in which public policies and laws affect children and families, and in which developmental/family research and practice are germane to legal policy (and case law); the methods through which empirical research findings may influence case law and legislation (amicus curiae and policy briefs); and, the relationship between the fields of family studies/ social science, policy, and law, and how this knowledge can affect study design/ dissemination and clinical/practical work. Key areas of focus will include: relevant prevention vs. intervention approaches to promoting child/family welfare and mental health; and, family violence prevention and intervention efforts. Prerequisite: SOCL 2130. Frequency: Odd Year Fall.

HDFS 3400 Legal Aspects of the Family (3 credits)
The purpose of this course is to provide the student with a general overview of the most important aspects of family law. Topics covered include the regulation of marriage, separation and divorce, alimony, child custody and support, adoption, parental authority and children?s rights, abortion, and the impact of technology on families. Prerequisite: SOCL 2130. Frequency: Even Year Winter.

HDFS 3500 Children with Special Needs (3 credits)
Multi-disciplinary approach to the study of issues related to exceptional children and their families. Explores social, emotional, and economic aspects of exceptionality for both children and families; examines processes of identification, intervention, and integration of children who deviate significantly from developmental norms. Prerequisite: PSYC 2350. Frequency: Even Year Fall.

HDFS 4800 Community Practicum in Human Development and Family Studies (3 credits)
Supervised experiences in established career-related positions at a community agency; focus selected on basis of professional interest (some sites may require a background check). Prerequisite: SOCL 2130, PSYC 2630, and PSYC 2350. Frequency: Every Winter.

HDFS 4880 Senior Seminar in Human Development and Family Studies (3 credits)
Students will have the opportunity to integrate information from a variety of perspectives in human development and family studies. Each seminar will have a focal theme that will allow students to gain new perspectives, as well as apply knowledge from prior courses and experiences. This course is presented as a capstone experience; therefore students with advanced standing in the HDFS major will benefit the most from the seminar. Prerequisite: HDFS 3000. Frequency: Every Winter.

HDFS 4900 Special Topics in Human Development and Family Studies (3 credits)
A critical look at one or more contemporary issues in human development and family studies. Prerequisites: PSYC 2350 and SOCL 2130.

HDFS 4990A Independent Study A in Human Development and Family Studies (3 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: HDFS 3000 and written consent of instructor and division director. Frequency: Every Fall and Winter.

HDFS 4990B Independent Study B in Human Development and Family Studies (3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: HDFS 3000 and written consent of instructor and division director. Frequency: Every Fall and Winter.

HDFS 4990C Independent Study C in Human Development and Family Studies (3 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: HDFS 3000 and written consent of instructor and division director. Frequency: Every Fall and Winter.

HDFS 4990D Independent Study D in Human Development and Family Studies (3 credits)
The student selects and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: HDFS 3000 and written consent of instructor and division director. Frequency: Every Fall and Winter.

HIPS—HIPS-History and

Political Sci

HIPS 2900 Research Methods in History and Politics (3 credits)
This course provides an introduction to the research methods that political scientists, historians, and international studies scholars use to answer questions. The course is intended to provide students with analytic tools with which they can critically evaluate research in these fields and train the student to pose and answer research questions of their own. Students complete a semester-long research assignment with an emphasis on using appropriate methodology, employing original sources, developing interpretative skills grounded in creative and responsible scholarship, improving writing skills, using discipline specific citation, and delivering oral presentations. Prerequisites: POLS 1200 or INST 1500 or one HIST course and COMP 2000 or 2020 or COMP 2000H. Frequency: Every Fall.

HIST—History

HIST 1030 American History to 1865 (3 credits)
American history from its colonial origins through the Civil War. Special emphasis is given to analyzing and evaluating the major forces and ideas that have shaped American political, social, and economic life. Frequency: Every Fall and Winter.

HIST 1040 American History Since 1865 (3 credits)
American history from Reconstruction to the present. Special emphasis is given to analyzing and evaluating the major forces and ideas that have shaped American political, social, and economic life. Frequency: Every Fall and Winter.

HIST 1090 Early Western History (3 credits)
A historical study of the major political, social, economic, philosophical, and religious movements shaping Western society in the period preceding the Renaissance. Frequency: Every Fall.

HIST 1110 Modern Western History (3 credits)
A historical examination of modern western society since the Middle Ages, emphasizing political, social, and economic movements, and the religious and philosophical ideas that have shaped its development. Frequency: Every Winter.

HIST 1150 Early World History (3 credits)
A study of the development of world civilizations, examining the interrelationships of the various regions of the world from Prehistoric times through 1500, including the rise of world communities, cultures, religions, and empires, tracing the development of trade, economics, political forms, the creation of the nation-state, and on the development of technology and the use of war of resolve cultural/religious/ national conflicts. Frequency: Every Fall.

HIST 1160 Modern World History (3 credits)
A study of the interrelationships of world civilizations of the various regions of the world in the post-Renaissance era, examining the major world communities, cultures, and religions, tracing the modernization of economics and political systems, and the relations between modern nation-states. The course will also examine the collapse of colonialism, the beginning and end of the Cold War, the use of technology and warfare to resolve cultural/ religious/ national conflicts, and the role played by the United States in world affairs in the modern era. Frequency: Every Winter.

HIST 2130 Formation of Latin America (3 credits)
An interdisciplinary study of ancient American and Latin American systems and societies. The course examines ways in which essential elements of indigenous cultures have had an impact on the development of Latin American political, social, and economic institutions; the impact of Iberian history and socioeconomic systems on the discovery, colonization, and development of American nations; the legacy of Spanish and Portuguese colonialism to emerging Latin American states; and the major goals and consequences of 19th century neocolonialism. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

HIST 2140 Modern Latin America (3 credits)
Using Latin America and the Caribbean as a focal point, the course provides an interdisciplinary overview of contemporary American systems and societies and their place in a rapidly changing, increasingly interdependent world. Topics discussed will include the causes and goals of revolution in Latin America, Latin American debt and development, U.S.-Latin American relations, and a new hemispheric order for the 21st century. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

HIST 2300 Caribbean History (3 credits)
This course traces the history of the Caribbean from the fifteenth century to the present, examining such issues as indigenous peoples and the early years of European settlement and colonization, the construction of African slavery, the changing place of the Caribbean in the world economy, various aspects of slave society, and the abolition of slavery. Revolution and struggles for independence will be emphasized, as will be U.S. imperialism, migration, and the rise of intellectual, artistic and literary movements in Caribbean island nations. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Even Year Fall.

HIST 2400 African History (3 credits)
This class will focus on Africa as a vast continent that is characterized by enormous ethnic, religious, geographic, and historical diversity. Emphasis will be on the transatlantic slave trade and its impact on Africa and Africa's relations with the outside world. European colonization of Africa and the extent to which it shaped the modern history of the continent; and the history of South Africa and the rise and fall of the Apartheid Regime. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Odd Year Fall.

HIST 3010 Constitutional History I (3 credits)
A study of the origin and development of the American constitutional system from the colonial period to 1870. The course will examine seminal decisions of the United States Supreme Court during this period in their political, social, and economic context. Prerequisites: one HIST course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

HIST 3020 Constitutional History II (3 credits)
Continuation of the study of the constitutional system of the United States. The course covers the period 1870 to the present with special emphasis on Supreme Court decisions in the areas of federal-state relations, individual liberties, and civil rights. Prerequisite: HIST 3010. Frequency: Every Fall and Winter.

HIST 3130 Vietnam (3 credits)
This course takes an interdisciplinary approach to examine the origins and causes of the Vietnam War, explore the ways it was fought, and evaluate its impact on American society, politics, and life. Specific focus will be on the way that the Vietnam conflict inspired feelings of strife and anger, confusion and frustration to an entire generation of Americans as America's first "lost" war. Prerequisites: one HIST course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Odd Year Fall.

HIST 3140 The Holocaust (3 credits)
A study of the history of the Holocaust. This course will look at the causes, reasons, results, and implications of the Holocaust from both a European and American perspective. Prerequisites: one HIST course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Even Year Fall.

HIST 3230 The Great Depression (3 credits)
This course will examine the origins and causes of the Great Depression, exploring its impact on American society and life and evaluating its effects on the politics of reform that grew up in response to this crisis. Specific topics, such as this era's impact on confidence about the future, the New Deal, the welfare state and modern liberal politics, and how events of the era have helped form contemporary American society, will be covered. Prerequisite: one HIST course; and COMP 2000, 2010, or 2020. Frequency: Even Year Fall.

HIST 3240 Irish History (3 credits)
This course will study Irish history from the Neolithic era to the 21st century, focusing on the colonial relation between Britain and Ireland, including the 17th-century Plantation, the Cromwellian and Williamite wars, the United Irishmen and the 1798 Rising, the Act of Union, the Great Hunger (Famine) and emigration to America, and the formation of the Irish Republic and the Northern Irish state in 1922. Prerequisites: one HIST course; and COMP 2000 or COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

HIST 3300 Contemporary U.S. History (3 credits)
This course follows a thematic approach to the history of the United States since 1945. The course will involve some general background on many of the major political, cultural, and social themes of this period, such as the civil rights movement, the politics of the welfare state, Watergate, the culture wars of the 1980s, etc. Four specific social and cultural issues will be emphasized: the impact of the Cold War on modern American culture; the social and cultural implications of the post-war growth of the middle class and suburbia; the counterculture of the 1960s and its impact on contemporary society; and the influence of the "moral majority" and the religious right on contemporary politics. Prerequisite: one HIST course and COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Odd Year Winter

HIST 3400 U.S. Foreign Relations (3 credits)
This course will examine the emergence of the United States as the dominant political, economic, and military power on the world stage in the twentieth century. Students will attempt to identify reasons for this development and endeavor to come to a fuller understanding of the nature and scope of America's global commitments. The course will trace the development of American foreign relations from the Spanish-America War of 1898 through the Cold War, concluding with an examination of the evolution of American foreign policy in the post-Cold War and the ramifications of recent developments at home and abroad. Prerequisite: one HIST course and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Winter.

HIST 3430 Renaissance and Reformation Europe (3 credits)
This course examines the reemergence of Europe in the fourteenth century as a center for political, intellectual, economic, and artistic developments. It also explores the religious, political, and social upheavals of the sixteenth and seventeenth centuries by focusing on the split between Protestants and Catholics, the development of powerful nation states, and the newly emerging "scientific" theories of the era. Prerequisites: one HIST course and COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

HIST 3440 Enlightenment and Revolution in Europe (3 credits)
This course examines the challenges to traditional authority by Enlightenment thinkers about the nature of reality, and how these objections shaped the interactions between society, politics, and culture that characterized the Enlightenment and the French Revolution. The overarching aim of this course is to understand the complex nature of these cultural upheavals in their political, religious, economic, scientific, and cultural dimensions, and to appreciate how their effects have continued to shape Western attitudes and values. Prerequisites: one HIST course and COMP 2000 or COMP 2020 or COMP 2000H or HIST 1040H. Frequency: Odd Year Fall.

HIST 3450 History of American Immigration (3 credits)
History of American Immigration: This course will examine the history of American immigration. The course will study the motivation for those coming to America, immigration demographics, the impact of immigration on American society, American reaction to immigration in public opinion, and the political, social, and legal response to immigration. Prerequisite: one HIST course; COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Winter.

HIST 3510 The Civil War and Reconstruction (3 credits)
This course examines the causes, character and consequences of the American Civil War. Emphasis will be placed on antebellum society and the growth of sectionalism, political breakdown, the institution of slavery; the war itself and how it transformed American economic, social and political institutions; Reconstruction and the War's aftermath. Prerequisites: HIST 1030 or HIST 1040 and COMP 2000 or COMP 2020 or COMP 2000H or HIST 1030H. Frequency: Odd Year Winter.

HIST 4700 Genocide in the 20th Century and Beyond (3 credits)
This course will examine the history of genocide beginning in the 20th century focusing mostly on Europe and Africa: the Holocaust, the Balkans, Rwanda and Darfur. As part of this study, students will travel to see the first-hand manifestations and implications of genocide. Prerequisites: one HIST; and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Winter.

HIST 4900 Special Topics in History (3 credits)
Advanced studies in selected topics in history, such as interpretations of Revolution, the role of technology in society, or environmental history. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one HIST course; COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or HIST 1030H or HIST 1040H.

HIST 4950 Internship in History (1–12 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of division director. Frequency: Every Fall and Winter.

HIST 4990 Independent Study in History (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: one HIST course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or HIST 1030H or HIST 1040H. Frequency: Every Fall and Winter.

HIST 4999 Senior Seminar in History (3 credits)
This course is a capstone experience for all history majors. Students will draw on everything they have learned in their prior courses by means of an intensive study of a single topic of historical concern or controversy. The learning method employed in this class will combine extensive readings in primary and secondary historical texts with a major research paper that is subject to rigorous academic standards. Topics will vary. Prerequisites: Senior standing and HIST 2900. Frequency: Every Winter.

HONR—Honors

HONR 1000C Honors Seminar: Myth and Fairy Tale in Modern Culture (3 credits)
This course will focus on the influence of mythology and fairy tale on the cultural and psychological fabric of modern life. As students read various myths, fairy tales, and literature, as well as study images of myth and tale in advertising and film, they will attempt to make connections between underlying recurrent themes that find their roots in the earliest stories of humanity. The reading and analysis of texts and images will be complemented by the development of individual writing skills, emphasizing critical thinking and the clear, sophisticated, and creative expression of ideas. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 1000D Honors Seminar: Future History (3 credits)
This course is an extrapolation of the future based on assumptions about, and concerns with, the present. Taking both a utopian and a dystopian form, these explorations of historic imagination say as much about where we think we are today as where we think we are heading in the future. It will further explore the various forces that shape historic change and seek to place ourselves and our personal world within this process. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 1000G Honors Seminar: The Problem of Consciousness (3 credits)
What is consciousness? How does the brain do its work and produce its dazzling, if taken-for-granted, capabilities? If we all share similar capacities, how does each brain manage to make itself unique? Although these similar questions have been asked for hundreds, if not thousands, of years, the past decade has provided more tools for answering them than at any other time in human history. Data from many fields of inquiry have begun to converge. Students who take this course will be exposed to these exciting new findings and will also explore resulting controversies. Satisfies general education requirements in Social & Behavioral Sciences. Prerequisite: Honors students only. Frequency: Every Fall.

HONR 1000J Honors Seminar: Culture Wars (3 credits)
An examination of the "hot button" topics that divide the American people, this seminar will delve into the issues and perspectives which shape American culture. It will ask not only what these issues are but why they divide us. Among the topics to be examined are abortion, free speech, evolution, gay rights, and affirmative action. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 1000M Honors Seminar: Wicked Wit: Satire in Literature, Film, and Television (3 credits)
This course focuses on the methods, intentions, and impact of satire, from its origins in classical literature through its "Golden Age" in the eighteenth century and its enduring, acerbic presence in 20th-and 21st-century literature, film, television, and on the Web. Students will explore the ways that satire challenges routinely accepted ideas and practices, and targets injustice, selfishness, and hypocrisy in people and in their social institutions. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 1000N Honors Seminar: Genetics and Genealogy (3 credits)
Through lecture, discussion, review of primary literature, case studies, videotapes and class presentations, this course will investigate the relationships among the studies of genetics, human evolution and genealogy. Students will be expected to extract their own DNA and analyze it for various molecular markers as well as create their family history tree and narrative which they will present in class. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors Students only. Frequency: Every Winter.

HONR 1000S Honors Seminar: The Nature of Truth (3 credits)
This seminar will examine the nature of the concept of truth as it appears in the human culture and civilization. Special attention will be paid to truth as disposition or virtue of character and the notion of truth as it has appeared in various religious contexts, as well as the impact these notions have had on philosophy, history, psychology, literature and the arts, and science. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 1000T Honors Seminar: Science in the News (3 credits)
This general education honors seminar is designed to give students the ability to see or hear news stories about the latest scientific discoveries and current events in science and assess the importance of these issues in our daily lives. Scientific topics may include but are not limited to: medicine, natural sciences, meteorology, climatology, and physics. This course satisfies general education requirement in science. Prerequisite: Honors students only. Frequency: Every Fall.

HONR 1000U Honors Seminar: You: A Critical Analysis (3 credits)
This course is designed for students to be able to take an introspective view of who they are, including their history, their belief systems, and their future. Students will explore, through a social science lens, various areas of how they choose to live life and will think critically about how they view themselves. The course will focus on aspects of personal growth and a scientific understanding of choice making. Course activities or assignments require students to disclose some personal information about themselves. Honors students only. Frequency: Odd Year Winter.

HONR 1000V Changes of Our Chemical World (3 credits)
The course is designed to explore how the chemistry of the land, air, and water has changed over time. Areas of investigation will include energy, climate change, farming, land, air, and water pollution. Students will understand how Earth's chemical changes impact the world. This course will prepare the student for an immersive experience in the summer-based field course HONR 1100A. This course satisfies general education requirements in Science and qualifies as a CHEM course. Prerequisite: Honors students only. Frequency: Infrequent.

HONR 1000W Honors Seminar: We Are All Biased: Social Stratification (3 credits)
This course will examine how the various groups with which people identify impact their perspectives on a variety of current and historic issues as well as one-on-one interaction with others. Using socio-economic class, race, ethnicity, sex, and gender as independent variables as well as combinations of these groups, students

will analyze and evaluate historic and current events to determine how inequality is established and maintained in our society. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 1000X Honors Seminar: Cultural Minorities and American Justice (3 credits)
A study of the position of cultural minorities within the U.S. justice system. The class will first provide a brief history of the relationship between Native Americans and American justice and the position of African Americans in American justice systems during the two decades following the U.S. civil rights movement of the 1960s. Students will then, through independent research, update and expand topics discussed in the first half of the class to the 21st century and other cultural minorities. Emphasis will be placed on change and continuity. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 1000Y Honors Seminar: The Image as Visual Rhetoric (3 credits)
This course will teach students how to synthesize theories and ideas about how images make meaning, critically analyze images in various cultural contexts, and produce visuals with deliberate thought to form, function, rhetorical purpose, and context. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 1100A Changes of Our Chemical World Field Study (1 credit)
This field course will provide direct experience with principles of chemistry that were introduced in HONR 1000V in unique national and international settings. This course satisfies general education requirements in Science and qualifies as a CHEM course. Prerequisites: HONR 1000V and Honors students only. Frequency: Infrequent.

HONR 1100B The US Supreme Court and the Cultural Revolution: Studying the Legacy of the Warren Court (3 credits)
The purpose of this course is to explore societal and cultural issues in various areas of the law and the legal implications that result. Students will evaluate case law and literature that probe the centerpiece cases heard by the Warren Court. Students will evaluate how an era so affected American history and answered questions on segregation, a person's right to counsel, freedom of religion, right to privacy, criminal procedure, and free speech. This course satisfies general education requirement in social and behavioral sciences. Prerequisite: Honor Students Only. Frequency: Even Year Fall.

HONR 1500 Honors Reading Seminar (1–12 credits)
The Honors Reading Seminar is designed to provide focused study on one selected text. Under faculty leadership, honors students will read and discuss the text in small groups. Students will take a leadership role to prepare discussions. Texts will be selected on a semester to semester basis and may reflect the annual theme. This course is an elective and does not satisfy requirements for general education. This seminar is open to honors students only. Frequency: TBA.

HONR 1500Y Honors Reading Seminar: Drew Magary (1 credit)
The honors reading seminar is designed to provide focused study on one selected text. Under faculty leadership, honors students will read and discuss the text in small groups. Students will take a leadership role to prepare discussions. Texts will be selected on a semester by semester basis and may relate to the annual theme. This course is an elective and does not satisfy requirements for general education. This seminar is open to honors students only. Pass/Fail only.

HONR 2000C Honors Seminar: History of Economic Development (3 credits)
This course will examine the history and evolution of economics as a basic human institution with emphasis on distinctions between growth and development. The challenge of sustainable development will be analyzed within the broader historical context of human rights, environmental consequences, and ideological goals and outcomes. Students will design and discuss alternative economic models for the future that emphasize sustainability. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 2000E Honors Seminar: Utopias and Dystopias (3 credits)
This course focuses on the dual concepts of utopias and dystopias--ideal visions of society and nightmarish visions of society. Various manifestations of utopias and dystopias in literature, philosophy, film, and mythology will be focused on as students explore the desire of humans to conceive of an ideal society, as well as the advantages and dangers of such conceptions. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000F Honors Seminar: Philosophy and Politics in Film (3 credits)
This course provides an introduction to thinking critically about philosophical and political issues by understanding how they can be manifest in popular film. Students will develop greater awareness of how to view film as a vehicle for ideological content. Topics could include, but not be limited to human rights, epistemology, personal identity (including the role of memory), temporality, the philosophy of religion, democratic ideals/plutocratic reality, workers unions, capitalism and gangsterism, the allure of fascism, environmental despoliation, etc. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Infrequent.

HONR 2000H Honors Seminar: Famous American Trials (3 credits)
This course will examine famous trials in American history that reflect major social changes, cultural conflicts and political struggles from the late 19th century through the 20th century. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2000J Honors Seminar: Chick Lit, Chick Flicks (3 credits)
This course will examine popular film and literature targeting women. Both contemporary "chick lit" and "chick flicks" feature single, urban women in their late 20s and early 30s navigating the minefields of professional life and romantic relationships. This course will trace the development of woman's fiction from Jane Austen's era and film from the "woman's film" of the 1940s. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000K Honors Seminar: Inappropriate Relationships (3 credits)
This course will focus on various types of relationships that have been deemed "inappropriate". A social science perspective will be used to examine the societal context in which these relationships develop, are maintained, and terminate. The course will also focus on the impact that these relationships have on society and society's impact on the individuals in the relationship. Satisfies general education requirements in Social & Behavioral Sciences. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000L Honrs Seminar: Ideologies of the Twentieth Century

(3 credits)
This course will examine the competing great ideologies of the twentieth century--Communism, Fascism, Liberalism and Socialism. After an examination of Liberalism and the ideas of the Enlightenment, students will discuss why Communists, Fascists and Socialists rejected classical Liberalism, with its emphasis upon limited government, the rights of the individual, and free market economics. Students will then consider the characteristics of the societies that anti-liberal thinkers created. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 2000M Honors Seminar: The U.S. at War (3 credits)
This course offers an examination of the social, cultural and political implications of the many wars fought in the history of the United States from the Revolutionary War to the War on Terror. Students will be asked to explore the extent to which warfare has influenced the course of American history and has contributed to the shaping of American culture. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000N Honors Seminar: The "F" Word: Feminism and Culture (3 credits)
This course will examine the role of 1st, 2nd, and 3rd wave feminisms in women's cultural history. By exploring the social and political contexts of the struggle for equal rights for women, students will learn to separate the myths (images of feminism) from the reality (contributions of feminism) in the lived experience of women. Although it will focus primarily on American feminist history, the course will consider its European roots. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2000Q Interpersonal Perception (3 credits)
This course examines the psychological processes involved in our perception of other's behavior, personality, and affective states. The goal of the course is to provide students with a broad survey of the factors that influence the way in which we perceive people, and to give students experience with the methods with which experimental psychology investigates these issues. Readings are from such diverse fields an nonverbal communication, social cognition, empathy, gender studies, cognitive development, and personality psychology. Satisfies general education requirements in Social & Behavioral Sciences. Perquisite: Honors students only. Frequency: Odd Year Fall.

HONR 2000U The Idea of the Hospital (3 credits)
This course explores the hospital through a humanities perspective with an emphasis on literary, cultural, and historical documents. The course will also consider the role hospitals play as theme and background for literature and personal narratives. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 2000V The Good, the Bad and the Ugly: Philosophy and the Western Film (3 credits)
This course critically examines philosophical issues that arise in the Western film genre, including the individual and community, justice and vengeance, violence, moral virtue and vice, knowledge and understanding, personal identity, and death. Theories of philosophers such as Plato, Aristotle, Hobbes, Kant and Nietzsche, as well as contemporary material will be used to discuss selected films. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000W Honors Seminar: The Pathography: Patients' Stories of Illness (3 credits)
This course explores the experience of illness through patient narratives in fiction, biographies and autobiographies. These narratives, in turn, shed light on contemporary medical practice. The course will examine such themes as battle, journey, and rebirth in patients' narratives. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2000X Honors Seminar: Conspiracy Theories (3 credits)
This course examines the role conspiracy theories have played in U.S. history from the inception of the Republic to the present day. At various times charges of conspiracies involving Masons, Jews, Slaves, Communists and Right Wing extremists (to name but a few) have played an integral role in U.S. history, while conspiracy theories involving U.F.O.s, presidential assassinations, and terrorist attacks have often taken deep root in the public imagination despite concerted efforts to refute them. This course will challenge students to think objectively and critically about these conspiracies (and the tendency towards paranoia in American politics) by analyzing them within the context of the passage of American history and the evolution of American democracy. Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2000Y The Book As Art (3 credits)
Artist's books are works of art realized in the form of a book. This practice-based studio arts course visually examines this specialized genre, offering an in-depth view at traditional and alternative book structures in relationship to narrative content. Lectures and demonstrations introduce students to creative process involved in book making, including traditional and alternative book formats, adhesive and sewn binding structures, archival concerns and methods for generating original images and text. This course satisfies general education requirements in Arts and Humanities and qualifies as an ARTS course. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2000Z Riders on the Storm: Critical Thinking and the Four Horsemen of Modern Atheism (3 credits)
This class presents the key concepts of scientific/hypothetico-deductive reasoning and develops the student?s critical thinking skills, particularly in applying the guiding principles that distinguish the investigative style of a trained scientist from the style of naive human reasoning. It emphasizes the nature of both styles of investigation and teaches the specific principles of the former. The key concepts and topics of the course are: the principle of parsimony, falsifiability, the nature of empirical questions, standards of evidence, the value and limits of intuition, the means by which science attempts to curtail the influence of scientists? biases, and the cognitive psychology of these biases. These topics are all applied to a discussion of religion and atheism. Specifically, each topic is introduced through and applied to those positions that are defended (and those attacked) in the books of Richard Dawkins, Daniel Dennett, Sam Harris, and Christopher Hitchens. This course satisfies general education requirements in Social and Behavioral Sciences. Honors students only. Frequency: Odd Year Winter.

HONR 2010B Deciphering Diversity in the Law (3 credits)
The purpose of this course is to explore societal and cultural issues in various areas of the law and the legal implications that result. Students will evaluate case law and literature that probe issues such as conceptions of property rights, gender and sexual orientation discrimination,

immigration rights, intercultural human rights, and cultural differences in assessing the appropriateness of such rights. Students will interpret how the Constitution and case law has affected special classes of people throughout the United States' legal history. An emphasis on US Supreme Court cases will guide students in identifying diversity in the law. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2010G Medical London: Culture and Context (3 credits)
Much of medical practice in the Western world has as its roots medical practice in Western Europe, and for centuries, London served as one of the major European centers of medical education and practice. This seminar examines the cultural context of medicine and medical education in London though various lenses. Readings from a variety of literary, historical, medical and cultural sources will acquaint students with London medical practice and the unique challenges it has faced during past centuries. The course also includes a required trip to London with walks to specific sites related to medical practice arranged geographically. The travel component is required for successful completion of the course. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Infrequent.

HONR 2010H Epidemics: Germs and Their Power over Humanity (3 credits)
Microscopic germs have continually devastated the human population for much of recorded history. Epidemic diseases such as bubonic plague, smallpox, and tuberculosis have not only caused the death of nearly a billion people, they have also done more to alter the course of human history than any government, person, or battle. Empires have fallen, wars have been decided, city design has been revolutionized, and human interaction has forever changed due to these tiny parasites. This course will systematically review the ten most deadly and influential epidemics and examine their cause, spread, and long-term social, historical, and political effects on humanity. This course satisfies general education requirement in Biology. Prerequisite: Honors students only. Frequency: Every Fall.

HONR 2010J Witch–Hunts! (3 credits)
Throughout American history the identity of specific individuals and/or groups have been branded by those in power as so great of a threat to the public good that it justified extreme, even violent, acts of suppression by the government or private citizens. Ironically, over time, the judgment of history often reverses the picture, branding those doing the attacking as evil and the oppressed as good people wrongfully victimized. This course will explore this dynamic, examining the origins, content, and effects of specific historical witch-hunts as well as the evolving verdict of history about these events. Satisfies general education requirement in Arts and Humanities. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2010K Honors Seminar: Assassin's Creed (3 credits)
This course is a social and cultural history of assassination, especially in American history. The course will focus on how each assassination helps inform one?s understanding of American history and the political, social and cultural forces at work surrounding each assassination and attempted assassination. This course satisfies general education requirements in arts and humanities. Prerequisite: Honors students only. Frequency: Even Year Winter.

HONR 2010L New Ideas from New Worlds (3 credits)
How has modern thought been influenced by the European encounters with the Americas? This course will examine British and Western European responses to the ?discovery? of New World cultures from the late 16th to the 18th century. Renaissance and Enlightenment ethnographers, artists, playwrights, poets, novelists and philosophers, such as John White, Michel de Montaigne, Thomas Hariot, William Shakespeare, Aphra Behn, John Locke, Jean-Jacques Rousseau and Voltaire, will be investigated. This course satisfies general education requirements in arts and humanities. Prerequisite: Honors students only. Frequency: Odd Year Fall.

HONR 2010M Honors Seminar: To Be or Not to Be (3 credits)
The focus of this course will be on self-caused death, or suicide, and how it should be regarded from an ethical point of view. This is not a sociology, psychology, or biology course. We will have occasion to draw on works form a number of disciplines and perspectives: classic works of philosophy, religious texts, poetry, literature, film, works of art. Is suicide wrong, always wrong, or profoundly morally wrong? Or is it almost always wrong but excusable in a few cases? Or is it sometimes morally permissible? Is it not intrinsically wrong at all, though perhaps often imprudent? Is it sick? Is it a matter of mental illness? Is it a private or a social act? Is it something the family, community, or society should always try to prevent, or could ever expect of a person? Could it sometimes be a "noble duty?" Or is it solely a personal matter, perhaps a matter of right based in personal liberties, or even a fundamental human right? Satisfies general education requirements in Arts and Humanities. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 2010N Honors Seminar: Alcohol, Drugs, and Society (3 credits)
This course will employ a sociological perspective to examine substance use, as well as problems and policies related to substance use. Topics reviewed in this course include a brief history of substance use in the U.S., classical and contemporary theoretical explanations, substance use cultures, vulnerable populations, substance use prevention, and legal issues and drug policies. In addition, each week will include a special topic students will explore in detail using sociological-based research. This course will require students to read, engage in critical thinking, and participate in discussions. Satisfies general education requirements in Social and Behavioral Sciences. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 2010P Honors Seminar: Law and Literature (3 credits)
This honors seminar will examine the interrelationship of the law and literature. The seminar considers how attorneys may use literary techniques and devices and how literary themes influence the life and practice of the lawyer. The course will compare approaches of the law and literature to various problems, from assisted suicide to murder, focusing on when the human element as expressed in literature can properly serve as a tool for the lawyer. Students will analyze rhetorical strategies common to legal and literary texts, and recognize the value of good writing technique. Prerequisite: Honors students only. Frequency: Even Year Fall.

HONR 2010Q Honors Seminar: Autism Today (4 credits)
Through a combination of traditional lectures, guest speaker appearances, observations, and active participation experiences, Autism Spectrum Disorder (ASD) will be explored through individuals, family members, and the personnel who support them. Beginning with a historical look at the recognition of this disorder, changes in the understanding of the disorder and diagnostic criteria over time, and the impact on prevalence rate, the course will then address issues in a variety of intervention approaches, their evidence base, and the decision making challenges faced by families across the

lifespan. The course will be presented by professionals from a variety of disciplines to allow undergraduate students in the Honors College to experience autism from different viewpoints including. Assignments are designed to foster critical thinking and reflection on the experiences of individuals with autism, their families, and service providers. Satisfies general education requirements in Social and Behavioral Sciences. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2010R Honors Seminar: Design Thinking (3 credits)
Design thinking is a process and a mindset that encourages creativity and innovation to solve complex problems and create solutions such as products, programs, services, experiences, spaces, and business strategies. This project-based course introduces students to design thinking and how it can be applied in various disciplines such as business, education, engineering, healthcare, and information systems. Through information presentations, readings, class discussions, activities, individual and multi-disciplinary collaborative projects, and reflection, students will apply design thinking tools and techniques to solve problems and create innovative solutions. There are no pre-requisites and no technical experience is required. Satisfies general education requirements in science. Prerequisite: Honors students only. Frequency: Odd Year Winter.

HONR 2010S Introduction to Biomedical Research (1 credit)
This course provides students an overview and introduction to the research process in the medical and other health professions. Each student will prepare and submit a proposal for a medical or other health professions research project. The course introduces students to the process of developing research proposals designed to expand the body of knowledge in the field of medicine and other health professions. Prerequisite: Honors students only. Frequency: Every Fall.

HONR 2010T The Nuclear Dilemma (0–3 credits)
Drawing from the resources of the social sciences, this course presents an overview of those factors which led to the creation of atomic weapons as well as an examination of the social and political forces which contributed to their use and continued deployment. The course provides portraits of the relevant key personalities involved in weapons development and investigates the causal factors which led to the decision to use atomic weapons at Hiroshima and Nagasaki. The social, political, psychological, and economic impact of atomic weapons on the national consciousness is examined through a detailed study of the Cold War economy, the Cuban Missile Crisis and the continued threat posed by such weapons. Prerequisite: Honors students only. Frequency: Every Winter.

HONR 4990 Independent Study: Honors Thesis Research (1–3 credits)
Students carry out independent research related to an approved project or honors thesis. Faculty mentoring is provided on an individual basis. Approval of faculty member, department chair, and dean of the Honors College is required. This course is an elective course and does not satisfy requirements for general education. Prerequisite: Honors students only.

HRM—Human Resource Mgmt

HRM 3100 Managing Conflict and Change (3 credits)
Examines the impact of conflict, stress and change on the workplace and the quality of work life. Topics include the myriad of stressors and their effect as well as the selection of appropriate interventions and responses. Frequency: Every Fall and Winter.

HRM 4160 Human Resource Management (3 credits)
Surveys personnel policies, techniques, and methods. Topics include wage and salary management, personnel selection and placement, labor relations, and employee rights. Frequency: Every Fall and Winter.

HRM 4200 Organizational Development and Change (3 credits)
Applies behavioral science knowledge and practices to help organizations improve the quality of work life and experience strategies for achieving change. Prerequisite: HRM 4160. Frequency: Upon Request, See Department Chair.

HRM 4250 Strategic Human Resource Management (3 credits)
A capstone course covering the HRM function in organizations with specific emphasis on training, development, and career paths of employees; stress management; and labor relations and negotiations. Prerequisite: HRM 4160. Frequency: Upon Request, See Department Chair.

HRM 4300 Managing Workplace Diversity (3 credits)
Prepares students to manage in the diverse work place. Emphasis is on practical, experiential classroom activities designed to help students understand the range of cultural behaviors and expectations found in the work place. Frequency: Every Fall and Winter.

HRM 4450 Labor Relations and Negotiations (3 credits)
Examines labor relations in terms of collective bargaining, contract negotiation, contract administration, mediation and arbitration. Includes an in-depth examination of labor legislation. Prerequisite: HRM 4160. Frequency: Upon Request, See Department Chair.

HRM 4650 International Human Resource Management (3 credits)
This course will focus on the key international issues and topics with regards to managing people in an era of unprecedented levels of foreign competition. Finding and nurturing the right talent required to implement an international or global strategy is of critical importance. Globalization of business is forcing managers to understand complex issues in an ever-changing world. Prerequisite: HRM 4160. Frequency: Upon Request, See Department Chair.

HRM 4700 Seminar in Current Human Resources Management Issues (3 credits)
This course will attempt to provide a familiarity with the instruments and procedures necessary to provide adequate personnel decisions in an organizational setting. Emphasis will be placed on criterion related issues such as job analysis, performance appraisal and selection issues which include: recruitment, test selection, and test validation. The goal is to expose the student to the practical mechanics of personnel psychology, and is not intended to provide a complete theoretical foundation. Prerequisite: HRM 4160.

HRM 4850 Readings in Human Resource Management (3 credits)
This course addresses aspects of the current literature in HRM. Using 1). a Text and 2). Articles provided in class, students will read what a wide variety of authors have provided in terms of perspective and actual organizational practices. Students will analyze the writings and share their interpretations. As appropriate, students will engage in comparing best practices. Prerequisite: HRM 4160.

HS—Human Services

HS 1100 Social Issues and Human Services Delivery Systems (3 credits)
This course will review contemporary and historical social issues in the United States,

with an emphasis on at-risk populations and disenfranchised groups. Social problems such as gangs, substance abuse, homelessness, child abuse, poverty, and immigration will be addressed, in addition to political, economic, policy, and educational implications. Systems of delivery within the human services field will be introduced and examined. Frequency: Every Fall.

HS 1200 Introduction to Human Services Administration (3 credits)
This course provides an overview of Human Services Administration as a profession. Emphasis is placed on providing familiarity with the roles and functions of Human Services workers/administrators and an examination of the factors necessary to enter the Human Services field. The course focuses on the history of helping, the human services movement, current issues related to human services, managed care, and models of service delivery. The ethical principles that guide the Human Services Administration profession will also be examined. Frequency: Every Fall.

HS 1300 Interpersonal Assessment Skills in Human Relations (3 credits)
This course provides an opportunity to learn basic skills essential for the assessment of interpersonal relations. Students will examine interpersonal dynamics and communication in families, the workplace, community organizations, and social settings. An emphasis is placed on developing skills in listening, observation, and analysis. Case studies will be used to explore a variety of presenting problems and appropriate assessment strategies. Frequency: Every Fall and Winter.

HS 1400 Counseling and Assessment in Human Services (3 credits)
Provides an overview of assessment procedures used in counseling settings including intelligence, achievement, interests, personality, observational assessments, and career. Students will consider cultural and ethical factors in determining appropriate evaluation instruments, procedure and interpretation of test data. Application of test data in human services settings will be emphasized. Frequency: Every Fall and Winter.

HS 2100 Administration of Recreational and Leisure Services (3 credits)
This course will discuss contemporary recreational therapy program organizational principles and administrative issues, such as assessment, instruction, evaluation, and supervision of staff and clients in recreational activities as part of a therapeutic/rehabilitative program. Frequency: Every Winter.

HS 3120 Grant Writing and Management (3 credits)
This course will introduce students to the purpose of grant writing and the basic components of a variety of grant applications/proposals. Students will learn how to identify an organization?s needs, locate funding opportunities, access resources, and organize team members to create a competitive grant proposal. Emphasis will be placed on developing skills needed to read and understand application guidelines, and write a successful grant proposal. Students will also be introduced to post-award procedures and grant management, including evaluation and reporting. Frequency: Every Fall.

HS 3130 Nonprofit Leadership (3 credits)
This course will equip students with a foundation in leadership through learning major leadership theories and their applications in the nonprofit sector. Students will build upon skills of decision-making, understand issues related to compliance, gain knowledge of the importance and function of community collaborations, and will be able to demonstrate ethical decision-making. Case studies that demonstrate challenges within nonprofit organizations will be discussed and analyzed. Frequency: Every Fall.

HS 3140 Fundraising and Philanthropy (3 credits)
This course examines various funding streams of nonprofit organizations, including government sources, public and private foundations, corporations, and individuals. This course explores historical issues related to philanthropy in the United States and the role of philanthropy in the nonprofit sector. Students will develop an understanding of fundraising plans, which include strategies for identifying and building relationships with potential donors. Legal and ethical issues pertaining to fundraising will be discussed. Frequency: Every Winter.

HS 3150 Strategic Planning in Human Services (3 credits)
This course will examine the strategic planning process in public and non-profit organizations. Emphasis will be placed on the theory and practice of strategic planning and management theory in the non-profit sector. The course will cover various approaches to designing and conducting strategic planning, including involvement of stakeholders and specific techniques for conducting environmental scans, strategic issue identification, strategy formulation. Frequency: Every Winter.

HS 3300 Ethical and Professional Issues in Human Services (3 credits)
This course provides a basic overview of the legal and ethical issues associated with the human services profession. A case study approach will be applied to provide a variety of realistic situations to illustrate potential ethical challenges and dilemmas. In addition, students will gain familiarity with the ethical standards of the American Counseling Association, the American Psychological Association, and related professional organizations. Frequency: Every Fall.

HS 3315 Human Services and Cultural Diversity (3 credits)
This course will examine the role of cultural diversity in human services/helping professions and will allow students the opportunity to increase self-awareness with regard to worldviews and personal beliefs about diversity issues. Key aspects of cultural competency will be reviewed including its history, definitions, and selected conceptual models, in addition to its relevance and importance in the development and administration of human services organizations. Frequency: Every Fall and Winter.

HS 3330 Human Behavior and the Social Environment (3 credits)
This course will examine theories of how the environment affects human behavior. Interactions between individuals and groups of people, impact of culture and society on one?s values, perceptions of the world, and beliefs will be explored. Additionally, influence of gender, sexual orientation, religion, spirituality, and socioeconomic class, on perceptions, experiences, and development across the lifespan will be discussed as well. Students will have the opportunity to self-reflect on how the multiple dimensions of the environment impacts their behavior and how it makes sense in context. The application of theoretical frameworks, such as the ecological model, to assessment and intervention practices in social work will also be examined. Frequency: Every Fall and Winter.

HS 3340 Interviewing and Assessment (3 credits)
Social workers use interviewing skills to develop and foster therapeutic relationships with their clients, gather information, and facilitate change. This course is designed to teach basic interviewing techniques, including active listening, observation, interpretation, and communicating empathy. In addition,

students will learn mental health diagnostic codes, and assessment writing skills and techniques. The course will also address issues in cross-cultural interviewing and in specific problematic interview situations. Frequency: Every Winter.

HS 3350 Social Work Practice (3 credits)
This course will prepare students for practice in the field of social work through developing a wide range of skills needed for generalist social work practice. Students will develop interviewing skills, listening skills, and learn how to create an alliance and co-collaborate goals with clients. Additionally, students will gain an understanding of ethical standards in social work practice, learn the stages of the helping process, and identify common methods of assessment. Contextual variables will be examined, such as environmental and interpersonal stressors. Overall, students will gain knowledge and build upon skills that assess and provide assistance for individuals, families, groups, and communities. Frequency: Every Winter.

HS 3410 Case Management Methods (3 credits)
Students will explore case management practice from intake to termination including completing an initial interview, dealing with difficult topics, receiving and releasing information, preparing a plan of service, documentation, and termination. Topics to be explored include a theoretical approach to case management, cultural competence, resources and referrals, and creating a treatment plan in accordance with ?best practices. Frequency: Every Fall.

HS 3420 Advocating for Individuals with Special Needs (3 credits)
Advocating for Individuals with Special Needs: (3 credits) This course focuses on teaching students principles and strategies of advocacy for individuals with special needs in a variety of settings, including agency, legislative, legal, and community. Included aresuch topics as ethics in advocacy, important related laws, types of services available, how to find services, and strategies for advocacy. Frequency: Every Winter.

HS 3430 Special Topics in Advocacy (3 credits)
This class is designed for exploring contemporary issues and topics in advocacy. An overview of the impact of government policies on families and contemporary American social services will be provided. Students will learn how to assess the effectiveness of policies and programs from a family perspective, learn about the policy-making process, and critically examine different roles professionals can play in influencing policy development. In addition, awareness on a range of social issues, such as poverty and homelessness, disabilities, mental illness, and racial and gender inequality will be covered. This course will allow students to assess and develop their personal leadership, while emphasizing the values, knowledge, and skills required for effective advocacy. Frequency: Every Winter.

HS 3440 Assessment and Treatment Planning (3 credits)
This course examines all the components that are essential when completing assessments and treating plans. Methods used to screen and evaluate clients? needs, issues, strengths, and weaknesses through various techniques are examined and then tied to the treatment planning process. Understanding the client in context and use of referrals and resources is discussed. Proper documentation of assessment and treatment planning, as well as ethics involved, will be examined as well. Frequency: Every Fall.

HS 3500 Introduction to Human Factors in Aviation (3 credits)
This course examines the effects of human factors on the aviation industry; namely, how human behaviors affect flight safety, planning, problem solving, resource management, organization, and communication. Students will explore how these variables are impacted by the ability to recognize and manage stress and will have the opportunity to learn anxiety reduction strategies to enhance effective decision-making in the cockpit. Emphasis will be placed on understanding the steps necessary for good judgment and developing decision-making skills to mitigate risk. Students will also gain an understanding of human factors in aviation within the changing landscape of the aviation industry and public policy related to aviation. Frequency: Every Fall and Winter.

HS 3510 Systems Analysis of the Impact of Human Factors on Decision Making in Aviation (3 credits)
This course is designed to ground students in the fundamentals of cockpit management. Specifically, students will be oriented to the principles of aerodynamics, airplane control, and flying rules and regulations. Considerations and steps in aircraft inspection and maintenance, in addition to cockpit orientation and the basic tenets of cockpit management will be covered. Students will be introduced to pre-and post-flight procedures, in addition to aircraft and environmental considerations through take-off, flight, and landing. Emphasis will be placed on human factors impacting cockpit management, including physiological and psychological mechanisms. Basic emergency procedures are also covered. Frequency: Every Fall and Winter.

HS 3520 Strategic Forecasting & Evaluation of Human Performance Factors in Aviation (3 credits)
This course provides students with advanced instruction on factors affecting cockpit/flight management. Topics include managing aircraft systems in a variety of environments, flight planning, communications, navigation, laws and rules related to private aviation, and orientation to in-flight environmental considerations unique to flight. Prerequisite: HS 3510. Frequency: Every Fall and Winter.

HS 3530 Integration of Technical Foundations of Flight Management (3 credits) (Revised: see *Addendum E*)
In this course, students will gain Instrument Flight Rules (IFR) training. This training will enable students to develop proficiencies in using the aircraft's instruments and navigational equipment. Organization and planning are emphasized to effectively combine the information from charts, plates, radios and ATC. Furthermore, this course will provide students with an understanding of instrument management through take-off, flight, and landing while simultaneously exploring the human factors that affect each phase of flight. Examines in detail how human factors such as stress, emotion, attention management, health/physiology, and human psychology impact cockpit management. Advanced strategies for monitoring and modulating human factors are also discussed. Case examples will be utilized to further students understanding of how mistakes could have been avoided or have been avoided in the aviation industry. Prerequisite HS 3520. Students must possess a private pilot's license. Frequency: Every Winter.

HS 3540 Application of fundamental Competencies in Commercial Aviation (3 credits)
The Commercial License course examines in greater depth and breadth flight management by analyzing issues and topics unique to commercial aviation. This course is designed to develop the student's advanced aeronautical knowledge and skill in the operation of complex airplanes to a level commensurate with safe operations as a commercial pilot. Topics include management of commercial aircraft systems in a variety of environments, commercial flight planning, laws and

rules governing commercial aviation, and the development of skills needed to communicate and navigate commercial flights. Prerequisite: HS 3530. Frequency: Every Fall and Winter.

HS 3550 Leadership Principles & Effective Communication in Flight Instruction (3 credits)
The Certified Flight Instructor course provides students with the fundamentals of flight instruction. Specifically, the objective of this flight training course is to develop in each student adequate instructional knowledge and skill in the procedures and pilot operations needed to safely exercise the privileges of a certified flight instructor certificate with an airplane -single-engine rating. The course examines flight management, while simultaneously educating students in the skills necessary to teach others how to fly. Topics include human learning, memory, and motivation; teaching and supervisory methods; overcoming barriers to effective communication; professionalism; and lesson planning. Prerequisite: HS 3540. Frequency: Every Fall and Winter.

HS 3990 Supervised Experience in Human Services I (3 credits)
This field experience will be individually arranged and will provide supervised on-site administrative experience (175 hours). Students are expected to propose two non-profit community-based organizations (CBO) and will complete their field experience in one of these. These experiences will provide an in-depth look at nonprofit systems, program development and evaluation, fundraising and issues faced by nonprofit organizations in changing economic and political climates and will be supervised by NSU faculty on a weekly basis.

HS 4100 Rehabilitation Principles and Case Management (3 credits)
The purpose of this course is to study the progression of rehabilitating individuals with disabilities in our society today. The relationship that exists among the different agencies and entities in the rehabilitation process will be highlighted and emphasized along with factors that facilitate or hinder the collaborative process. Principles and current practices in the process of rehabilitation will be introduced. These may include: the goals and models of case management in rehabilitation, client/consumer interviewing and assessment, planning for appropriate and effective intervention strategies, services, and benefits included in a rehabilitation plan, monitoring & evaluation of client progress, and follow up and closure. Frequency: Every Winter.

HS 4200 Accountability in Human Services Administration (3 credits)
This course provides an overview of the rehabilitation process including historical developments and theoretical underpinnings, with an emphasis on the current operational aspects of local, state, and federal rehabilitation service delivery systems, as well as private and not-for-profit agencies. Additionally, the course will provide an understanding of how to select the services that will meet the unique needs of individuals and assisting them and their families in developing and implementing an individual rehabilitation plan. The course will also outline strategies for working with families in order to improve access and engagement in the rehabilitation process. Frequency: Every Winter.

HS 4250 Program Planning and Evaluation (3 credits)
This course provides an overview of the competencies necessary to critically plan, implement and evaluate human service programs. Relevant program evaluation models are reviewed and a primer of quantitative and qualitative research methods is provided. Data collection techniques and the ethics and standards of evaluation practice are also covered. Social and human service trends relevant to program planning are also addressed in order to assist in the development of human service programs to meet future societal needs. Frequency: Every Winter.

HS 4995 Supervised Experience in Human Services II (3 credits)
The second component of the field experience will be individually arranged as well and will provide supervised on-site administrative experience (175 hours). Students will select their second choice of Community Based Organization (CBO) and will complete their field experience in this site. These experiences will now provide a hands-on implementation of principles and theory learned as it relates to nonprofit systems, program development and evaluation, fundraising, finance and budget issues faced by nonprofit organizations along with factors that impact change in economic and political climates. Students will be supervised by NSU faculty on a weekly basis.

HUMN—Humanities

HUMN 1000A Aristotle's Nicomachean Ethics (1 credit)
This one-credit seminar course will introduce students to one of the most widely read and influential works of moral philosophy in the western tradition, Aristotle's Nicomachean Ethics. No previous preparation is presupposed. Pass/Fail Only. Frequency: Odd Year Fall.

HUMN 1000B Dante's Inferno (1 credit)
The one-credit seminar course will examine the Inferno, the first and perhaps most well-known section of Dante Alighieri's Divine Comedy. Themes of study will include Dante's religious theories and cosmological philosophy, the motivations, religious and cultural, behind Dante's conceptions of sin and punishment, and the influence that Dante's ideas have had on subsequent writers, thinkers, and the general public. No previous preparation is presupposed. Pass/Fail only. Frequency: Even Year Fall.

HUMN 1000C Eliot's Middlemarch (1 credit)
This one-credit seminar course will introduce students to the social and cultural milieu of the Victorian period, through one of the most widely read and influential novels in English literature, George Eliot's Middlemarch. No previous preparation is presupposed. Pass/Fail only. Frequency: Even Year Winter.

HUMN 1000D Austen's Emma (1 credit)
This one-credit seminar course will introduce students to the late eighteenth century author, Jane Austen, and one of the most widely read and influential novels in English literature, Emma. No previous preparation is presupposed. Pass/fail only. Frequency: Odd Year Winter.

HUMN 1000F Cervantes' Don Quixote (1 credit)
The novel, Don Quixote, by Cervantes, is probably one of the world's most influential and recognized books ever written. The exchanges between the novel's two main characters, Don Quixote and Sancho Panza, will engage students in a story that, while entertaining, makes very profound statements about medieval society, politics, and values. From a critical perspective, the novel occupies a seminal position in the development of modern writing. Through his novel Cervantes reveals the fascination with narrative processes and techniques that have made him an inspiration for many writers of our time. No previous preparation is presupposed. Pass/Fail only. Frequency: Odd Year Fall.

HUMN 1000G Shelley's Frankenstein (1 credit)
This one-credit seminar course will examine Mary Shelley's Frankenstein, one of the most seminal works of world literature.

Themes of study will include the influence of Shelley's parentage and marriage on her work, scientific theories of the 19th century that influenced the novel, issues of human heroism and frailty, and the ethical concerns that transcended Shelly's own time period. Consideration will also be given to the various ways that the Frankenstein story has manifested itself in popular culture up through the modern era. No previous preparation is presupposed. Pass/fail only. Frequency: Even Year Fall.

HUMN 1000I Hume's Enquiry (1 credit)
This one-credit seminar course involves a close reading of a seminal work in early modern philosophy, David Hume's An Enquiry Concerning Human Understanding. No previous preparation is presupposed. Pass/fail only. Frequency: Even Year Winter.

HUMN 1000J Descartes' Meditations (1 credit)
This one-credit seminar course involves a close reading of a seminal work in early modern philosophy, Descartes' Meditations on First Philosophy. No previous preparation is presupposed. Pass/fail only. Frequency: Odd Year Winter.

HUMN 1000K Woolf's Mrs. Dalloway (1 credit)
This course examines Virginia Woolf's classic novel, Mrs. Dalloway, in light of The Hours, the film adaptation based on Michael Cunnigham's re-working of the Dalloway novel. The course will explore Woolf's pioneering use of stream of consciousness/interior monologue, as well as the feminist and existential themes at the heart of Woolf's artistic vision. Comparing it to The Hours encourages students to recognize the enduring values of a classic work within a contemporary frame. No previous preparation is presupposed. Pass/fail only. Frequency: Odd Year Fall.

HUMN 1000M Nietzsche's Beyond Good and Evil (1 credit)
This one-credit seminar course will introduce students to one of the most widely read and influential works of philosophy in the western tradition, Nietzsche's Beyond Good and Evil. No previous preparation is presupposed. Pass/Fail only. Frequency: Even Year Fall.

HUMN 1000N Plato's Apology (1 credit)
This one-credit seminar course will introduce students to one of the most widely read and influential works of philosophy in the western tradition, Plato's Apology. No previous preparation is presupposed. Students will be graded on a pass/fail basis only. Frequency: Even Year Winter.

HUMN 1000P Mill's On Liberty (1 credit)
This one-credit seminar course will introduce students to one of the most widely read and influential works of political philosophy in the western tradition, John Stuart Mill?s Mill's On Liberty. No previous preparation is presupposed. Students will be graded on a pass/fail basis only. Frequency: Odd Year Winter.

HUMN 1000Q Plato's Phaedo (1 credit)
This one-credit seminar course will introduce students to one of the most widely read and influential works of philosophy in the western tradition, Plato?s Phaedo. No previous preparation is presupposed. Students will be graded on a pass/fail basis only. Frequency: Odd Year Fall.

HUMN 1200 Introduction to World Religions (3 credits)
This course provides an introduction to significant forms of religion around the world, including Hinduism, Buddhism, Confucianism, Taoism, Shinto, Judaism, Christianity, and Islam, as well as tribal religious traditions and beliefs. The course will focus on the historical development of these faiths, as well as look at the worldview of each of these traditions, to develop a better understanding and appreciation for the diverse religious traditions of the world. Frequency: Every Fall.

HUMN 1995 Prior Learning in Foreign Language (1–12 credits)
This course number and prefix indicate award of lower-level undergraduate prior learning credit in foreign language. This course is repeatable up to 12 credits.

HUMN 2200 Introduction to Medical Humanities (3 credits)
This course provides students with an opportunity to explore the relationship between medicine, medical practice, and two or more disciplines within the humanities: the arts, philosophy, history, literature, and cultural studies. Students will assume an active role in discussions, presentations, and other aspects of the course. Prerequisite: COMP 1500. Frequency: Every Fall.

HUMN 2300 Introduction to World Mythology (3 credits)
This course provides a broad overview of myths from various geographic areas and historical periods, including Egyptian, Mesopotamian, Greek, Roman, Celtic, Germanic, Asian, North and South American, African and Australian traditions. The course emphasizes the importance of myth in world cultures. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Even Year Fall.

HUMN 2350 Introduction to Folklore (3 credits)
This course explores various definitions of folklore, focusing on the ways that literature, art, music, performance, and religion all contribute to a culture. Students will be exposed to multiple storytelling techniques and how the many disciplines included in the study of folklore can be understood as forms of narration that tell the story of a culture's evolution. Folklore of different ethnographic backgrounds will be covered, including modern American folklore. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Odd Year Fall.

HUMN 2400 Introduction to Celtic Studies (3 credits)
This course provides an introduction to the languages, literatures, history, art, mythology and cultures of the Celtic peoples of Europe, from ancient Gaul, Britain and Ireland to the 21st century. Prerequisites: COMP 1500 or COMP 1500H. Frequency: Odd Year Fall.

HUMN 3010 Communication Traditions (3 credits)
This course addresses the role of argument and communication in public discourse. Students will become intelligent consumers of public discourse through learning the traditions of the art of communication from ancient times through the present. Students will study compelling speakers and speeches from rhetorical and philosophical viewpoints. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Fall.

HUMN 3300 Native American Myth and Storytelling (3 credits)
This course will investigate traditional Native American and Inuit (Eskimo) oral narratives, including tales of shamans (medicine men) and tricksters, warriors and corn goddesses. The material will be studied from both native and scholarly perspectives. Students will be exposed to local Native American (i.e. Seminole and Miccosukee) traditions in the course. Prerequisites: HUMN 2300 or HUMN 2350 and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Winter.

HUMN 3400 The Beat Generation (3 credits)
This course is a study of the literature, film, and music of the "Beat Generation," a diverse group of artists and writers active in the early 1950s in America, who challenged the status quo in America's literary scene, as well as the social and political conservatism of post-war America.

Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

HUMN 3610 The Harlem Renaissance (3 credits)
This course will examine the Harlem Renaissance, the period from the end of World War I and through the middle of the 1930's Depression, during which African-American artists produced a body of work in the graphic arts, poetry, fiction, drama, essay, music, particularly jazz, spirituals and blues, painting, dramatic revues, and others. The notions of racial consciousness will be explored, as well as the common themes of alienation, marginalization, the use of folk material, the use of the blues tradition, and the problems of writing for an elite audience. Prerequisite: COMP 2000, COMP 2010, COMP 2020 or COMP 2000H. Frequency: Odd Year Winter.

HUMN 3800 Mexican Cult of Death in Myth and Literature (3 credits)
This course examines the Mexican Cult of Death as an ubiquitous theme in Mexican arts and letters. Prerequisites: One ARTS, FILM, HIST, HUMN, LITR, or PHIL course; and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Odd Year Fall.

HUMN 3995 Prior Learning in Foreign Language (1–12 credits)
This course number and prefix indicate award of upper-level undergraduate prior learning credit in foreign language. This course is repeatable up to 12 credits.

HUMN 4100 Death and Dying (3 credits)
A multidisciplinary examination of significant topics related to the process of dying and death, such as changing western attitudes toward death, problems and solutions that may arise for those experiencing the dying process (including the dying, family, and friends), the grieving process, and non-western approaches to death and dying. Prerequisites: one ARTS, HIST, HUMN, FILM, LITR, PHIL, or THEA course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

HUMN 4200 Asian Thought (3 credits)
An introduction to the fundamental teachings of significant religious and philosophical systems of Asia, offering a broad overview of such topics as Wu Wei, karma, reincarnation, impermanence, the nature of the mind, the paths of enlightenment, and basic practices such as meditation and compassionate action. Prerequisites: one ARTS, FILM, HIST, HUMN, LITR, PHIL or THEA course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Every Winter.

HUMN 4310 The Vampire (3 credits)
This course investigates the development of the vampire tradition in Eastern and Western myth and legend; 19th and 20th century literacy and artistic representations of the vampire; and psychological and medical explanations of the phenomenon. Prerequisites: one ARTS, HIST, HUMN, LITR, PHIL, or THEA course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

HUMN 4400 Issues in Latin American Development and Sustainability (3 credits)
In this course, theory and history are combined in an attempt to understand the various forces that have shaped development in Latin America, past, present and future. We start by examining divergent theories of development and their applications to the region. The historical roots of modern institutions are explored. The course then turns to the modern political and economic challenges confronting the region. The role of the state, the market, and the informal sector in the development process will be debated, as well as the prospects of reform and sustainable development in the future. Prerequisites: COMP 2000 or 2020 and INST 1500 or HIST 2130 or HIST 2140. Frequency: Odd Year Winter.

HUMN 4900 Special Topics in the Humanities (3 credits)
Advanced studies in selected cross-disciplinary areas of the humanities, including such topics as comparative religion, death and dying, or popular culture. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one ARTS, FILM, HIST, HUMN, LITR, PHIL, or THEA course; and COMP 2000, COMP 2010, or COMP 2020 or ARTS 2300H or HIST 1030H or HIST 1040H or PHIL 3180H. Frequency: Even Year Winter.

HUMN 4950 Internship in the Humanities (1–12 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of division director. Frequency: Every Fall and Winter.

HUMN 4990 Independent Study in Humanities (1–6 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: one ARTS, HIST, HUMN, LITR, or PHIL course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or ARTS 2300H or HIST 1030H or HIST 1040H or LITR 2010H or LITR 2011H or LITR 2021H or LITR 2030H or LITR 2031H or PHIL 3180H. Frequency: Every Fall and Winter.

IENG—IENG-Industrail & Syst Eng

IENG 3010 Principles and Methods of Industrial and Systems Engineering (3 credits)
Topics in this course include systems engineering methodologies, and processes; conceptual system design; testing; design review; multiple criteria design decisions; and design for reliability. Introduces engineering management and organization principles, team building, leadership, motivation, and quantitative decision making.

IENG 3060 Systems Optimization (3 credits)
Introduces mathematical tools applied to system optimization, including problem formulation, identification of decision variables, use of graphical methods, linear programming, concepts of duality, and sensitivity analysis. Applications include transportation, network analysis, project management and other engineering areas.

IENG 4010 Work Measurement and Human Factors (3 credits)
Topics in this course include work place design and analysis: Human information processing, motor skills, hand tool designs, biomechanics, and work related injuries. Work measurement, motion analysis, human interface design and response.

IENG 4020 Analysis of Production Systems and Facility Design (3 credits)
Topics in this course include tools and approaches for design and analysis of production systems including strategy, aggregate planning, inventory, location, layout, scheduling, forecasting, and production control systems.

IENG 4065 Discrete System Modeling (3 credits)
Topics in this course include simulation with emphasis on discrete event models. Model building, data integration, verification and

validation, statistical analysis of simulation results, and applications to engineering problems.

INB—International Business

INB 2999 Prior Learning Credits in International Business (3–12 credits)
This course number and prefix indicate award of lower-level undergraduate prior learning credits in International Business. This course is repeatable up to 12 credits.

INB 3550 International Business (3 credits)
Surveys the legal and cultural environment of international business; the international financial system; management of international operations; personnel and labor relations; international marketing; international economics, trade, and finance; multinational enterprise; and international accounting. Prerequisite: ECN 2025. Frequency: Every Fall and Winter.

INB 4300 Export/Import Trade (3 credits)
Studies the management of the export/import department, including government regulations affecting imports; financing, insuring, transporting, and marketing of exported or imported raw materials and finished products; methods of purchasing foreign products and selling domestic goods abroad; joint marketing; licensing; and distributor relations. Prerequisite: MKT 3320. Frequency: Every Fall.

INB 4600 International Management (3 credits)
Explores the context of international management and the organization of multinational firms. Topics include organizational problems in international operations, international financial management, international personnel management, relations with host governments, and comparative management. Prerequisite: INB 3550. Frequency: Every Fall and Winter.

INB 4999 Prior Learning Credits in International Business (3–12 credits)
This course number and prefix indicate award of upper-level undergraduate prior learning credits in International Business. This course is repeatable up to 12 credits.

INST—International Studies

INST 1500 Global Issues (3 credits)
This course examines some of the increasingly complex and diverse issues confronting humanity. It examines the great diversity of opinion that people hold on important global issues, such as population, natural resource utilization, development, human rights, and values. Students may not receive credit for both INST 1500 and GLBS 1500. Frequency: Every Fall and Winter.

INST 1500H Global Issues Honors (3 credits)
This course examines some of the increasingly complex and diverse issues confronting humanity. It examines the great diversity of opinion that people hold on important global issues, such as population, natural resource utilization, development, human rights, and values. Students may not receive credit for both INST 1500H and GLBS 1500H. Prerequisite: Honors students only.

INST 4800 Crossroads of the Transatlantic World (3 credits)
This course will focus on South Florida s the crossroads of a transatlantic world and allow students to explore in detail its relation with one or more regions of the world: i.e. North America, South America, Central America and Caribbean, Europe and Africa. Students will be required to write a research paper on a topic of their choosing under the guidance of the instructor, employing the appropriate methodology in the instructor's discipline, and offer an oral presentation of this paper to the class and the international studies faculty at the end of the semester. Prerequisites: A minimum of 18 credits in the INST major and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Winter.

INST 4950 INST 4950 Internship in International Studies (3 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of department chair. Frequency: Every Fall and Winter.

INST 4990 Independent Study in International Studies (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One INST course and COMP 2000, 2010, or 2020. Frequency: Every Fall and Winter.

ISM—Information Systems Mgmt

ISM 2999 Prior Learning Credits in Management Information Systems (3–12 credits)
This course number and prefix indicate award of lower-level undergraduate prior learning credits in Management Information Systems. This course is repeatable up to 12 credits.

ISM 3660 Management Information Systems (3 credits)
Discusses the use of computers in business, as well as database management and information system fundamentals. Prerequisites: TECH 1110, MGT 2050, and MKT 3050. Frequency: Every Fall and Winter.

ISM 4999 Prior Learning Credits in Management Information Systems (3–12 credits)
This course number and prefix indicate award of upper-level undergraduate prior learning credits in Management Information Systems. This course is repeatable up to 12 credits.

LED—Leadership

LED 3000 Introduction to Leadership (3 credits)
This course presents leadership as an on-going and developing set of theories and models. Recognizing these theories and models provides a basis for understanding how leadership influences the success of individuals, groups, and organizations. The development of several of these theories and models will be considered to create a current perspective on leadership. Frequency: Every Fall and Winter.

LED 3200 Creativity and Work Performance (3 credits)
This course will address the tools and techniques that individuals and organizations use to increase their creative capacity and work place applications. The focus will be on creative behaviors and the value creativity brings to all types of organizations from entrepreneurial businesses to large companies, from hospitals to law offices, from solo practitioners to government agencies and not for profits. Creative leaders such as Steve Jobs, Robert Johnson and Marissa Mayer will be discussed. The influence of both individual and team creativity on organization success will be considered. The course will be offered in a seminar format and will include many experiential learning activities, including work at an international innovative company. Frequency: Every Fall.

LED 4100 Great World Leaders

(3 credits)
This course examines the leadership style of six to eight world leaders in order to better understand how they influence the success or failure of their country or organization. Cultural differences are also considered in order to appreciate how they can affect the leaders themselves and, in turn, play an important role in today's increasingly global environment. Prerequisite: LED 3000 or RAZR 3000. Frequency: Every Winter.

LED 4200 Current Issues in Leadership (3 credits)
This course addresses the traditional and the appreciative inquiry models for analyzing leadership impact. A framework for analysis will be presented for use in determining best ways for leaders to attain business results at all levels in the organization. Students will use contemporary business writings as their source for identifying best ways. This will include the following: Fortune, Business Week, Journal of Applied Management and Entrepreneurship, as well as the business sections of daily newspapers. This course will be highly interactive. Prerequisite: LED 3000 or RAZR 3000. Frequency: Every Fall.

LED 4250 Self Leadership in Organization (3 credits)
This course explores a multiplicity of frameworks that focus on leadership tasks. Leadership task behavior will be analyzed using practical models from a variety of readings. Students will build a personal set of actions for successful leadership task performance. All course activity will be based upon the reality of the current leadership situation. The course will address how the appropriate leadership behavior grows the business. The course philosophy will be based upon actions to take, as well as actions to be avoided. Students will learn from not only readings and discussion, but form case-in-point, simulation and leadership storytelling. Prerequisite: LED 3000 or RAZR 3000. Frequency: Every Winter.

LED 4300 Situational Leadership (3 credits)
This course presents the concepts of leadership style and follower readiness using the Situational Leadership model developed by Paul Hersey. The importance of matching leadership style with follower readiness through a task-specific diagnosis is also presented. Situational Leadership will aid students in appreciating how their own leadership style affects others whenever they try to influence anyone within their organizations or in other aspects of their lives. Prerequisite: LED 3000 or RAZR 3000. Frequency: Every Fall.

LEGS—Legal Asst/Paralegal

LEGS 1150 Introduction to Law and the Legal Profession (3 credits)
Topics will include the structure and decisional processes of the American legal system, sources of law, methods of dispute resolution, the roles of the attorney and the legal assistant, legal analysis, interviewing techniques and ethics for legal assistants. This course is not required for those students who have taken LGST 2500. Frequency: Every Fall and Winter.

LEGS 2100 Legal Research and Writing I (3 credits)
Students will study primary and secondary sources of law, obtain legal research and writing skills, learn how to use a law library, and obtain computer-assisted legal research training. Frequency: Every Fall.

LEGS 2200 Computer Applications for the Legal Profession (3 credits)
Theory and application of programs for computers that are used in the legal profession. Hands-on experience with microcomputers and specialized software utilized by the legal profession. Frequency: Every Winter.

LEGS 3050 Criminal Law and Procedure (3 credits)
This course covers the study of both substantive criminal law and criminal procedure for the paralegal student. Students will learn the elements of major crimes and defenses. Students also will examine the constitutional aspects of criminal procedure, including searches, seizures and arrests; interrogation; the pretrial process; trial; sentencing; and appeal. Prerequisite: LEGS 1150 or LGST 2500. Frequency: Every Winter.

LEGS 3260 Real Estate Practice I (3 credits)
Topics will include interests in real property, contracts, deeds, mortgages and other encumbrances, mortgage foreclosures, title searches, title insurance, and leases. Students will prepare closing documents for a residential real estate transaction. Prerequisite: LEGS 1150 or LGST 2500 or MGT 2150. Frequency: Every Fall.

LEGS 3300 Torts and Civil Litigation (3 credits)
This course covers tort law, including such topics as intentional torts, negligence, strict liability, products liability, defamation, and defense to torts. Students also will examine the civil litigation process, including evidence, the rules of civil procedure, discovery, jury selection, and pre-trial work. Students will prepare pleadings and pre-trial discovery. Prerequisite: LEGS 1150 or LGST 2500. Frequency: Every Fall.

LEGS 3360 Wills, Trusts, and Estates I (3 credits)
Topics will include intestacy, wills, trusts, living wills, will substitutes, probate, estate administration, and estate and gift taxes. Students will prepare wills and estate administration documents. Prerequisites: LEGS 1150 or LGST 2500. Frequency: Every Winter.

LEGS 3400 Business Relations and Organizations (3 credits)
Topics will include contracts (the essential elements, defenses to enforceability, third party beneficiaries, and assignments), the Uniform Commercial Code, sole proprietorships, general and limited partnerships, and corporations. Prerequisite: LEGS 1150 or LGST 2500. Frequency: Every Winter.

LEGS 3550 Family Law (3 credits)
Topics will include prenuptial and postnuptial agreements, marriage, dissolution, equitable distribution, alimony, shared parental responsibility, child support, property settlement agreements, adoption, and paternity and juvenile law. Prerequisite: LEGS 1150 or LGST 2500. Frequency: Every Fall.

LEGS 4050 Advanced Practices in Criminal Law (3 credits)
This course is designed to expand on the knowledge gained in the student's study of Criminal Law. It will review past landmark cases as well as current criminal cases faced by the courts and counsel. The course will evaluate the criminal cases from an historical and Constitutional background to include the rights and procedures when charging a person with a crime, procedural rights and protections at trial, and post-conviction rights. Students will interpret and justify legal arguments from both the prosecution and defense perspective. The course will also identify a variety of Criminal Law issues including: forensic evidence, sentencing, ethics, the death penalty, and recent case law applied in the criminal justice system. Prerequisites: LEGS 1150 or LGST 2500; and LEGS 2100 or LGST 4000; and LEGS 3050. Frequency: Even Year Winter.

LEGS 4060 Debtor and Creditor Relations (3 credits)
Topics will include the following: the bankruptcy process and alternative remedies; secured parties under the Uniform Commercial Code; judgment liens; locating debtors' property; enforcement of judgments by way of garnishment,

attachment, and replevin; and exempt property. Prerequisites: LEGS 1150 or LGST 2500. Frequency: Even Year Fall.

LEGS 4110 Legal Research and Writing II (3 credits)
This course will commence with a review of all basic primary and secondary sources. Florida research tools and special topical reference materials will also be covered. Advanced training in computer-assisted legal research will be provided. Legal writing will be emphasized. There will be a variety of written work ranging from everyday correspondence to memoranda of law. Prerequisites: LEGS 2100 or LGST 4000. Frequency: Every Winter.

LEGS 4270 Real Estate Practice II (3 credits)
Topics will generally be chosen from among the following: title problems, mortgage foreclosures, landlord-tenants, commercial real estate transactions, condominiums, construction liens, and environmental matters. Prerequisites: LEGS 3260. Frequency: Every Fall.

LEGS 4310 Advanced Litigation (3 credits)
This course will commence with a review of all basic primary and secondary sources. Florida research tools and special topical reference materials will also be covered. The following topics under the Florida Rules of Civil Procedure will be covered: pleadings, service of process, parties, default, dismissals, discovery in all of its forms, the trial stage, judgments, and post-judgment relief. Students will work on civil cases in several areas of law, where they will apply many of the procedural rules that they have studied. Prerequisites: LEGS 3300. Frequency: Every Fall.

LEGS 4370 Wills, Trusts, and Estates II (3 credits)
Topics will generally be chosen from among the following: probate litigation, mechanisms to transfer property, will and trust drafting, homestead, and federal estate and gift tax system, the Florida estate tax, and preparation of federal estate and gift tax returns. Prerequisites: LEGS 3360. Frequency: Every Winter.

LEGS 4410 Corporate Regulation and Change (3 credits)
Topics will include the following: capitalization, debt and equity financing, federal and state securities regulation, mergers, asset and stock acquisitions, reorganizations, and drafting corporate documents. Prerequisites: LEGS 1150 or LGST 2500; and LEGS 2100 or LGST 4000; and LEGS 3400. Frequency: Every Winter.

LEGS 4470 Emerging Technologies and the Legal Profession (3 credits)
This course covers emerging technologies and their impact on the legal profession. Topics covered will include an overview of the Internet, conducting legal research on the Internet, electronic filing with government agencies and the courts, "non-legal" Web sites with legal-specific applications, using email in law practice, legal trends on the Internet, ethical issues pertaining to emerging technologies, and law as applied to computers and other technology. Prerequisites: LEGS 1150 or LGST 2500. Frequency: Even Year Fall.

LEGS 4560 Elder Law (3 credits)
Topics will include the following: incapacity; types of guardians; guardianship practice and procedure; alternatives to guardianships, such as durable powers of attorney, trusts, health care surrogates, and representatives payers; government benefits such as Social Security, Medicare, and Medicaid; and housing options such as " reverse mortgages," life care contracts, adult congregate living facilities, and nursing homes. Prerequisites: LEGS 1150 or LGST 2500; and LEGS 2100 or LGST 4000. Frequency: Odd Year Fall.

LEGS 4600 Pleadings and the Courts (3 credits)
This advanced course focuses on the paralegal?s role in discovery procedure and trial practice as it relates to civil and criminal actions through a transactional approach. The course will focus on state rules of civil and criminal procedures in the drafting of legal pleadings required for each area of the law. Students will be involved in preparing materials for a hypothetical trial. Prerequisites: LEGS 1150 or LGST 2500; and LEGS 2100 or LGST 4000. Frequency: Odd Year Winter.

LEGS 4700 Immigration Law (3 credits)
This course provides students with a foundation in the underlying policies and basics of immigration and nationality law. Topics include immigrant and nonimmigrant visa categories, citizenship and nationality, removal proceedings, and asylee and refugee status. Emphasis is placed on applying legal principles to practical situations by working on hypothetical immigration client files, including preparation of forms to be filed with the United States Citizenship and Immigration Services. Prerequisites: LEGS 1150 and LEGS 2100. Frequency: Even Year Winter.

LEGS 4800 Advanced Practicum in Paralegal Studies (3 credits)
This advanced practicum simulates a law office environment in which students work for senior and junior law partners in a generalized law practice. This experiential approach is designed to integrate and apply substantive law, procedural application and legal computer application drawing on materials in a variety of legal areas including but not limited to civil litigation, real estate, estate planning, family law, legal research, criminal law, contracts and corporate law. Students take this course in the last semester of their paralegal studies curriculum. Prerequisites: LEGS 2100 and LEGS 3050 and LEGS 3210 or LEGS 2200 and LEGS 3260 and LEGS 3300 and LEGS 3360 and LEGS 3400 and LEGS 3550. Frequency: Every Winter.

LEGS 4900 Special Topics in Paralegal Studies (3 credits)
The subjects covered by this course will generally be chosen from among the following: administrative law; alternative dispute resolution; employment law; health law; immigration law; insurance law; international law; and patents, trademark, and copyright law. Prerequisites: LEGS 1150 or LGST 2500; and LEGS 2100 or LGST 4000.

LEGS 4950 Internship in Paralegal Studies (3 credits)
A 20-hour per week work experience for 16 weeks in the student's major area of study at an internship site registered with the paralegal studies program as an approved site. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of paralegal coordinator. Students may take a maximum of two internships, which must be taken at different internship sites. Frequency: Upon Request; see department chair.

LEGS 4950A Internship A in Paralegal Studies (3 credits)
A 20-hour per week work experience for 16 weeks in the student's major area of study at an internship site registered with the paralegal studies program as an approved site. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of paralegal coordinator. Students may take a maximum of two internships, which must be taken at different internship sites. Frequency: Every Fall and Winter.

LEGS 4950B Internship B in Paralegal Studies (3 credits)
A 20-hour per week work experience for 16 weeks in the student's major area of study

at an internship site registered with the paralegal studies program as an approved site. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of paralegal coordinator. Students may take a maximum of two internships, which must be taken at different internship sites. Frequency: Every Fall and Winter.

LGST—Legal Studies

LGST 2500 Introduction to Legal Studies (3 credits)
This course provides an introduction to the structure and basic decisional processes of the American legal system, as well as a study of the historical and social development of the legal profession in America from the colonial period to the present. Particular focus is on examination of the central issues and processes of the legal system from the perspective of their everyday working relationships and how courts work. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

LGST 3350 Environmental Law and Policy (3 credits)
This course analyzes environmental quality in terms of law and policy. Specific public policy issues are surveyed to develop alternative approaches for dealing with ecological problems and for illustrating the power of public opinion. This course also provides an understanding of the norms and institutions that comprise national and international environmental law. Specific topics considered include air pollution and protection of the atmosphere, hazardous waste, endangered species, the global commons, and laws of the sea. Statutes, regulations, and judicial decisions are emphasized to provide an overall analysis of environmental law. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Winter.

LGST 3400 Comparative Legal Systems (3 credits)
A study of the interrelationship between cultures and legal systems; how legal systems develop as a response to, and expression of, the cultures from which they derive. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Winter.

LGST 4000 Legal Research and Trial Advocacy (3 credits)
Students will learn legal research and writing skills, as well as the basics of case preparations, courtroom strategy and presentation, and legal argumentation. Library and Internet primary and secondary legal resources will be utilized, and legal memoranda and research skill exercises will be required. The students will create a trial notebook of their research and writing work, which they will then present in a mock trial/appellate setting. Prerequisites: LGST 2500 and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

LGST 4100 The First Amendment (3 credits)
This course focuses on study of the First Amendment, emphasizing freedom of speech and religion and how those rights have been exercised and interpreted both historically and in the modern era. Prerequisites: LGST 2500 and COMP 2000 or 2020 or COMP 2000H. Frequency: Odd Year Winter.

LGST 4200 Crime and the Constitution (3 credits)
This course focuses on the study of the 4th, 5th, and 6th amendments and their relationship to criminal procedure. Additional emphasis will be on the 8th amendment and the death penalty. Prerequisites: LGST 2500 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Fall.

LGST 4270 Judicial Politics and Process (3 credits)
This class will examine both the formal and informal practices and rules that shape the American judicial system. Using a political science/legal anthropology approach, it will ask who uses the courts, why they use the courts, and what they hope to achieve. In doing so, it will seek to assess the effectiveness of American justice by analyzing such topics as the formal structures of the American judicial system and the judicial appointment, socialization, and the decision-making process. Prerequisite: LGST 2500 and COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

LGST 4310 Individual Rights and the Law (3 credits)
A study of the crucial role the Supreme Court has played in the expansion and diminution of the rights of individuals. This course focuses on civil rights issues (discrimination on the basis race, sex, etc.) and the rights of the individual to privacy. Prerequisites: LGST 2500 and COMP 2000 or 2020 or COMP 2000H. Frequency: Odd Year Fall.

LGST 4410 International Law (3 credits)
An introduction to basic legal principles governing relations between nations. Topics include recognition of states, jurisdiction, human rights, treaties and agreements, law of the sea and claims against nations. Prerequisites: one LGST course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Every Winter.

LGST 4420 War Crimes (3 credits)
This course focuses on the issue of war crimes as well as trials of war criminals during the last hundred years. Students will consider the development and evolution of the law particularly as it relates to the definition of war crimes, genocide, ethnic cleansing, and crimes against humanity. Students will examine key historical trials as well as consider how war crimes doctrines are being applied currently in national and international venues. Prerequisite: one LGST course and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Winter.

LGST 4950 Internship in Legal Studies (1–12 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 higher, completion of 60 or more credit hours, and permission of division director. Frequency: Every Fall and Winter.

LGST 4950A Internship in Legal Studies (A) (3 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of division director. Frequency: Every Fall and Winter.

LGST 4990 Independent Study in Legal Studies (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: one LGST course and written consent of instructor and division director. Frequency: Every Fall and Winter.

LITR—Literature

LITR 2010 British Literature I (3 credits)
A survey of major literary movements and writers, from Old English through the 18th century. The course examines themes common to various historical periods. Prerequisite: COMP 1500 or COMP 1500H.

Frequency: Every Fall and Winter.

LITR 2010H British Literature I Honors (3 credits)
A survey of major literary movements and writers, from Old English through the 18th century. The course examines themes common to various historical periods. Prerequisites: COMP 1500 or COMPH; Honors students only. Frequency: Odd Year Fall.

LITR 2011 British Literature II (3 credits)
A survey of major literary movements and writers, from the Romantic period through the present. The course examines themes common to various historical periods. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

LITR 2011H British Literature II Honors (3 credits)
A survey of major literary movements and writers, from the Romantic period through the present. The course examines themes common to various historical periods. Prerequisites: COMP 1500 or COMP 1500H; Honors students only. Frequency: Odd Year Winter.

LITR 2020 American Literature I (3 credits)
A survey of American literature from the colonial period through the Civil War, emphasizing major authors and identifying themes common to various historical periods. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

LITR 2020H American Literature I Honors (3 credits)
A survey of American literature from the colonial period through the Civil War, emphasizing major authors and identifying themes common to various historical periods. Prerequisites: COMP 1500; Honors students only. Frequency: Even Year Fall.

LITR 2021 American Literature II (3 credits)
A survey of American literature from the end of the Civil War through the present, emphasizing major authors and identifying themes common to various historical periods. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

LITR 2021H American Literature II Honors (3 credits)
A survey of American literature from the end of the Civil War through the present, emphasizing major authors and identifying themes common to various historical periods. Prerequisites: COMP 1500 or COMP 1500H; Honors students only. Frequency: Even Year Winter.

LITR 2030 World Literature I (3 credits)
A survey of selected masterpieces by international writers from antiquity through the Renaissance, emphasizing the evolution of world culture. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

LITR 2030H World Literature I Honors (3 credits)
A survey of selected masterpieces by international writers from antiquity through the Renaissance, emphasizing the evolution of world culture. Prerequisites: COMP 1500 or COMP 1500H; Honors students only. Frequency: Odd Year Fall.

LITR 2031 World Literature II (3 credits)
A survey of selected masterpieces by international writers from the 17th century through the 20th century, emphasizing the evolution of world culture. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

LITR 2031H World Literature II Honors (3 credits)
A survey of selected masterpieces by international writers from the 17th century through the 20th century, emphasizing the evolution of world culture. Prerequisites: COMP 1500 or COMP 1500H; Honors students only. Frequency: Odd Year Winter.

LITR 2110 Detective Fiction (3 credits)
A study of the literary sub-genre of detective fiction through the reading of important short fiction and novels by such authors as Poe, Doyle, Christie, Chandler, and Hammett. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

LITR 2120 Science Fiction and Fantasy Literature (3 credits)
A study of science fiction and fantasy literature from the 18th-century to the present. May include a variety of genres of speculative fiction, from traditional sci-fi and fairy tales to supernatural fiction and cyberpunk. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

LITR 2130 Contemporary Memoir (3 credits)
A detailed study of the contemporary memoir by reading representative works in English with particular focus on the origins and development of ?New Autobiography.? Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

LITR 3040 Women in Literature (3 credits)
Works will be studied to acquaint students with the rich and extensive contributions of women to the various literary genres (autobiography, poetry, fiction). Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Even Year Fall.

LITR 3060 History and Structure of the English Language (3 credits)
A study of the structure and development of the English language from Old English to Modern English, including changes in word forms, meaning and sounds, syntax and grammar. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Every Fall.

LITR 3500 Literature and Medicine (3 credits)
This course explores the relationship between literary and historical texts and medical practice. Using critical perspectives from the humanities, the course examines such topics as the medical practitioner's role, medical themes in literature, and pathographies. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or LITR 2010H or LITR 2011H or LITR 2020H or LITR 2021H or LITR 2030H or LITR 2031H. Frequency: Odd Year Fall.

LITR 3510 Irish Literature (3 credits)
A study of Irish and Celtic literatures, focusing on early Irish myth and medieval literature translated from Gaelic, the literature of the Irish Renaissance in the early 20th century, and contemporary Irish poetry and prose. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Odd Year Winter.

LITR 3520 African–American Literature (3 credits)
A study of African-American literature, from slave narratives to modern African-American poetry and prose. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Odd Year Fall.

LITR 3530 Caribbean Literature (3 credits)
A study of Caribbean literature from early post-Colombian literature, such as slave narratives and travel writing, to modern Caribbean poetry and prose. The emphasis is on literature written in English, but the course includes works that have been translated into English from other languages, including French and Spanish. This course provides an introduction to the literature of the Caribbean and a framework for studying that material. Prerequisites: one LITR course; and COMP 2000, COMP

2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Fall.

LITR 3540 Latin American Literature (3 credits)
A survey of Latin American literature in translation. Prerequisite: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

LITR 3620 Studies in Poetry (3 credits)
A detailed study of the genre of poetry through the reading of important works on various periods and countries from the ancient through the modern era, focusing on the main poetical categories of epic, lyric, and dramatic poetry. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Odd Year Winter.

LITR 3630 Studies in the Novel (3 credits)
A detailed study of the novel through the reading of important works of various periods and countries from the 18th century through the modern era. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or LITR 2010H or LITR 2011H or LITR 2020H or LITR 2021H or LITR 2030H. Frequency: Odd Year Fall.

LITR 3640 Studies in Drama (3 credits)
A detailed study of drama through the reading of important works of various periods and countries from the ancient through the modern era. Prerequisites: one LITR course; COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

LITR 4050 Literary Criticism and Theory (3 credits)
This course introduces students to critical approaches to literature and explores the potential usefulness of theoretical constructs in examining literary texts. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Every Winter.

LITR 4060 Critical Theories and Gender (3 credits)
This course introduces students to contemporary feminist criticism and gender theory from Simone de Beauvoir to the present and explores the potential usefulness of theoretical constructs in examining literature. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or LITR 2010H or LITR 2011H or LITR 2020H or LITR 2021H or LITR 2030H. Frequency: Even Year Winter.

LITR 4510 King Arthur (3 credits)
This course traces the origins and development of the legend of King Arthur, Queen Guinevere, and the Knights of the Round Table from the 5th to the 21st century. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Odd Year Winter.

LITR 4760 Major Authors (3 credits)
This course will examine the life and work of an influential single literary author from a range of critical perspectives, using a variety of selections from the author?s work. Prerequisite: one LITR course; and COMP 2000 or COMP 2000H or COMP 2020. Frequency: Every Winter.

LITR 4900 Special Topics in Literature (3 credits)
Topics, which vary from year to year, may include a history of literary criticism, a study of literature in relation to a specific field (politics, law, science), an exploration of a particular form of literature (travel literature, autobiography, etc.), or theme (literature and the city, literature and the self), or an interdisciplinary approach to a particular era. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one LITR course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or LITR 2010H or LITR 2011H or LITR 2020H or LITR 2021H or LITR 2030H or LITR 2031H. Frequency: Odd Year Winter.

LITR 4990 Independent Study in Literature (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: one LITR course; and COMP 2000, COMP 2010 or COMP 2020 or LITR 2020H or LITR 2021H. Frequency: Every Fall and Winter.

MATH—Mathematics

MATH 1000 Essential Mathematics (3 credits)
This course is designed to provide a brief review of basic computational skills in fractions, decimals, and rational numbers. It expands into a comprehensive study of introductory algebra including: variable expressions, linear equations and inequalities, polynomials, exponents, algebraic word problems, factoring, and quadratic equations. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Frequency: Every Fall and Winter.

MATH 1009 Prior Learning Credit in Mathematics (1–12 credits)
This course number and prefix indicate award of lower-level undergraduate prior learning credit in mathematics which does not meet the general education math requirements. This course is repeatable up to 12 credits. Prerequisite: approval of chair. Frequency: Transfer Credit Only.

MATH 1030 Intermediate Algebra (3 credits)
This course is designed for students who have had some algebra. Topics include: algebraic expression and real numbers; linear equations and inequalities in one and two variables; quadratic equations; polynomials and factoring; graphs of basic functions; systems of linear equations; and applications. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1000. Frequency: Every Fall and Winter.

MATH 1040 Algebra for College Students (3 credits)
This course is designed to provide students with a full range of algebra skills. Topics include: graphs of functions and relations; inverse functions; rational and radical expressions; linear, quadratic, and rational functions; absolute value and radical functions; properties and graphs of exponential and logarithmic functions and applications. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or Math 1030. Frequency: Every Fall and Winter.

MATH 1050 Concepts in Geometry and Logic (3 credits)
This course is designed to meet the general education requirements for only those students intending to enter education majors. The course addresses essential mathematical competencies related to sets, logic, and geometry. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1040. Frequency: Every Fall.

MATH 1060 Concepts in Statistics and Probability (3 credits)
This course is designed to meet the general education requirements for only those students intending to enter education majors. The course addresses essential mathematical competencies related to probability and both inferential and descriptive statistics. This course has been exempted from the requirements of

the Writing Across the Curriculum policy. Prerequisite: MATH 1040 or challenge examination. Frequency: Every Winter.

MATH 1120 Games of Chance (3 credits)
This course presents elementary probability theory and statistics through the view point of games, sports, and gambling. Topics include counting principles, probability, probability distributions, expectation, and descriptive statistics. Examples are taken from games of chance and sports. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 1030 Frequency: See Academic Department Chair.

MATH 1130 Introductory Seminar in Mathematics (1 credit)
This course is basic, nontechnical introduction to current and/or classical topics in mathematics. Specific topics for the course vary by semester. Prerequisite: MATH 1040. Frequency: See Academic Department Chair.

MATH 1200 Precalculus Algebra (3 credits)
This course is for students with a strong background in algebra. Students will study fundamental concepts of algebra; equations and inequalities; functions and graphs; polynomials; and rational, exponential, and logarithmic functions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1040. Frequency: Every Fall and Winter.

MATH 1250 Trigonometry (3 credits)
This course will complete the sequence of courses necessary to begin the study of calculus. A thorough study of trigonometric functions, analytic trigonometry, and numerous applications will be covered. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1200. Frequency: Every Fall and Winter.

MATH 2001 Introduction to Math Models in Biology I (3 credits)
This course is designed for students with a mathematical background sufficient to take calculus and an interest in the biological sciences. Students will be introduced to the interplay of mathematical modeling and biology; as well as an introduction to a broad mathematical tool chest. Topics include linear and nonlinear difference equations and matrix algebra. The Matlab? computer software program will be used in this course. Prerequisite: Challenge examination or MATH 1200. Frequency: Upon Request.

MATH 2020 Applied Statistics (3 credits)
This course is an introductory course in the use of descriptive and inferential statistics. Topics include graphical and numerical descriptive measures, probability, common random variables and their distributions including the binomial and normal distributions, the Central Limit Theorem, sampling procedures, confidence intervals, and hypothesis testing. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 1040 or higher. Frequency: Every Fall and Winter.

MATH 2020H Applied Statistics Honors (3 credits)
This course is an introductory course in the use of descriptive and inferential statistics. Topics include graphical and numerical descriptive measures, probability, common random variables and their distributions including the binomial and normal distributions, the Central Limit Theorem, sampling procedures, confidence intervals, and hypothesis testing. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 1040 or higher; Honors students only. Frequency: Every Fall and Winter.

MATH 2080 Applied Calculus (3 credits)
Functions, graphs and derivatives of algebraic functions; introduction to derivatives of trigonometric functions, application of derivatives to business problems; and related rates and maximum/minimum problems. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1200. Frequency: Every Winter.

MATH 2100 Calculus I (4 credits)
Functions, limits, and derivatives of algebraic functions. Introduction to derivatives of trigonometric functions, logarithmic functions; application of derivatives to physics problems; related rates and maximum/minimum problems, and definite and indefinite integrals with applications. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: Challenge examination or MATH 1250. Frequency: Every Fall and Winter.

MATH 2100H Calculus I Honor (4 credits)
Functions, limits, and derivatives of algebraic functions. Introduction to derivatives of trigonometric functions, logarithmic functions; application of derivatives to physics problems; related rates and maximum/minimum problems, and definite and indefinite integrals with applications. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisites: Challenge examination or MATH 1250; Honors students only. Frequency: Every Fall.

MATH 2200 Calculus II (4 credits)
Riemann sums; the definite integral; method of integration; continuation of exponential, logarithmic functions, and inverse trigonometric functions. L'Hopital's rule and improper integrals. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 2100 or MATH 2100H. Frequency: Every Fall and Winter.

MATH 2200H Calculus II Honors (4 credits)
Riemann sums; the definite integral; method of integration; continuation of exponential, logarithmic functions, and inverse trigonometric functions. L'Hopital's rule and improper integrals. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 2100 or MATH 2100H; Honors students only. Frequency: Every Winter.

MATH 2250 Euclidean Geometry (3 credits)
Plane Euclidean geometry starts with a vocabulary of terms, definitions, and postulates, works its way into direct and indirect proofs, and finishes with similar figures, triangles, circles, and areas. The study of coordinate, solid, and non-Euclidean geometrics will be introduced. Prerequisite: MATH 1200. Frequency: Upon Request

MATH 2500 Introduction to Advanced Mathematics (3 credits)
This course is an introduction to concepts encountered in abstract mathematics that are common to most fields in mathematics. Topics covered include: logic, set theory, functions, relations, cardinality, mathematical induction, algebraic structures and the real number system. Optional topics may be included based upon the discretion of the instructor. There will be an emphasis in writing formal mathematical proofs. Prerequisite: MATH 2200. Frequency: Odd Year Winter.

MATH 3030 Applied Statistics II (3 credits)

Introductory aspects of inferential statistics and experimental design are covered. Course material includes hypothesis testing and estimation, analysis of variance, multiple comparison procedures, linear and multiple correlation and regression methods, chi-square tests, nonparametric techniques, and elementary design of experiments. Stress will be placed on interpreting studies that employ these techniques. Prerequisite: MATH 3020 or MATH 3020H or MATH 2020 or MATH 2020H. Frequency: Upon Request.

MATH 3050 Mathematics and Biology (3 credits)
This course provides an introduction to upper divisional mathematics and its applications in life sciences. Multi-variate calculus topics including partial differentiation and Lagrange multipliers are introduced with application to constrained optimization problems in resource management and ecology. Linear algebra topics including determinates and eigen-values and vectors are introduced with application to discrete time dynamical systems models used in ecology and epidemiology. Dynamical systems topics of phase-planes and null-clines are introduced to study non-linear oscillator models for rhythmic behavior in neural impulse generation and the heart-beat. Prerequisite: MATH 2100 or MATH 2100H. Frequency: Odd Year Fall.

MATH 3200 Calculus III (4 credits)
Functions of several variables, surfaces, in three-space, vectors, techniques of partial differentiation and multiple integration with applications. Vector calculus topics will include the theorems of Green, Gauss and Strokes. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 2200 or MATH 2200H. Frequency: Every Fall and Winter.

MATH 3260 Combinatorics (3 credits)
This course begins with the Pigeonhole principle and studies permutations and combinations. Students will learn the techniques for counting and enumeration including generating functions, the principle of inclusion and exclusion, as well as graph theory. Prerequisite: MATH 2200 or MATH 2200H. Frequency: See Academic Department Chair

MATH 3270 Logic (3 credits)
Topics covered are syntax and semantics of formal languages; sentential logic, proofs in first order logic; Godel's completeness theorem; compactness theorem and applications; cardinals and ordinals; the Lowenheim-Skolem-Tarski theorem; Beth's definability theorem; effectively computable functions; Godel's incompleteness theorem; undecidable theories. Prerequisite: MATH 2500. Frequency: See Academic Department Chair.

MATH 3300 Introductory Linear Algebra (3 credits)
This is an elementary linear algebra course. The focus of the course is on the methods in matrix computations and the basic theory of vector spaces. Prerequisite: MATH 2100 or MATH 2100H. Frequency: Every Fall and Winter.

MATH 3340 Linear Algebra II (3 credits)
This advanced linear algebra (mainly matrix theory) course covers linear vector spaces, inner product spaces, minimal and characteristic polynomials, eigenvalues and eigenvectors, canonical forms of matrices, tensor and Hadamard products, and properties of positive defininte matrices, Hermitian matrices and normal matrices. Prerequisites: MATH 3300 and MATH 2200 or MATH 2200H. Frequency: Even Year Winter.

MATH 3350 Number Theory (3 credits)
This introductory course to Number Theory is open to students with interests in mathematics, science or secondary math education. Topics covered include divisibility, Division (Euclidean) Algorithm, greatest common divisor and least common multiple, prime numbers, Fundamental Theorem of Arithmetic, multiplicative functions, and Chinese Remainder Theorem. Additional topics may be included at the discretion of the instructor. Prerequisite: MATH 2200 or MATH 2200H or permission of instructor. Frequency: Odd Year Winter.

MATH 3400 Ordinary Differential Equations (3 credits)
Topics covered in this course include first-order separable, linear, and nonlinear differential equations, first-order systems, forced second order linear equations, qualitative techniques, bifurcations, numerical methods, linearization, and applications to numerous areas such as biology, chemistry, economics, physics, and social sciences. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 2200 or Math 2200H. Frequency: Every Winter.

MATH 3450 Elementary Differential Geometry (3 credits)
This course is an introduction to differential geometry which studies the local and global geometric properties of curves, surfaces and higher dimensional mathematical objects. This course will introduce the concept of the curvature for both curves and surfaces in three dimensions. Along with the global properties such as Gauss-Bonnet theorem and fundamental forms, this course will also cover Gauss map, parallel transport and their applications. Prerequisite: MATH 3200. Frequency: Even Year Winter.

MATH 3900 History of Mathematics (3 credits)
Designed primarily for secondary math education majors. Includes from the early development in mathematics to current thinking. Students will gain the perspective that mathematics is the cumulative creation of many people over time. Prerequisite: MATH 2200 or MATH 2200H. Frequency: See Academic Department Chair.

MATH 4020 Applied Regression Analysis (3 credits)
An applied course in regression analysis discussing simple, multiple regression; exponential and logistic regression; resolution of fit of a model, including, residual analysis; precision of estimate; ANOVA and tests of general hypotheses; model building; step-wise regression; use of indicator variables, and multi co-linearity. Prerequisite: MATH 3030. Frequency: See Academic Department Chair.

MATH 4040 Applied Multivariate Statistical Analysis (3 credits)
An applied course in multivariate statistical analysis. This includes the study of the multivariate normal distribution and inference about one and several multivariate means. Also, students will study principal components and factor analysis and apply such techniques to real multivariate data. Also, the study of classification and cluster analysis will enable the students to better apply such techniques in marketing research, biological models, and social studies. Prerequisites: MATH 3030 and MATH 3300. Frequency: See Academic Department Chair.

MATH 4050 Advanced Calculus I (3 credits)
The course is an introduction to the theoretical treatment of the real numbers, sets, functions, sequences, limits and calculus. The course places an emphasis on reading and writing formal mathematical proofs. Topics include: the real number system, convergence of sequence and series, continuity, limits, functions of one real variable, and the theoretical foundations of differentiation and integration of functions of a single variable. Pre-requisite: MATH 3200.Frequency: Even Year Fall.

MATH 4060 Advanced Calculus II (3 credits)
This course is a continuation of Advanced Calculus I providing an introduction to metric spaces and their topology. The course places an emphasis on extending results for real functions to multivariable functions. Topics include: metric spaces and topology, integration, differentiation, optimization and analysis in several variables. Pre-requisite: MATH 4050. Frequency: Odd Year Winter.

MATH 4080 Introduction to Statistical Computations (3 credits)
This class gives the students the opportunity to learn writing codes for performing statistical analysis and data manipulation including writing their own functions or macros in one of the high level programming languages. Students will have a better hand on one/more statistical programming language(s) so as to carry out statistical analysis. Students will be prepared to handle and manipulate different types of data files and write their own functions (macros) to perform specific procedures. Prerequisites: MATH 3030 and MATH 3300. Frequency: See Academic Department Chair.

MATH 4100 Introduction to Topology (3 credits)
This course is an introduction to topology and elements of algebraic topology, including metric spaces, continuity, compactness, topological spaces, separation axioms, product spaces, subspaces, quotient spaces, connectedness, and the fundamental group. Prerequisite: MATH 2200 or MATH 2200H. Frequency: See Academic Department Chair.

MATH 4200 Complex Variables (3 credits)
This is a first course in complex variables. Topics covered in this course include the origin, algebra, topology and geometry of complex numbers, the mappings, continuity, branches, and transformations of analytic and harmonic functions, and the computation of contour integrals. Prerequisite: MATH 3200. Frequency: Odd Year Winter.

MATH 4300 Numerical Methods (3 credits)
This is an introductory survey course to standard numerical methods, the mathematical ideas behind them and their use in obtaining numerical solutions. Topics include polynomial interpolation, numerical integration and differentiation, numerical solution of nonlinear equations and ordinary differential equations. Prerequisite: MATH 2200 or MATH 2200H. Frequency: See Academic Department Chair.

MATH 4350 Abstract Algebra I (3 credits)
This course is an introduction to the concepts of groups and rings from modern abstract algebra. Group theoretic topics include: modular arithmetic, groups, cyclic groups, permutation groups, normal groups, factor groups, group homomorphism and isomorphism, cosets, Lagrane's theorem, and external (internal) direct products. Ring theoretic topics include: rings, integral domain, ideals, factor rings, ring homomorphism and isomorphism, factorizations, divisibility, and fields. Prerequisites: MATH 3300 and either MATH 2500 or CSIS 2050. Frequency: Odd Year Fall.

MATH 4360 Abstract Algebra II (3 credits)
This course, which is a continuation of Math 4350, further develops the theory of groups and rings and introduces the concept of field theory. Group theoretic topics include: group theory, Sylow?s theorem, symmetric groups, Burnsie?s theorem. Ring theoretic topics include: ring theory, polynomial rings, factorizations, and divisibility. Field theoretic topics include: extension fields, algebraic extension, finite fields, and Galois theory. Prerequisite: MATH 4350. Frequency: Even Year Winter.

MATH 4400 Partial Differential Equations (3 credits)
Introduction to second-order linear partial differential equations (heat, wave and Laplace equations), separation of variables, Sturm-Liouville eigenvalue problems, method of eigenfunction expansions (Fourier analysis), and Green's functions. Possible introduction to first-order PDEs, the method of characteristics, and non-linear PDE as time permits. Prerequisites: MATH 3200 and MATH 3400. Frequency: Even Year Fall.

MATH 4450 Basic Probability (3 credits)
Probability spaces, discrete and continuous distributions, conditional probability space, effect on distributions by linear, and non-linear functions of one and two random variables, moments, characteristic functions, vectors and sequences of one and two random variables, laws of large numbers, central limit theorem, special probability laws. Prerequisite: MATH 2200 or MATH 2200H. Frequency: See Academic Department Chair.

MATH 4500 Probability and Statistics (3 credits)
Probability functions, random events, expectation, conditional probability distribution functions, and foundations of statistics. Prerequisite: MATH 2200 or MATH 2200H. Frequency: Every Fall..

MATH 4600 Introduction to Applied Mathematics (3 credits)
This course provides an introduction to the methods of applied Mathematics. Topics include the spectral theory of vector and function spaces, orthogonal functions, series expansion, differential operators, Green?s functions, complex variables including derivatives and integrals, laurent series, special functions, and transforms. Prerequisites: MATH 3200 and MATH 3300. Frequency: See Academic Department Chair.

MATH 4700 Applied Cryptography (3 credits)
This is an introductory course to applied cryptography. Symmetric-key cryptography topics include stream ciphers, block-ciphers, permutations, groups and Galois fields. Public-key cryptography topics include factorization, discrete logarithm problem, and elliptic curves. Prerequisite: MATH 4350. Frequency: See Academic Department Chair.

MATH 4900 Special Topics in Mathematics (3 credits)
The Special Topics in Mathematics course presents mathematical topics that are not covered in any of our current courses. Course contents and schedule are announced in the course syllabus. Prerequisites: Junior standing. Specific course content and prerequisites are announced in the course schedule for the given term. Frequency: See Academic Department Chair.

MATH 4950 Internship in Mathematics (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic department chair. Frequency: See Academic Department Chair.

MATH 4990 Independent Study in Mathematics (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990A Independent Study in Mathematics (A) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990B Independent Study in Mathematics (B) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990C Independent Study in Mathematics (C) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990D Independent Study in Mathematics (D) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990E Independent Study in Mathematics (E) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MATH 4990F Independent Study in Mathematics (F) (1–3 credits)
The student selects and independently carries out, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and academic department chair. Frequency: See Academic Department Chair.

MBIO—Marine Biology

MBIO 1050 Introductory Marine Biology Seminar (1 credit)
This one-credit seminar course uses presentations and readings to introduce students to a series of contemporary issues and research in marine biology. Required of all incoming marine biology students. No previous university-level preparation is presupposed. Pass/fail only. Frequency: Every Fall.

MBIO 1060 Introduction to Oceanography (3 credits)
Examination of the physical, chemical, biological, and geological properties of the world's oceans. The interdisciplinary approach will introduce concepts important in understanding the development and current status of oceanographic research for the nonscience major. Frequency: Every Fall, every Winter.

MBIO 1220 Introduction to Marine Biology (3 credits)
Introduction to marine environments of South Florida with emphasis on adaptation of local organisms to a variety of habitats including mangrove swamps, the intertidal zone, sea grass meadows, coral reefs, and the Gulf Stream. Field trips to various South Florida marine habitats will round out the course experience. Frequency: Every Fall.

MBIO 1300 Introduction to Scuba Science (3 credits)
Introduction to scuba diving provides a comprehensive curriculum of the skills and academics required to safely participate in recreational/sport scuba diving activities. The course is comprised of classroom lecture sessions as well as pool and open water lab sessions. Academic content includes the history, physics, physiology, equipment, specialties, medicine, and the underwater environment of recreational sport scuba diving. Pool and open water labs encourage proficiency in dive planning, safety, buddy systems, equipment handling, diver assistance, air consumption, underwater problem solving, entry and exit procedures, proper buoyancy, and dive boat protocol. Course requirements: Students must be at least 18 years old at the start of the class, must know how to swim, and have good overall health. Students will perform a watermanship evaluation consisting of a 200 meter/yard continuous swim without the use of swim aids followed by a 10 minute water tread. Goggles may be worn during the watermanship evaluation. Students must complete the PADI Medical History Questionnaire. Certain conditions may require a physician?s pre-approval to dive. If a student answers `Yes? to any question on the PADI Medical History Questionnaire, the student MUST have the form signed by a physician giving his or her approval for the student to participate in scuba diving. This form must be completed (with proper physician?s approval where applicable) and turned in by the first pool session. Frequency: Every Fall.

MBIO 2410 Marine Biology and Lab (4 credits)
This introductory course for the marine biology major will acquaint the student with basic principles of marine biology and function as a complementary course to Oceanography/Lab (MBIO 2500). The course will touch upon basic aspects of physical, chemical, and geological oceanography, and then focus upon marine communities found in the open ocean, deep sea, coastal shelf and inter tidal regions. Species diversity, phylogenetic relationships, organisms function, symbiotic relationships, and ecological interactions will be examined. Prerequisite: BIOL 1510 or BIOL 1510H. Frequency: Every Fall.

MBIO 2500 Oceanography/Lab (4 credits)
This introductory course for the marine biology major will expose the student to more comprehensive principles of physical, chemical and geological oceanography, and functions as a complementary course to Marine Biology (MBIO 2410). Oceanographic sampling and laboratory analysis techniques will be covered. Prerequisite: BIOL 1510 or BIOL 1510H. Frequency: Every Winter.

MBIO 3450 Survey of Marine Mammals (3 credits)
This course provides an overview of the anatomy, biomedicine, evolution, husbandry, natural history, pathology, and physiology of the cetaceans, pinnipeds, sirenians, and allies. The course consists of lectures and field trips. Prerequisite: MBIO 2410. Frequency: Winter, odd years.

MBIO 3500 Food Web Dynamics (3 credits)
A food chain is simply "who eats what". The linear relationships of a food chain will be contrasted with the more complex interactions of a food web. The biological and physical processes which contribute to a food web, such as population dynamics and energy flow, will be introduced in multiple estuarine and marine ecosystems, from coastal mangroves to offshore open waters. Specialized food webs, such as sea ice and hydrothermal vent communities, will also be introduced. Prerequisites: MBIO 2410. Frequency: Winter, odd years.

MBIO 3600 Plankton Ecology (0–3 credits)
Marine and freshwater zooplankton, with limited discussion of phytoplankton, protozoans and bacteria, will be discussed. A survey of holoplanktonic

and meroplanktonic zooplankton will be conducted, including phylogeny, ecology and processes which influence production and diversity. A discussion of field and laboratory sampling techniques and methodology will include introductions for collecting, preserving, subsampling, identifying and quantifying collections. A one-day field trip will allow students to collect marine samples and they will learn to identify organisms based on those samples throughout the course. Prerequisites: MBIO 2410 or MBIO 2500. Frequency: Winter, even years.

MBIO 3700 Biology of Fishes/Lab (4 credits)
This is an introduction to the major groups of fishes such as jawless, cartilaginous and bony fishes. Topics will include the diversity of extant fishes from various aquatic habitats, with emphasis on local species, the anatomy, physiology, behavior, ecology and evolution of fishes, and fisheries conservation and enhancement practices. Prerequisites: BIOL 1510 or BIOL 1510H. Frequency: Fall, even years.

MBIO 3750 Coral Reefs and Coral Communities (3 credits)
This class introduces students to the biology and ecology of corals and coral-associated organisms. Topics include coral distribution, abundance, diversity, taxonomy, endosymbionts, reproduction, predator-prey relationships, and anthropogenic and natural disturbances. Active classroom discussion will be encouraged during and following the presentation of material by the professor. A formal discussion period on selected papers will be conducted during each class. Material will be presented from a global perspective, with focus on South Florida and Caribbean marine environments. Two weekend field trips are required. Prerequisite: MBIO 2410. Frequency: Fall, even years.

MBIO 3800 Island Biogeography (0–3 credits)
Island biogeography is the study of the distribution and dynamics of species in island environments. Due to their isolation from more widespread continental species, islands are ideal places for unique species to evolve, but they are also places of concentrated extinction. There is little understanding of island geology, geography, climate, or the impact of colonization by plants, animals and humans. Natural and anthropogenic disturbances are common to island groups, all of which face extinctions of endemic flora and fauna, growing populations of invasive species, and increasing human resident and tourist populations. This course will examine the natural and human history of several island groups from early geologic development to plant and animal adaptation to anthropogenic influences on extinction and sustainable growth. Prerequisites: MBIO 2410 or MBIO 2500 or BIOL 3200. Frequency: Winter, even years.

MBIO 3801 Island Biogeography Field Course (0–1 credits)
Island biogeography is the study of the distribution and dynamics of species in island environments. Due to their isolation from more widespread continental species, islands are ideal places for unique species to evolve, but they are also places of concentrated extinction. There is little understanding of island geology, geography, climate, or the impact of colonization by plants, animals and humans. Natural and anthropogenic disturbances are common to island groups, all of which face extinctions of endemic flora and fauna, growing populations of invasive species, and increasing human resident and tourist populations. This field course will examine the natural and human history of the Hawaiian Islands from early geologic formation of the Big Island to plant and animal adaptation 5 million years in the future on the island of Kauai. Both islands will be explored from a terrestrial and aquatic perspective.Prerequisites: MBIO 3800. Frequency: Summer, even years.

MBIO 3910 Sharks and Their Relatives (3 credits)
This is a survey of three major groups of elasmobranch fishes: sharks, skates and rays, and chimera. This course will be divided into three main bodies of information: 1) the history and evolution of sharks and their relatives; 2) elasmobranch taxonomy; and 3) current and future research. Prerequisite: MBIO 2410. Frequency: Fall, odd years.

MBIO 4260 Ecology of the Galápagos Islands (3 credits)
This course will introduce and amplify principles of evolutionary ecology that occur in the unique setting of the Galapagos Islands. Lectures will cover the historical, geological, and biological aspects of the archipelago and will prepare the student for an immersive experience in the summer-based field course MBIO 4261. Prerequisite: MBIO 2410 or BIOL 1510 or BIOL 1510H. Frequency: Winter, odd years.

MBIO 4261 Ecology of the Galápagos Islands Field Trip (1 credit)
This field course will provide direct experience with principles of evolutionary ecology that were introduced in MBIO 4260 in the unique setting of the Galapagos Islands. The course will include visits to the Charles Darwin Research Station and several sites in the Galapagos National Park on the island of Santa Cruz, and offer additional experiences on other islands of the archipelago. Prerequisite: MBIO 4260. Frequency: Odd Year Summer.

MBIO 4900 Special Topics in Marine Biology (3 credits)
Topics in advanced marine biology that are not included in a regular course offering. Prerequisites may be required. Specific content and prerequisites are announced in the course schedule for the given term. Students may re-enroll for Special Topics covering different content. Frequency: Upon request.

MBIO 4900A Special Topics in Marine Biology: Food Web Dynamics (3 credits)
A food chain is simply “who eats what”. A food web weaves together many food chains to form a complicated network of feeding relationships. Many animals eat more than one thing, and each link in each chain is important and integral to the entire system. The interactions in a food web are far more complex than the interactions in a food chain. The most complex food webs follow certain patterns and that those patterns are shaped by a limited number of biological processes, such as population dynamics and energy flow. This course is designed to study the basic components and processes of trophic dynamics, how these comprise different terrestrial and aquatic ecosystems and how these systems can be altered and influenced. Prerequisite: BIOL 1510. Frequency: Upon request.

MBIO 4900B Special Topics in Marine Biology: Introduction to SCUBA Diving (3 credits)
Introduction to SCUBA diving provides a comprehensive curriculum of the skills and academics required to safely participate in SCUBA diving activities. The course is comprised of classroom lecture sessions as well as pool and open water sessions. Academic content includes the history, physics, physiology, equipment, specialties, and the underwater environment of recreational sport SCUBA diving. Pool and open water labs train proficiency in dive planning, safety, buddy system, equipment handling, diver assistance, air consumption, underwater problem solving, entry and exit procedures, proper buoyancy, and dive boat protocol. Prerequisites: Students must know how to swim and have good overall health and meet the following 2 requirements: (1) Students will perform a watermanship evaluation consisting of a 200 meter/yard continuous swim without the use of swim aids, followed by

a 10-minute water tread. Goggles may be worn during the watermanship evaluation. (2) Students must complete a PADI Medical History Questionnaire. Certain conditions may require a physician's pre-approval to dive. If a student answers "Yes" to any question on the PADI Medical History Questionnaire, the student must have the form signed by a physician giving his or her approval for the student to participate in SCUBA diving. Frequency: Upon request.

MBIO 4950 Internship in Marine Biology (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Upon request.

MBIO 4990 Independent Study Marine Biology (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and department chair. Frequency: Upon request.

MBIO 4990A Independent Study Marine Biology (A) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and department chair. Frequency: Upon request.

MBIO 4990B Independent Study Marine Biology (B) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and department chair. Frequency: Upon request.

MBIO 4990C Independent Study Marine Biology (C) (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and department chair. Frequency: Upon request.

MBIO 4990D Independent Study in Marine Biology (1–3 credits)
The student selects and independently carries out library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: Determined by faculty and department chair. Frequency: Upon request.

MGT—Management

MGT 1010 Introduction to Business (3 credits)
Provides an overview of the private enterprise system. Course topics include the key concepts of business, social responsibility, entrepreneurship, the management process, marketing, finance, and the legal and international environment of business.

MGT 2050 Principles of Management (3 credits)
Provides an overview of management history and theory, schools of management thought, the functions and processes of management, and the environment within which the modern manager operates. Frequency: Every Fall and Winter.

MGT 2050H Principles of Management Honors (3 credits)
Provides an overview of management history and theory, schools of management thought, the functions and processes of management, and the environment within which the modern manager operates. This course is open to HONORS students only. Frequency: Every Fall.

MGT 2150 Business Law I (3 credits)
Sets forth, explains, illustrates, and applies fundamental principles of business law to modern day business problems. Important subject matters covered are introduction to the legal system, constitutional law as applied to business, contract law and sales law, agency and employment law, types of business organizations, and torts and products liability law. Credit cannot be obtained for both this course and LEGS 3400. Frequency: Every Fall and Winter.

MGT 2510 Supervisory Skills (3 credits)
Studies the changing responsibilities of first-level supervisors. Topics include high-quality management, multicultural diversity, dealing with unions, equal opportunity legislation, discipline procedures, and organizational ethics and politics.

MGT 3020 Business Communications (3 credits)
Examines the strategies of effective written and oral business communications. Topics include persuasive messages, delivery of good news and bad news, sales letters, collection messages, design of business reports and oral presentations, use of visual aids, and resume preparation. Prerequisite: COMP 1500. Frequency: Every Fall and Winter.

MGT 3055 Managing Groups and Teams (3 credits)
Groups and teams are an integral part of today's global marketplace. This course focuses on exposing students to essential theories and concepts for analyzing, understanding, and managing groups and teams. Through course readings, case studies, and other methodologies designed to help students successfully work in and lead groups and teams, they will develop a firsthand understanding of group and team dynamics that can be applied to their personal and professional lives. Frequency: Every Fall and Winter.

MGT 3100 Managing Conflict and Change (3 credits)
Examines the impact of conflict, stress and change on the workplace and the quality of work life. Topics include the myriad of stressors and their effect as well as the selection of appropriate interventions and responses. Frequency: Every Fall and Winter.

MGT 3150 Business Law II (3 credits)
This course is a continuation of Business Law I. The course examines additional important business law subject matter areas, such as commercial paper and banking transactions, creditors and debtors rights and responsibilities, Internet law, intellectual property law, real property law, international business law, liability of accountants, wills and trusts, and personal property, gifts, and a bailment. Prerequisite: MGT 2150

MGT 3900 Management Internship (3–6 credits)
The Huizenga College internship fosters learning through the application of classroom theory in the workplace. During the course, the student also focuses on practical career skills and personal professional goals with individual guidance from the professor. The minimum work requirement is 180 hours during one semester (16 weeks). Contact Academic Advising for registration. ACADEMIC REQUIREMENTS: good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours. Frequency: Every Fall and Winter.

MGT 3901 Management Internship Extension (0 credits)
Students may register for this noncredit course to extend an internship for one term with the same or a new employer. ACADEMIC REQUIREMENTS: good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours.

Grading is Pass/Fail. Frequency: Every Fall and Winter.

MGT 4100 Business Ethics (3 credits)
Examines the nature of morality and theories of normative ethics. Identifies a variety of ethical issues and moral challenges involving consumers, the environment, the professions, and the role of the corporation in our society. Prerequisite: Senior standing. Frequency: Every Fall and Winter.

MGT 4170 Organizational Behavior (3 credits)
Organizational Behavior: Explores the interaction of individuals and the organization as a dynamic interplay that affects total organizational effectiveness. Topics include the role of effective communication in the organization, motivation, leadership and values. Prerequisite: MGT 2050. Frequency: Every Fall and Winter.

MGT 4880 Business Strategy and Policy (3 credits)
Business Strategy and Policy is an integrative senior course in strategic management building on functional area learning in management, accounting, finance, operations and marketing. The course focuses on the solution of specific business problems utilizing a corporate simulation which requires students to develop a strategy to lead their own company and implement the strategy through tactics for operations, management, marketing, and finance. Students are measured by a balanced scorecard estimating their performance in each area and their preparation for the future. Prerequisites: FIN 3010 and Senior Standing. Frequency: Every Fall and Winter.

MGT 4910 Advanced Special Topics (3 credits)
Examines topics in management that are not included in regular course offerings. Specific content and possible prerequisites are announced in the course schedule for a given term. Students may reenroll for Special Topics covering different content. Prerequisites: MGT 2050 and MGT 4170. Frequency: Every Fall and Winter.

MGT 4920 Advanced Special Topics (3 credits)
Examines topics in management that are not included in regular course offerings. Specific content and possible prerequisites may vary. Students may re-enroll for special topics covering different content. Frequency: Every Fall and Winter.

MKT—Marketing

MKT 3050 Marketing Principles and Application (3 credits)
A focus on the marketing concept, and examination of a marketing oriented firm. Topics include consumer behavior, market analysis and the marketing mix. Students will produce a marketing plan. Frequency: Every Fall and Winter.

MKT 3060 Consumer Behavior (3 credits)
This course introduces students to marketing concepts and theories developed in the behavioral and economic sciences (cultural anthropology, psychology, social-psychology, and sociology) as they relate to consumer and business markets. Students will examine models of consumer behavior and organizational buying. They will learn how these behaviors are influenced by principles of learning, motivation, personality, perception, and group influence. Frameworks of consumer and buyer behavior are discussed in the context of advertising/promotion, product management, and the development of effective marketing strategies. Prerequisite: MKT 3050. Frequency: Every Fall and Winter.

MKT 3100 Services Marketing (3 credits)
Explores the marketing of services, highlighting the distinctions that exist in the marketing of intangibles. Presents strategies for marketing of services versus the traditional product related marketing. Prerequisite: MKT 3050. Frequency: Every Fall and Winter.

MKT 3110 Retail Management (3 credits)
To critically analyze the retailing process, the environment within which it operates, and the institutions and functions that are performed. To familiarize students with the decisions involved in running a retail firm and the concepts and principles for making those decisions. To provide a foundation for those students who plan to work in retailing or related disciplines. In this class, you will learn about the evolution of retailing and its implications in a global, high-technology industry. Technological developments have affected the way consumers buy products and services and the way retailers run their businesses. You will examine decision support systems to develop merchandise assortments, evaluate retail sites, manage sales associates, and target promotions to customers. While the course focuses on the retail industry including retailers of consumer services, the content of the course is useful for students interested in working for companies that interface with retailers such as manufacturers of consumer products or for students with a general management or entrepreneurial interest. Prerequisite: MKT 3050. Frequency: Every Fall and Winter.

MKT 3210 Professional Selling (3 credits)
The focus of this course is to introduce students to the field of professional and personal selling, their role in marketing, and the overall sales process required to cultivate long-term relationships through effective communications, rapport and bonding strategies. Prereq: MKT 3050 or SPT 3650. Frequency: Every Fall and Winter.

MKT 3220 Advanced Selling (3 credits)
The focus of this course is the application of contemporary selling behaviors that apply to any industry. Building on concepts learned in MKT 3210, students explore the role of professional selling in the firm?s marketing strategy. This course is designed to develop one?s selling and communication skills via mock presentations and role plays. Prereq: MKT 3210. Frequency: Every Fall.

MKT 3230 Managing the Sales Force (3 credits)
In this course, students will learn to develop selling strategies for effective sales proposals that ensure high probability sales closure. State-of-the-art techniques will be discussed for crafting customer oriented presentations using appropriate media and demonstration tools. Students will also learn powerful techniques for avoiding buyer remorse and maintaining ongoing relationships. In addition, business development strategies will be learned using innovative techniques. Prerequisites: MKT 3220. Frequency: Every Winter.

MKT 3320 International Marketing (3 credits)
The course studies the scope of international marketing, the structure of multinational markets, foreign market research, international advertising and promotion, international distribution channels, international product policy, international pricing policy, and export/import management. Frequency: Every Fall and Winter.

MKT 3510 Customer Value & Relationship Marketing (3 credits)
MKT 3510 Customer Value & Relationship Mkt.(3 Credits):The Customer Value and Relationship Marketing course builds on the principle the customer is at the center of the firm's activity and that by delivering superior value and building long-term relationships the firm will be competitive and generate sales and profits. Every successful firm whether marketing to consumers or to businesses, has developed customer relationship strategies, tools, and processes

to provide outstanding value to customers. The course approaches building customer value and relationships from three important perspectives. First, the course focuses on the customer using key marketing concepts such as satisfaction, loyalty, retention and the strategies used to build these. Second, the course develops implementing customer relationship management from the organizational perspective across all functional areas and with special emphasis on sales and marketing. Third, the course introduces students to the importance of data management as a foundation of customer relationship management and marketing insight and the importance of evaluative tools to measure the progress of a customer relationship program. The course will use lectures, discussions, case problems and written assignments. Prerequisite: MKT 3050. Frequency: Every Winter.

MKT 3600 Digital and Search Engine Marketing (3 credits)
In this course, students will examine how online marketing techniques can maximize brand awareness and sales generation. Through marketing plan and other exercises, students will learn how to develop advertising and communications strategies that blend traditional marketing concepts with marketing in a digital age. Specifically, the course demonstrates how to boost website traffic through online advertising, precision email campaigns and websites designed for customer usability. In addition, students will further examine how engine marketing techniques and keyword research are used in Web 2.0 environments to maximize website exposure and viewer experience. The course will then demonstrate the most effective ways to measure these results through web analytics. Prerequisites: MKT 3050. Frequency: Every Fall and Winter.

MKT 3605 Content Marketing (3 credits)
This course provides an extensive overview of content marketing strategies that activate a marketer?s engagement with their social media communities. Using both educational and entertaining formats, students will learn how to best engage their target communities with a media mix of video, photo-based, graphic, audio and textual content. Strategies will be developed for creating and sequencing blogs, eBooks, webinars, podcasts, e-newsletters, slide shows and other talk-worthy content that educates and/or entertain target audiences while laying the foundation for a loyal following. Students will further examine how this online content can boost search engine results and social media reach while enabling targeted email campaigns to track audience needs from content downloading behaviors used in online selling strategies. Frequency: Every Winter.

MKT 3610 Social Networking (3 credits)
This course offers a comprehensive overview of how social networking is used in brand awareness and sales generation. Specifically, students will become familiar with the role played by social networks in spreading marketing content, building target audience communities and creating thought leadership. Tools and techniques will be introduced for posting, pinning and sharing content through Facebook, LinkedIn, Twitter, Google+, Tumblr and a variety of photo and video sharing networks. Students will learn how to activate and engage communities of these networks with contests and brand conversations as well as share-worthy content. The course includes social media marketing plan exercises that provide hands-on experience in both social community development and fan engagement. In addition, context-marketing strategies will be examined for reaching audiences through location-based services, mobile apps and behavioral targeting techniques.Prerequisites: MKT 3600. Frequency: Every Winter.

MKT 3800 Entrepreneurial Marketing (3 credits)
The successful entrepreneur if faced with the challenge of innovation and growth, often with limited resources. How innovation -in the form of new products, services, and business concepts -is brought to the marketplace will be explored using small and start-up businesses, new economy companies, and corporate entrepreneurial models. Coursework will include defining market opportunities, value propositions, target-marketing, positioning strategy, branding, promotion (including public relations and guerilla marketing), distribution, including the Web, pricing, and customer relationship management in the context of entrepreneurial setting, resources, and culture. Case studies will be used to exemplify the various steps in launching successful products, businesses and initiatives. The course will culminate in the preparation and presentation of a marketing plan geared to the entrepreneurial organization. Prerequisites: MKT 3050. Frequency: Every Fall and Winter.

MKT 3900 Marketing Internship (3 credits)
The Huizenga College internship fosters learning through the application of classroom theory in the workplace. During the course, the student also focuses on practical career skills and personal professional goals with individual guidance from the professor. The minimum work requirement is 180 hours during one semester (16 weeks). Contact Academic Advising for registration. ACADEMIC REQUIREMENTS: good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours. Prerequisite: MKT 3050. Frequency: Every Fall and Winter.

MKT 4100 Integrated Marketing Communication (3 credits)
The Integrated Marketing Communication course introduces students to the concept and application of integrating the elements of advertising, sales promotion, public relations, direct marketing and other essentials of the marketing mix to support the overall marketing strategy. IMC allows marketers to effectively and efficiently reach prospects and retain customers with consistent brand messages in the context of fragmented media and increasing customer empowerment through the Internet. Emphasis will be placed on linking the fundamentals of segmentation, targeting, positioning, buyer behavior, and branding with planning, budgeting, and executing a comprehensive, integrated marketing communication program from message development through media selection. Prerequisite: MKT 3060. Frequency: Every Fall and Winter.

MKT 4700 Marketing Research (3 credits)
This course outlines the fundamentals of research methodology and its application to the solution of marketing problems. Students are exposed to procedures and analytical tools for collection, analysis and interpretation of data for marketing decisions. Topics include: problem definition, research design, questionnaire construction, sampling, attitude scaling, statistical analysis, presentation and evaluation or research findings. A field research project may be included. Prerequisites: MKT 3060. Frequency: Every Fall and Winter.

MKT 4710 Marketing Strategy (3 credits)
Examines marketing activities from the viewpoint of the marketing executives. Topics include strategic planning and policy formulations; the use of marketing research; test marketing of products; and inter-company coordination of pricing and promotion. Prerequisites: MKT 3060 and Senior-level standing. Frequency: Every Fall and Winter.

MUSC—Music

MUSC 1200 Piano I (3 credits)
A laboratory class designed to integrate aural and written theory through the development of keyboard proficiency. Frequency: Every Fall and Winter.

MUSC 1250 Piano II (3 credits)
A laboratory class designed to further integrate aural and written theory through development of keyboard proficiency. Prerequisite: MUSIC 1200. Frequency: Every Winter.

MUSC 1300 Beginning Guitar Class (3 credits)
A course designed to learn basic rhythmic patterns and scales, standard chord sequences and progressions from different styles for the developing electric or acoustic guitar player. Frequency: Every Fall and Winter.

MUSC 1500 Beginning Voice (3 credits)
A performance-oriented course designed to introduce, develop and reinforce fundamental vocal skills and techniques. Frequency: Every Fall.

MUSC 1800 Music Theory I (3 credits)
A course designed to introduce the study of music theory beginning with rhythm and pitch and progressing through melody and harmony. Frequency: Every Fall.

MUSC 1960 Commercial Music Theory (3 credits)
This course will introduce fundamentals of music theory including chord progressions, song forms, and harmonic techniques used in commercial music. Students will develop the foundation to write and analyze commercial music. Pre-requisites: None. Course Frequency: Every Fall.

MUSC 2401 Basic Applied Voice I (2 credits)
Applied studio are lessons one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: Permission of division director. Frequency: Every Fall and Winter.

MUSC 2402 Basic Applied Voice II (2 credits)
Applied studio lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2401. Frequency: Every Fall and Winter.

MUSC 2403 Basic Applied Voice III (2 credits)
Applied studio lessons are on-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2402. Frequency: Every Fall and Winter.

MUSC 2404 Basic Applied Voice IV (2 credits)
Applied studio lessons are one-on-one with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2403. Frequency: Every Fall and Winter.

MUSC 2411 Basic Applied Piano I (2 credits)
Applied one-on-one lessons with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: Permission of division director. Frequency: Every Fall and Winter.

MUSC 2412 Basic Applied Piano II (2 credits)
Applied one-on-one lessons with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2411. Every Fall and Winter.

MUSC 2413 Basic Applied Piano III (2 credits)
Applied one-on-one lessons with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2412. Frequency: Every Fall and Winter.

MUSC 2414 Basic Applied Piano IV (2 credits)
Applied one-on-one lessons with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2413. Frequency: Every Fall and Winter.

MUSC 2421 Basic Applied Instrument I (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: Permission of division director. Frequency: Every Fall and Winter.

MUSC 2422 Basic Applied Instrument II (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2421. Frequency: Every Fall and Winter.

MUSC 2423 Basic Applied Instrument III (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2422. Frequency: Every Fall and Winter.

MUSC 2424 Basic Applied Instrument IV (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2423. Frequency: Every Fall and Winter.

MUSC 2600 Music Production I (3 credits)
This three credit course is an introduction to

the use of computers in music production and music notation. Basic software and concepts in music technology will be explored and applied. Sources, selection, evaluation, creation, and implementation of electronic media for the musician will be covered in this course. Frequency: Even Year Fall.

MUSC 2700 Musical Theatre Performance I (2 credits)
A two credit course which includes studio training in the techniques, repertoire, and business acumen required for the musical theatre professions. Prerequisite: MUSC 1200 or MUSC 1500 or MUSC 1800 or THEA 2020. Frequency: Every Winter.

MUSC 2900 Introduction to the Music Industry (3 credits)
This course will introduce and examine the music industry from a practical, historical, and contextual viewpoint. The music product will be considered as well as career options for students as developing producers and performers. Students will develop the foundation to produce and analyze commercial music. Pre-requisites: None. Course Frequency: Odd Year Winter.

MUSC 2960 Creating Commercial Music (3 credits)
This course will develop the necessary music theory fundamentals to create commercial music. Students will analyze commercial repertoire to more fully understand improvisation, stylistic interpretation, and application of technical skill. Prerequisite MUSC 1960. Course Frequency: Even Year Winter.

MUSC 3301 Ensemble I (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: permission of division director. Frequency: Every Fall and Winter.

MUSC 3302 Ensemble II (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: MUSC 3301. Frequency: Every Fall and Winter.

MUSC 3303 Ensemble III (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: MUSC 3302. Frequency: Every Fall and Winter.

MUSC 3304 Ensemble IV (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: MUSC 3303. Frequency: Every Fall and Winter.

MUSC 3305 Ensemble V (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: MUSC 3304. Frequency: Upon Request; see academic department chair.

MUSC 3306 Ensemble VI (1 credit)
A performance-based course in which a group of musicians (vocal or instrumental) perform together. Vocal ensemble may be a chorus or choir and instrumental ensemble may be an orchestra or band. Depending on the number of participants, an ensemble may be quartets, quintets, etc. Pass/Fail only. Prerequisite: MUSC 3305. Frequency: Upon Request; see academic department chair.

MUSC 3600 Music of World Cultures (3 credits)
This course will introduce musical traditions from around the world and examine how cultural setting shapes the music. The meanings derived from musical styles and structures will be assessed through active and informed listening. Non-Western cultures studied may include West Africa, Asia, India, Latin America, and more. Prerequisite: COMP 2000, COMP 2000H, COMP 2010, or COMP 2020. Course Frequency: Every Winter.

MUSC 3701 Advanced Musical Theatre Performance I (2 credits)
A two credit course which includes advanced studio training in the techniques, repertoire, and business acumen required for the musical theatre profession. Prerequisite: MUSC 2700. Frequency: Every Fall.

MUSC 4100 Composition/MIDI (3 credits)
This course is designed to study in detail contemporary composition techniques including free pentatonic music, pandiatonicism, impressionism, polytonality, tonal contradiction, and interval harmony. Composition of music in the digital domain, from the basic concepts behind synthesizers and sequencers to production techniques such as mixing, mastering and signal processing will be covered. Prerequisite: MUSC 1800. Frequency: Odd Year Fall.

MUSC 4401 Advanced Applied Voice I (2 credits)
Applied voice lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of vocal repertoire and solid vocal technique. Registration for this class requires a private lesson fee. Prerequisite: MUSC 3701. Frequency: Every Fall and Winter.

MUSC 4402 Advanced Applied Voice II (2 credits)
Applied voice lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of vocal repertoire, and a solid vocal technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4401. Frequency: Every Fall and Winter.

MUSC 4403 Advanced Applied Voice III (2 credits)
Applied voice lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of vocal repertoire, and a solid vocal technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4402. Frequency: Upon Request; see academic department chair.

MUSC 4404 Advanced Applied Voice IV (2 credits)
Applied voice lessons are one-on-one sessions with student and instructor

designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of vocal repertoire, and a solid vocal technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4403. Frequency: Upon Request; see academic department chair.

MUSC 4411 Advanced Applied Piano I (2 credits)
Applied Studio lessons are advanced one-on-one sessions with students and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 2414. Frequency: Every Fall and Winter.

MUSC 4412 Advanced Applied Piano II (2 credits)
Applied studio lessons are advanced one-on-one sessions with students and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4411. Frequency: Every Fall and Winter.

MUSC 4413 Advanced Applied Piano III (2 credits)
Applied studio lessons are advanced one-on-one sessions with students and instructors designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4412. Frequency: Upon Request; see academic department chair.

MUSC 4414 Advanced Applied Piano IV (2 credits)
Applied studio lessons are advanced one-on-one sessions with students and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4413. Frequency: Upon Request; see academic department chair.

MUSC 4421 Advanced Applied Instrument I (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of repertoire, and a solid technique. Prerequisite: MUSC 2424. Frequency: Every Fall and Winter.

MUSC 4422 Advanced Applied Instrument II (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of repertoire, and a solid technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4421. Frequency: Every Fall and Winter.

MUSC 4423 Advanced Applied Instrument III (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of repertoire, and a solid technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4422. Frequency: Upon Request; see academic department chair.

MUSC 4424 Advanced Applied Instrument IV (2 credits)
Applied instrument lessons are one-on-one sessions with student and instructor designed to address and correct faults, develop the ability to perform with appropriate musical style, and synthesize musical technique for aesthetic interpretation. This is an advanced course requiring strong music skills, a knowledge of repertoire, and a solid technique. Registration for this class requires a private applied lesson fee. Prerequisite: MUSC 4423. Frequency: Upon Request; see academic department chair.

MUSC 4900 Special Topics in Music (3 credits)
An advanced course in a particular composer, composition, or musicological period. Specific focus to be announced. May be repeated once for credit if content changes and with written consent of division director. Prerequisites: one MUSC course and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Upon Request; see academic department chair.

MUSC 4950 Internship in Music (3 credits)
Internship in Music requires a 15-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of division director. Repeatable to 6 credits. Frequency: Every Fall and Winter.

MUSC 4990 Independent Study in Music (3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of division director required. Prerequisites: one MUSC course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Upon Request; see academic department chair.

MUSE—MUSE-Museum

MUSE 1000 Transdisciplinary Arts: Demystifying the Creative Process (3 credits)
"Viewing and creating art come together in this immersive, interdisciplinary museum experience. Through in-depth study of a variety of art forms, students will examine the cultural conditions of artistic production through object-based observation. Workshops in a variety of disciplines including visual art, music, dance and drama will develop and strengthen an understanding and appreciation of self-expressive art-making experiences, nurturing spontaneity, improvisation and imagination. Students will explore the inter-relationships of the theory and practice learned in context to each student's individual course of study. Innovation can be found at the intersection of distinct disciplines. The purpose of this course is to expose students to a variety of artistic forms; facilitate an understanding of the arts in theory, context and practice; form relationships between various artistic disciplines; and develop students' capacity to apply creative problem solving to any field of study. The role of the museum as laboratory is explored through the unique resources available within the exhibits, facilities and studios at the Museum of Art | Fort Lauderdale and its Academy of Art." Frequency: Upon Request.

NEUR—Behavioral Neuroscience

NEUR 2500 Introduction to Neuroscience/Lab (4 credits)
This course highlights the biological structures and functions of the brain and nervous system and introduces the fundamental concepts in neuroscience and research methods used by behavioral neuroscientists. Concepts range from cellular to behavioral aspects of neuroscience. Frequency: Every Fall and Winter.

NEUR 2600 Introduction to Neuroanatomy (3 credits)
This course will introduce students to structural, functional, and developmental features of the human nervous system. After each major structure, system, or anatomical pathway is presented, a clinical component will emphasize normal function and dysfunction resulting from injury or disease. Clinical cases will be presented to reinforce the relationship between structure and function. Prerequisite: NEUR 2500 Frequency: Every Fall.

NEUR 2700 Research Methods and Data Analysis in Behavioral Neuroscience /Lab (4 credits)
This course will introduce students to a wide range of research strategies and methods being used by behavioral neuroscientists. The course will focus on modern, common techniques used in hypothesis-driven research to collect scientifically relevant and publishable data. Examples from various areas of inquiry (e.g., learning and memory, sleep, etc.) will be used to illustrate both applications and limitations of these techniques. Prerequisite: NEUR 2500 Frequency: Every Winter.

NEUR 3000 Behavioral Genetics (3 credits)
This course provides an overview of the role of genes in animal (primarily human) behavior. Topics covered include population genetics and quantitative genetics of behavior, the molecular biology of gene discovery, and the evolution of behavioral traits. Methods and research techniques in behavioral genetics will also be covered ranging from twin and adoption studies to molecular techniques. Prerequisite: NEUR 2500 Frequency: Every Fall.

NEUR 3100 Developmental Neuroscience (3 credits)
This course provides an overview of the progressive stages of neural development. The course will focus on molecular aspects of developmental neuroscience, with an emphasis on known signaling pathways involved in neural growth and specification. Current research in several fields such as growth cone guidance and collapse, activity dependent development, and applications of these to injury and disease will be discussed. Prerequisite: NEUR 2500 Frequency: Even Year Fall.

NEUR 3200 Drugs and the Brain (3 credits)
This course provides a foundation in neuropharmacology. Topics covered include the impact of psychotropic drugs on the nervous system, basic principles of pharmacodynamics and pharmacokinetics, synaptic transmission, and an overview of brain structure and function. Prerequisite: NEUR 2500 Frequency: Odd Year Winter.

NEUR 4100 Neurobiology of Disease (3 credits)
This course is based on the National Institutes of Health Blueprint for Course Development in the Neurobiology of Disease. This course provides a lecture and literature based overview of neurodegenerative diseases and disorders. The course will focus on basic genetic, molecular, and cellular mechanisms that underlie a wide range of neurodegenerative diseases and disorders. The course is designed to foster an understanding of the links between basic science, disease-oriented research, and translational research. The course offers a foundation of knowledge in critical areas of basic and clinical neuroscience. Prerequisites: NEUR 2500. Frequency: Even Year Winter.

NEUR 4880 Senior Seminar in Behavioral Neuroscience (3 credits)
Students will have the opportunity to integrate information from a variety of specialties in behavioral neuroscience. Each seminar will have a focal theme that will allow students to gain new perspectives, as well as apply knowledge from prior courses and experiences. This course is presented as a capstone experience; therefore students with advanced standing in the behavioral neuroscience major will benefit the most from the seminar. Prerequisite: NEUR 2700. Frequency: Every Winter.

NEUR 4990A Independent Study in Behavioral Neuroscience A (1–3 credits)
Independent, faculty supervised academic research. Students will develop the research questions and the techniques for their study. Topics will vary by individual research projects. Prerequisite: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

NEUR 4990B Independent Study in Behavioral Neuroscience B (1–3 credits)
Independent, faculty supervised academic research. Students will develop the research questions and the techniques for their study. Topics will vary by individual research projects. Prerequisite: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

NEUR 4990C Independent Study in Behavioral Neuroscience C (1–3 credits)
Independent, faculty supervised academic research. Students will develop the research questions and the techniques for their study. Topics will vary by individual research projects. Prerequisite: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

NEUR 4990D Independent Study in Behavioral Neuroscience D (1–3 credits)
Independent, faculty supervised academic research. Students will develop the research questions and the techniques for their study. Topics will vary by individual research projects. Prerequisite: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

NUR—Nursing

NUR 2500 Basic Concepts of Professional Nursing (3 credits)
This course introduces the first year college student to the concept of professionalism, including the core values of Nova Southeastern University College of Nursing. Roles of the professional nurse including provider of care, coordinator of care, advocate, educator, researcher, leader, and member of the profession will be presented. Basic terminology commonly used in health care environments and introductory nursing skills that promote safe and effective nursing practice will be presented. The history of nursing and how society views the nursing profession are discussed. The student is introduced to theories and quality measures that influence nursing practice and patient-centered care. Ethical and legal principles, sociocultural concepts, and political principles guiding the profession will also be addressed. Frequency: Every Winter

NUR 3000 Transition to Baccalaureate Nursing Education for Registered Nurses (3 credits)
This course is designed to assist the

registered nurse as an adult learner to make the transition to the university setting and the role of the nursing student. Students will be introduced to computer skills that facilitate success in achieving their educational goals at NSU and how the application of these skills can be used in nursing practice. Students will learn computer skills that include foundational concepts of information technology, Microsoft Office, and access to the NSU online library data bases and resources to support evidence-based practice. In addition, students will be introduced to the concepts of the American Psychological Association (APA) and scholarly writing. Emphasis is placed on the development of the knowledge and competencies in computer technology that are necessary for registered nurses in education and healthcare. The class will involve active participation in cooperative group activities as well as individualized activities. Frequency: Every Fall and Winter

NUR 3002 Introduction to Baccalaureate Nursing Education (3 credits)
This course is designed to introduce the novice nursing student to the discipline of nursing building on the liberal arts education. During the course, students will be introduced to the knowledge and skills essential for understanding the role of the baccalaureate nurse. Opportunities for scholarly writing and conducting library searches focused on using evidence to support nursing practice will be provided. Use of technology as a tool for learning and time management are additional skills that will be emphasized. The class will involve active learning in both individual and team activities. Co-requisites: NUR 3005 & PHS 4904. Frequency: Every Fall and Winter

NUR 3005 Mathematical Applications for Nursing Practice (2 credits)
This course builds upon previously learned mathematical skills needed to calculate pharmacological dosages for safe medication administration in the clinical setting. Students are taught dimensional analysis as the appropriate clinical/critical reasoning method to ensure safety and quality when determining medication dosages for patients. Students are also taught how to calculate enteral and parenteral dosages. Co-requisites: NUR 3002, NUR 3160, and PHS 4904. Frequency: Every Fall and Winter

NUR 3013 Transition to Professional Nursing (3 credits)
This course focuses on the role transition to professional nurse as provider of care, manager of care, and member of the profession. The students will explore the history of nursing and how society views the nursing profession. Ethical and legal principles guiding the nursing profession are introduced. Frequency: Every Fall and Winter

NUR 3020 Theoretical Foundations to Nursing Practice (3 credits)
This course focuses on the practicing nurse's acquisition, evaluation, utilization, and interpretation of nursing theories as a foundation for patient-centered care. In addition, nursing practice knowledge will be derived from the interpretation and application of selected theories from other disciplines. Frequency: Every Fall and Summer

NUR 3029 Foundations of Health Assessment (3 credits)
This course introduces the entry level student to foundational health assessment skills emphasizing data collection. Students will be expected to use principles based on the biological sciences to perform a holistic health assessment. Students will interpret pertinent data in order to make sound clinical judgments needed to deliver safe, quality and effective nursing care. Students will demonstrate competency in communicating and documenting assessment findings. Integrity, compassion and stewardship will be discussed as they relate to cultural awareness and legal and ethical issues that pertain to health assessment. Prerequisites: PHS 4904, NUR 3160, and NUR 3005. Co-requisites: NUR 3032, NUR 3131, and NUR 3130. Frequency: Every Winter and Summer

NUR 3030 Health Assessment (3 credits)
This course emphasizes the knowledge, skills, and competencies necessary to complete a health assessment for clients across the life span. This course analyzes the concepts of health assessment methodology which include interviewing, history taking, and physical assessment. Students will be expected to utilize assessment skills in identifying pertinent data as it relates to evidence-based health promotion and health education strategies. Frequency: Every Fall and Winter

NUR 3031 Pathophysiology (3 credits)
The focus of the course is on the pathogenesis of selected diseases leading to alterations of body structure and functions across the lifespan. This is emphasized through case study review discussing and applying cell structure, function, genetic control and its impact on the disease process. The students will integrate and apply pathophysiological concepts to client care in the development of primary, secondary, and tertiary interventions to attain, maintain, and retain the health state. Contemporary treatment, legal and ethical issues and health promotion concepts pertaining to pathophysiological disorders will be explored. Frequency: Every Fall and Winter

NUR 3032 Foundations of Pathophysiology (3 credits)
This course introduces the entry level student to concepts of pathophysiology based on principles from the biological sciences. Students will examine the phenomena that cause changes in physiological functioning. Specific system disorders will be investigated, using current evidence-based literature, as a basis for health promotion. Students will utilize pathophysiological concepts as a basis for making sound clinical judgments needed to deliver safe, quality and effective care. Ethnic, cultural and other influences on health will be discussed. Prerequisite/s: PHS 4904, NUR 3002, NUR 3160, and NUR 3005. Co-requisites: NUR 3130, NUR 3029, and NUR 3131 Frequency: Every Winter and Summer

NUR 3050 Research Methodologies and Evidence–Based Practice (3 credits)
This course prepares the baccalaureate nursing students to become consumers of research. Students will be introduced to the research processes essential to providing evidence based nursing care. Research designs will be discussed as a basis for critiquing the efficacy of selected research studies. Students will be introduced to the legal and ethical principles which guide the integrity of nursing research. The nurse's role in retrieval, appraisal, and synthesis of evidence in collaboration with members of the interprofessional team to improve patient outcomes will be addressed. Co-requisites: NUR 4110, NUR 3192. Prerequisites: NUR 3180, NUR 3191. Frequency: Every Winter and Summer

NUR 3051 Introduction to Nursing Research (3 credits)
This course introduces essential concepts of nursing research and evidence-based practice. Students will review the scientific merit of research methods with an emphasis on implication and application for evidence based nursing practice. Practicing Registered Nurses will build upon existing knowledge and skills related to research to improve patient outcomes, nursing practice, and interprofessional collaboration. Students will also examine the contemporary trends and legal and ethical issues related to the research process. Prerequisites: NUR 3020 and Math

2020. Frequency: Every Fall and Summer

NUR 3130 Foundations of Professional Nursing Practice (6 credits)
This course introduces the entry level student to the discipline of nursing in which they will provide holistic and compassionate care for diverse populations. Students will begin to develop the knowledge, skills and attitudes needed to provide safe, quality and effective nursing care. Students will start to use clinical/critical reasoning, communication and assessment skills to care for patients across the health illness continuum understanding the need for stewardship and integrity in this changing healthcare environment. The roles of provider of care, coordinator of care, advocate and educator will be applied in the delivery of competent patient care. Prerequisites: NUR 3002, NUR 3160, NUR 3005, and PHS 4904. Co-requisites: NUR 3029, NUR 3131, and NUR 3032. Frequency: Every Winter and Summer

NUR 3131 Problem Solving Strategies for Nursing Practice (1 credit)
This course introduces the entry-level nursing student to problem solving and clinical/critical reasoning skills and strategies needed for safe decision making in the delivery of nursing care. Using patient scenarios and/or case studies, students will apply the nursing process to determine safe, quality and effective nursing care. Prerequisites: NUR 3002, NUR 3160, NUR 3005, and PHS 4904. Co-requisites: NUR 3130, NUR 3032, NUR 3029. Frequency: Every Winter and Summer

NUR 3160 Introduction to Professional Nursing (3 credits)
This course introduces the student to the roles of the professional nurse including provider of care, coordinator of care, advocate, educator, researcher, leader, and member of the profession. The history of nursing and how society views the nursing profession are discussed. The student is introduced to theories and quality measures that influence nursing practice and patient-centered care. Ethical and legal principles, sociocultural concepts, and political principles guiding the profession will also be addressed. Prerequisite: NUR 3002 Co-requisites: NUR 3005 and PHS 4904. Frequency: Every Fall and Winter

NUR 3180 Primary Concepts of Adult Nursing (6 credits)
This course introduces the entry level student to the application of nursing concepts in order to provide holistic and compassionate care for patients who have specific disorders. Students will apply knowledge, skills and attitudes needed to provide safe, quality and effective nursing care. Students will continue to develop clinical/critical reasoning, communication and assessment skills to care for patients across the health illness continuum understanding the need for stewardship and integrity in this changing healthcare environment. Topics covered include gastrointestinal, endocrine, genitourinary, immunological, hematological and oncological disorders. Co-requisites: NUR 3191, BHS 3110. Prerequisites: NUR 3002, NUR 3160, NUR 3005, PHS 4904, NUR 3130, NUR 3032, NUR 3029, and NUR 3131. Frequency: Every Fall and Summer

NUR 3191 Pharmacological Basis for Nursing Interventions I (2 credits)
This course introduces the entry level student to pharmacologic concepts in order to provide safe and effective care for patients who have specific disorders. The concepts of drug efficacy, pharmacokinetics, mechanism of action, and medication interactions will be introduced as a basis for providing safe, quality, and effective nursing care. Students will apply dimensional analysis to calculate safe medication dosages. Students will begin to develop clinical/critical reasoning as related to the nurse's role in pharmacotherapy. Topics covered include medications used in the treatment of gastrointestinal, endocrine, immune, oncological disorders and in the treatment of pain, anxiety and depression. Co-requisite: NUR 3180. Prerequisite/s: NUR 3130, NUR 3029, NUR 3032, and NUR 3131. Frequency: Every Fall and Summer.

NUR 3192 Pharmacological Basis for Nursing Interventions II (2 credits)
This course provides opportunities for the entry level student to integrate pharmacologic concepts in order to provide safe and effective care for patients who have specific disorders. Students will apply dimensional analysis to calculate safe medication dosages. The concepts of drug efficacy, pharmacokinetics, mechanism of action, and medication interactions will be examined as a basis for safe, quality, and effective nursing care. Students will continue to improve clinical/critical reasoning as related to the nurse's role in pharmacotherapy. Topics covered include medications used in the treatment of cardiovascular, peripheral vascular, respiratory, neurological, musculoskeletal and sensory disorders. Co-requisites: NUR 4110, NUR 4020. Prerequisites: NUR 3180, NUR 3191. Frequency: Every Fall and Winter

NUR 4020 The Nurse as a Leader and Manager (3 credits)
This course is designed to assist the baccalaureate nursing student apply leadership and management theories, concepts, and skills. Principles of stewardship, prioritization, delegation, quality improvement, patient safety, and evidence-based practice will be discussed. Students will examine the basic concepts of an organizational structure, mission, vision, philosophy, and core values as they relate to individual ethics and values. Students will investigate power, accountability, conflict management and team-building within an interprofessional team. Legal, ethical, and political issues that impact quality and safety in the delivery of compassionate and competent patient care will be analyzed. Co-requisites: NUR 4110, NUR 3192. Prerequisites: NUR 3180 and NUR 3191. Frequency: Every Fall and Winter

NUR 4021 Transformational Nursing Leadership (3 credits)
This course focuses on evidence-based leadership and management skills and competencies needed by professional nurses to be full partners and work productively in interprofessional teams to facilitate the transformation of complex healthcare systems. Students will analyze current best practices related to leadership roles, organizational communications, team dynamics in learning organizations, quality improvement, safe patient-centered care, and the role nursing leadership related to information systems. The course will assist the students to differentiate the concepts of contemporary trends in leadership, management theories, development of self, and communication skills necessary to influence behaviors. Emphasis will be placed on organizational systems structure and culture, change management, human resource management, and performance improvement in care delivery systems. Legal and ethical issues related to leadership and management will be analyzed. Frequency: Every Winter and Summer

NUR 4030 The Business of Health Care (3 credits)
This course focuses on the financial environments of healthcare systems and how they relate to today's professional nursing roles in leadership, management, and patient-centered care, incorporating the values of stewardship, integrity and competence. Students will analyze the principles of financial management, healthcare reimbursement, regulatory processes, healthcare policy, and healthcare reform related to current nursing practice. This course will assist the student to differentiate the concepts of cost and revenue, accounting vocabulary, budgeting, human resource management, and financial processes, functions, and

reports commonly utilized in healthcare systems. Emphasis will be placed on the political and economic forces that influence the development of health policy and professional nursing practice. Students will assess how financial management integrates with safety, information technology, patient-centered care, interprofessional teams, quality, and evidence-based practice. Frequency: Every Fall and Summer

NUR 4031 The Business of Healthcare in Complex Systems (3 credits)
This course focuses on the financial environments of healthcare systems and how they relate to today's professional nursing roles in leadership, management, and patient-centered care. Students will analyze the principles of financial management, healthcare reimbursement, regulatory processes, healthcare policy, and healthcare reform related to current nursing practice. This course will assist the student to differentiate the concepts of cost and revenue, accounting vocabulary, budgeting, human resource management, and financial processes, functions, and reports commonly utilized in healthcare systems. Emphasis will be placed on the political and economic forces that influence the development of health policy and professional nursing practice. Students will assess the how financial management integrates with safety, information technology, patient-centered care, interprofessional teams, quality, and evidence-based practice. Frequency: Every Winter and Summer.

NUR 4060 RN to BSN Directed Study (3 credits)
Students select an area of study in cooperation with the course advisor and/or department coordinator. The project may include such items as work-related studies, program development, grant proposals and/or planning documents. A comprehensive paper will be developed and delivered according to the NSU Nursing requirements for written assignments. Student must receive departmental and advisor approval in order to be allowed to register for this course. Frequency: Upon Request see academic Department Chair

NUR 4061 RN to BSN Directed Study (1 credit)
Students select an area of study in cooperation with the course advisor and/or Program Director. The project may include work-related studies, program development, or investigation of a subject of interest. A presentation will be developed and delivered according to the NSU Nursing requirements for written assignments and presentations. Student must receive departmental approval in order to be allowed to register for this course. Frequency: Upon request see academic Department Chair

NUR 4110 Primary Concepts of Adult Nursing II (6 credits)
This course provides opportunities for the entry level student to integrate nursing concepts in order to provide holistic and compassionate care for patients who have specific disorders. Students will integrate knowledge, skills and attitudes needed to provide safe, quality and effective nursing care. Students will continue to improve clinical/critical reasoning, communication and assessment skills to care for patients across the health illness continuum understanding the need for stewardship and integrity in this changing healthcare environment. Topics covered include cardiovascular, peripheral vascular, respiratory, neurological, musculoskeletal and sensory disorders. Co-requisites: NUR 3192, NUIR 4020. Prerequisites: NUR 3180 and NUR 3191. Frequency: Every Fall and Winter

NUR 4120 Advanced Concepts of Adult Nursing (5 credits)
This course provides opportunities for the entry level student to synthesize nursing concepts in order to create and manage holistic and compassionate care for patients who have complex needs. Students will incorporate knowledge, skills and attitudes needed to provide safe, quality and effective nursing care to patients who have multiple system disorders. Students will apply clinical/critical reasoning, communication and assessment skills to care for patients across the health illness continuum understanding the need for stewardship and integrity in this changing healthcare environment. Legal and ethical issues pertaining to patients who have complex multi-system health care needs will be analyzed. Co-requisite: NUR 4172. Prerequisites: NUR 3250, NUR 4150, NUR 4030. Frequency: Every Fall and Winter

NUR 4130 Concepts of Maternal–Child Nursing and Families (5 credits)
This course integrates developmental theories, theories from the biological and social sciences, family nursing theory, and evidence-based practice in order to provide holistic and compassionate care for the childbearing and child-rearing families. Health promotion and risk reduction, contemporary trends, social justice issues, and legal and ethical issues, will be addressed. Students will apply knowledge, skills and attitudes needed to provide safe, quality and effective nursing care. Students will apply clinical/critical reasoning, communication and assessment skills to care for patients across the health illness continuum. The students will examine the need for stewardship and integrity in this changing healthcare environment. Topics covered include care of the members of childbearing and child rearing families and specific disorders in these populations. Co-requisites: NUR 3050, NUR 4160. Prerequisites: NUR 4110, NUR 3192, NUR 4020. Frequency: Every Winter and Summer

NUR 4150 Population Health Nursing (4 credits)
This course provides the foundation for population-oriented nursing practice and focuses on the process of conceptualizing individuals, aggregates and communities as a single entity. Students are introduced to epidemiological theories and concepts that are relevant in planning and implementing primary, secondary, and tertiary levels of prevention for populations within their own environments. Students will provide stewardship to populations of diverse cultures through community empowerment so that they can access health care and promote healthy behaviors. Communication, negotiation, and clinical/critical reasoning skills will be practiced when collaborating with the targeted population, the interprofessional health care team and the community stakeholders. Principles of evidence-based practice will be utilized when implementing the nursing process within the population. Students will examine the legislative and regulatory processes relevant to the provision of safe, quality health care. Corequisite: NUR 3250 Prerequisites: NUR 3050, NUR 4110, NUR 4130. Frequency: Every Fall and Summer

NUR 4151 Population Health:Promotion, Prevention, and Disease Management (4 credits)
This course is designed to prepare the practicing registered nurse to utilize evidenced based health promotion, health prevention, and disease management as it applies to diverse individuals, families, groups, communities, and populations. Essential concepts of epidemiology, community based assessment and evaluation, equity, vulnerable populations, and community resources are introduced. This course leads to an increased understanding of the relationships related to socio-cultural contexts, ethics, and health/illness beliefs and practices. Students will demonstrate an ability to facilitate health care delivery to populations of diverse cultures using effective communication skills that include negotiation, problem-solving skills, and collaboration with various interprofessional health care teams.

Frequency: Every Fall and Winter

NUR 4160 Genetics for Nursing Practice (2 credits)
This course will focus on providing students with a fundamental understanding of human genetics and its role in diagnosis, disease management, risk reduction and health promotion. Students will learn ways to assess protective and predictive genetic factors, which influence the health of individuals, families, groups, communities, and populations in order to develop a basis for competent nursing care. Students will apply knowledge of inheritance and immuno-genetics in predicting the possible effect of genetics on disease development. This course will also address the ethical, social, political and economic impact of selected genetic diseases, DNA-based genetic diagnosis, and gene therapy. Co-requisites: NUR 3050, NUR 4130. Prerequisites: NUR 4110, NUR 3192, and NUR 4020. Frequency: Every Winter and Summer

NUR 4161 Genetic Concepts (2 credits)
This course will focus on building upon the previous experience and knowledge of the practicing registered nurse to develop a further understanding of genetics and its role in pathophysiology and the diagnosis and management of disease. Students will be introduced to basic concepts in human genetics that contribute to an understanding of nursing or related health care problems, as well as apply knowledge of inheritance and immunogenetics in predicting the possible effect of genetics on disease processes. This course will also analyze the ethical, social, political, and economic impact of selected genetic diseases, DNA-based genetic diagnosis, and gene therapy. Frequency: Every Summer and (Winter for RN to MSN students).

NUR 4171 Nursing and Healthcare Trends (3 credits)
This course explores contemporary trends in health care delivery system and professional nursing practice. Students will integrate knowledge from previous courses further exploring health care system quality and safety, evidenced-based practice, technology, informatics, and the nurse's role in today's healthcare delivery system. This course examines the relationships between quality of care, cost of care, and safety as well as the regulatory effects on patient care and cost. Students will develop skills to address relevant issues within today's health care delivery system. Trends in healthcare informatics are explored and the effects of nursing informatics on communication and safety will be analyzed. Frequency: Every Fall, Winter, and (Summer for RN to MSN students).

NUR 4172 Nursing in Today's Health Care Environment (3 credits)
This course integrates contemporary trends in the present complex healthcare delivery system with professional nursing practice. Students will synthesize knowledge from previous courses to further investigate health care system quality, safety, evidenced-based practice, technology, and the professional nurse's role. The importance of collaborative relationships among interprofessional team members and their impact on quality and value-based care, and patient safety will be analyzed. Students will further develop skills to address relevant legal, ethical and regulatory issues. Co-requisites: NUR 4120, NUR 4180. Prerequisites: NUR 3250, NUR 4150. Frequency: Every Fall and Winter

NUR 4175 Transition to Graduate Education (9 credits)
The course prepares the student for the transition into graduate nursing studies. It incorporates evidence-based research and various theories that may be utilized to enhance nursing practice. Students will be introduced to concepts and theories of leadership and business, relating these to nursing practice. Ethical and legal issues pertinent to graduate nurse practice environments will be explored. This course will provide an overview of the skills required to be successful as a leader in today¿s healthcare environment. Frequency: Every Fall and Summer.

NUR 4180 Nursing Practicum (6 credits)
This seminar/ clinical capstone synthesizes all previously learned knowledge, integrating the concepts of physiological, psychological, sociocultural, developmental, and spiritual variables as they pertain to client care. The student will focus on the synthesis and integration of complex concepts of nursing knowledge related to clinical practice and leadership and management skills. Within the seminar setting, students will utilize nursing theory to guide practice. Students will also apply leadership skills and client management theories in delegating, supervising, and evaluating other members of the health care team. The student will work with a registered nurse preceptor and other members of the health care team. Prerequisite: Completion of all prior clinical and didactic courses; Corequisite: NUR 3175. Frequency: Every Fall and Winter

NUR 4250 Concepts of Psychiatric–Mental Health Nursing (4 credits)
This course applies theories and concepts from liberal education and evidence-based practice to provide nursing care for diverse populations who have specific psychiatric disorders. The focus is on designing nursing strategies that support mental health and wellness and reduce symptomatology following a reaction to stressors. Contemporary trends in treatment and mental health promotion will be emphasized. The legal and ethical issues pertaining to intrapersonal, interpersonal, and extrapersonal stressors of the psychological variable will be discussed. Students will also reflect on their own behaviors and methods of communication. The course will include both a clinical and didactic component. Frequency: Every Fall and Summer

OPS—Operations Management

OPS 3880 Operations Management (3 credits)
This course approaches Operations Management from the ?inside-out.? It develops the student?s personal understanding of processes, process capabilities and results and then transfers those into the business environment. The course builds on an understanding of applied statistics to develop an understanding of the planning and the processes involved in the creation of value both through provision of services and manufacture of goods. Topics include process flow and capability, operations strategy, total quality management (TQM), supply chain and capacity management, process improvement, project management. Prerequisites: Math 3020 or Math 3020H, or Math 2020, or Math 2020H. Frequency: Every Fall and Winter.

PADM—Public Administration

PADM 1000 Introduction to Public Administration (3 credits)
Public Administration is a multi-disciplinary discipline that provides students with the basic skills necessary for employment in government, public service, and non-profit organizations. This course is a survey of the field of public administration, and will introduce the student to the history, theories, concepts, and practice of public administration. This course will provide an overview of the major sub-fields in public administration and will serve as a basis for further study in the field.

PADM 2100 Principles of Management in Public Administration (3 credits)

This is an introductory course focusing on fundamental public management theories, concepts, principles, and practices. The course provides an overview of the field at the state and local levels setting the stage for the program's curriculum. Topics are taken from a variety of subject areas from across the discipline. Students are challenged to explore and evaluate techniques for structuring and resolving managerial problems in public organizations. Prerequisite: COMP 1500 or COMP 1500H, and POLS 1010 and POLS 2100.

PADM 2150 Transforming Public Administration for Sustainable Development (3 credits)
Based on the United Nations' call to transform public administration to help foster environmental, social and economic sustainability (the three pillars of sustainable development), this course invites students to explore the change of public administration for sustainable development. Through theoretical and practical research of the meaning and relevance of sustainability for our governments, participants will learn how public administration reports and improve on sustainability standards at regional, national and international levels. They will have the opportunity to partner with a local government and conduct a mini-consultancy project. Participants will combine their skills to develop their expertise on governance for sustainability, to deliver innovative projects and contribute to our governments' deliverables for sustainable development.

PADM 2200 Leadership of Public Organizations (3 credits)
This course exposes students to definitions and conceptualizations of organizational leadership with emphasis on leadership of public bureaucracies. Theories of leadership are examined to identify the skills, qualities and characteristics commonly attributed to the effective leader. Leadership will be examined and linked to various organizational contexts including power, gender, personality, culture, and development. Differences in leadership roles in public and private sector organizations are also explored. Prerequisite: PADM 1000.

PADM 3000 Public Policy (3 credits)
This course focuses on the public policy process in U.S. states and local governments as well as on how potential ideas for government action are translated from concepts into reality. In addition to providing a basic overview of the processes of policy formulation, implementation and evaluation, this course introduces some of the major stakeholders and actors, both formal and informal, in the world of policymaking. This course examines the policy process at the state and local levels and explores the political contexts in which policies are made, administered, analyzed, and challenged. Prerequisite: PADM 2100.

PADM 3100 Financial Accounting in the Public Sector (3 credits)
Provides an introduction to financial accounting and its decision-making elements. Areas covered are the conceptual frameworks of accounting, fund accounting, and government financial statements and their components. Prerequisite: PADM 2100 and ACT 2300.

PADM 3200 Public Budgeting (3 credits)
Public budgeting is the study of how scarce public resources are allocated among competing interests in a political environment. Though resource allocation decisions are essentially economic, fiscal policy decisions are made through public institutions and political processes. This course introduces students to the policies, procedures, and skills relevant to financial management in public sector organizations. The emphasis is on the practice of budgeting, financial reporting, revenue generation, capital budgeting, and debt management. The purpose of the course is to provide the knowledge and skills that all public administration students need as preparation for careers in public management, and to provide a solid foundation for those who wish to study more advanced topics in government policy and finance. Prerequisite: PADM 2100 and ACT 2300.

PADM 3300 Public Sector Human Resource Management (3 credits)
Human resource management personnel are actively involved in the selection, hiring, training, compensation, job analysis, and performance evaluation functions in public and nonprofit organizations. This course explores each of these functions in turn. Additionally, this course is an introduction to issues encountered by human resource management personnel in the public sector as they perform this vital work. This overview course provides students, future government employees, and future government managers with a foundation for developing human resource management skills and an appreciation for the fact human resource management involves much more than "red tape" and "pushing paper". Prerequisite: PADM 2100.

PADM 3456 Creativity and Innovation in Government and Social Practices (3 credits)
The future will be determined by individuals and government organizations who choose to creatively grow and renew. This course will focus on how individuals and teams develop perspectives, principles and practices that will bolster a contagion for newness in operations and social systems. Students will learn the principles and practices which lead to creativity and innovation in government practices addressing citizen needs and societal challenges. Students will learn techniques and tools to strengthen their efforts to better align with individual and team results. The course will also involve reviewing successful innovative government practices and social environments in operation today. Students will produce their own problem, plan and implementation agenda for an existing opportunity in a government or societal deficiency.

PADM 4100 Data Driven Decision–Making (3 credits)
Management is a continuous cycle of decision-making and evaluation. What actions should be taken? How should those actions be implemented? Who should take those actions and when? Were the actions effective? How can we improve? These questions must be constantly asked and answered. Accurate identification, collection, and analysis of proper data can enhance management's potential to make optimal decisions and produce desired outcomes. This course introduces students to methods for identifying, collecting and analyzing data and provides students hands-on opportunities to apply their analyses to decision scenarios related to operations management, strategic planning, and program evaluation. Prerequisite: PADM 2100 and MATH 2020.

PADM 4200 Planning, Zoning, and Development (3 credits)
This course will cover the fundamentals of land use planning with an emphasis on sustainable development. A more complete course description will be developed by the department in collaboration with an expert in this area. Prerequisite: PADM 2100.

PADM 4400 Public Sector Labor Relations (3 credits)
This course explores public sector collective bargaining and labor relations. Topics include the historical background of collective bargaining, current bargaining practices, labor and management bargaining strategies, and contract maintenance. Students will participate in simulated collective bargaining negotiations. Prerequisite: PADM 2300.

PADM 4500 Administrative Ethics (3 credits)
This course will provide students with an understanding of the core assumptions of the major ethical theories. Armed with this knowledge, students will evaluate ethical dilemmas in the public service, and analyze the role social and political forces play in shaping these dilemmas. Prerequisite: PADM 2100.

PADM 4880 Senior Seminar in Public Administration (3 credits)
The senior seminar in public administration is the capstone course of the B.S. in Public Administration program. This course uses case studies, service learning projects, and research activities to prompt students to synthesize content from across the curriculum. Students will demonstrate their accomplishment of the seven program learning outcomes. Prerequisite: Completion of 50 Public Administration Major Credits. Prerequisite: PADM 2100, PADM 3000, PADM 3100, PADM 3200, PADM 3300, PADM 4100, PHIL 3670.

PADM 4950A Internship in Public Administration A (3 credits)
This course is designed to provide students with an opportunity to integrate academic and experiential knowledge in the field of Public Administration. Students will be placed with an agency or organization, of their choice, related to the practice of public administration. All internship placements must be approved by the Academic Internship Supervisor before the commencement of the internship. Students will be required to complete a minimum of 140 contact hours at the internship placement site during the 16 weeks of enrollment. Prerequisites: (1) a minimum grade point average of 3.0 as calculated by NSU; (2) completion of 90 credit hours; (3) an approved placement site prior to enrolling in the course; and (4) permission from the academic director. Prerequisite: PADM 2100.

PADM 4950B Internship in Public Administration B (3 credits)
This course is designed to provide students with an opportunity to integrate academic and experiential knowledge in the field of Public Administration. Students will be placed with an agency or organization, of their choice, related to the practice of public administration. All internship placements must be approved by the Academic Internship Supervisor before the commencement of the internship. Students will be required to complete a minimum of 140 contact hours at the internship placement site during the 16 weeks of enrollment. Prerequisites: (1) a minimum grade point average of 3.0 as calculated by NSU; (2) completion of 90 credit hours; (3) an approved placement site prior to enrolling in the course; and (4) permission from the academic director. Prerequisite: PADM 2100.

PHED—PHED-Physical Education

PHED 3200 Methods of Teaching Physical Education (3 credits)
This course involves the study and practical application of the instructional design and content of physical education for grades K-12. It is designed to offer the student with the knowledge base, skills, methodology, and techniques to teach a full range of activities to elementary, middle, and secondary students in these grades. Instructional content and curriculum will include recreational team sports, individual lifetime sports, and personal fitness/ wellness activities. Prerequisite: None. Frequency: Every Fall.

PHED 3300 Physical Education Administration (3 credits)
This course is designed to acquaint individuals in the management and operations of physical education. This course provides the philosophy and policies in administration of program planning and management. Classroom management, professional ethics, and legal issues are reviewed as it pertains to physical education. Prerequisite: None. Frequency: Every Fall.

PHED 3400 Physical Education Principles and Practice in Coaching (3 credits)
This course provides foundation principles and techniques related to coaching in schools (K-12) in various team and individual sports. Other topics include principles of: coaching, behavior, teaching, physical training, and management. In addition to class meetings, at least six hours of field experience are required. Prerequisit: None. Frequency: Every Winter.

PHIL—Philosophy

PHIL 1010 Introduction to Philosophy (3 credits)
An introduction to the nature of philosophy, philosophical thinking, major intellectual movements in the history of philosophy, and specific problems in philosophy. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

PHIL 1400 Introduction to Logic (3 credits)
A study of the principles and evaluation of critical thinking including identification and analysis of fallacious, as well as valid reasoning. Traditional and symbolic logic will be considered and foundations will be laid for further study in each area. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

PHIL 2000 Moral Issues (3 credits)
This course provides an introduction to moral reasoning through a philosophical examination of important ethical concepts, such as ethical theory, relativism, egoism, and virtue. Topical moral problems such as world hunger, abortion, and animal rights (among others) will be used as illustrative examples. Students will be introduced to the idea that ethical problems are largely a matter of reason and that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

PHIL 2400 Symbolic Logic (3 credits)
Rigorous analyses of the concepts of proof, consistency, equivalence, validity, implication, and truth as exemplified in propositional logic and predicate logic. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

PHIL 3010 Ethical Issues in Communication (3 credits)
This course provides an introduction to moral reasoning through a philosophical examination of major ethical problems in communications, such as those encountered by media professionals; conflicts of interest, morally offensive content, media influences on anti-social behavior, confidential sources, privacy, truth and honesty in reporting, among others. Student will be introduced to the idea that ethical problems are largely a matter of normative ethical (philosophical) theory. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Winter.

PHIL 3180 Biomedical Ethics (3 credits)
This course provides an introduction to moral reasoning through a philosophical examination of major problems in biomedical ethics, such as abortion, euthanasia, allocation of resources, medical experimentation, genetic engineering, confidentiality, among others. Students will be introduced to the idea that ethical problems are largely a matter of reason; that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite:

COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

PHIL 3180H Biomedical Ethics Honors (3 credits)
This course provides an introduction to moral reasoning through a philosophical examination of major problems in biomedical ethics, such as abortion, euthanasia, allocation of resources, medical experimentation, genetic engineering, confidentiality, among others. Students will be introduced to the idea that ethical problems are largely a matter of reason, that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Honors students only. Frequency: Every Fall.

PHIL 3200 Ethics and Sport (3 credits)
This course provides an introduction to moral reasoning through a philosophical examination of major problems in sports, such as the nature of sportsmanship, drugs, violence, commercialization, and gender equality, among others. Students will be introduced to the idea that ethical problems are largely a matter of reason; that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite: COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Fall.

PHIL 3220 Philosophy of Science (3 credits)
A study of the conceptual foundations of modern science. The course focuses on the philosophical analysis of scientific method and its basic concepts and assumptions. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Fall and Winter.

PHIL 3360 Environmental Ethics (3 credits)
This course provides an introduction to moral reasoning through the philosophical examination of major problems in environmental ethics, such as the relationship between human beings and living and non-living environments, controlling nature, and land use, assessing risk, responsibility to future generations, and the role of science, among others. Students will be introduced to the idea that ethical problems are largely a matter of reason; that progress toward solutions can be gained through an application of normative ethical (philosophical) theory. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Every Winter.

PHIL 3510 Ancient Philosophy (3 credits)
A study of the classic works of philosophy focusing on Plato and Aristotle, and might include discussion of various Pre-Socratic and Hellenistic philosophers. The emphasis throughout will be on understanding, analyzing, and evaluating arguments of the philosophers. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Fall.

PHIL 3520 Modern Philosophy (3 credits)
A study of the classic works of philosophy focusing on the rationalists, the empiricists, and Kant. The emphasis throughout will be on understanding, analyzing, and evaluating arguments of the philosophers. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Winter.

PHIL 3660 Philosophy of Law (3 credits)
A critical examination of basic analytic and normative questions pertaining to law. The course may include such topics as the nature of law, law and morality, legal responsibility, civil disobedience, and the justification of punishment. Prerequisite: COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

PHIL 3670 Social and Political Philosophy (3 credits)
This course will examine significant philosophical contributions to an understanding of politics and society. Among the questions it will address are: What is the nature and basis of the state? Which form of government is best? How do we determine whether political institutions are just? What conceptions of human nature underlie various political philosophies? How are social goods and burdens justly divided? This course will draw from classical, modern, and contemporary sources in political philosophy. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Odd Year Winter.

PHIL 4100 Metaphysics (3 credits)
This course will examine the nature of metaphysical inquiry in general and the specific arguments advanced by philosophers to resolve or clarify fundamental metaphysical problems. The course may include topics such as the nature of existence, the debate between realists and antirealists, the nature of truth, the relationship between conceivability, possibility, and actuality, the status of substances and properties, the persistence of entities through change, and the problem of free will. Prerequisite: one PHIL course and COMP 2000, 2010 or 2020 or COMP 2000H. Frequency: Odd Year Winter.

PHIL 4200 Epistemology (3 credits)
This course will examine the nature of the philosophical study of human knowledge in general and the specific arguments advanced by philosophers to resolve or clarify fundamental epistemological problems. The course may include topics such as skepticism, the analysis of knowledge, the status of a priori knowledge, and theories of justification, memory, and perception. Prerequisite: one PHIL course and COMP 2000, 2010 or 2020 or COMP 2000H. Frequency: Even Year Winter.

PHIL 4900 Special Topics in Philosophy (3 credits)
A careful and critical study of one or more of the outstanding works in philosophy and/or an in-depth study of one philosophical issue. May be repeated once for credit if content changes and with written consent of division director. Prerequisites: one PHIL course; and COMP 2000, COMP 2010, or COMP 2020. Frequency: Every Fall.

PHIL 4900A Special Topics in Philosophy: The Ethics of War and Peace (3 credits)
PHIL 4900 Special Topics in Philosophy Description and Other Offerings A careful and critical study of one or more of the outstanding works in philosophy and/or an in-depth study of one philosophical issue. May be repeated once for credit if content changes and with written consent of the Department of History and Political Science Chair.Prerequisites: one PHIL course; and COMP 2000, COMP 2010, or COMP 2020. (Description Last Updated: Fall 2012 (201320))

PHIL 4950 PHIL 4950 Internship in Philosophy (3 credits)
A 10-20 hour per week field or work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of department chair. Frequency: Every Fall and Winter.

PHIL 4990 Independent Study in Philosophy (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: one PHIL course; and COMP 2000, COMP 2010, or COMP 2020 or COMP 2000H or PHIL 3180H. Frequency: Every Fall and Winter.

PHS—Physiology

PHS 4904 Advanced Anatomy & Physiology for Health Professions (4 credits)
This course is a survey course of human physiology including functional anatomy. This course will be presented using an organ system approach and will cover cellular physiology, cardiovascular, renal, respiratory, gastrointestinal, endocrine, reproductive and nervous systems. The course emphasizes the correlation between anatomical structure and function, clinical application, and usage of correct anatomical terminology. Topics include cellular anatomy with an emphasis placed on the structural organization of the integument, musculoskeletal, cardiovascular, respiratory, digestive, renal, reproductive, and nervous systems. Students apply these concepts in the anatomy laboratory setting using resources such as cadaver dissection, radiographs, MRI, CT scans. Frequency: Every Fall and Winter

PHS 5904 Advanced Anatomy and Physiology for Health Professions (5 credits)
The anatomy and physiology component is an intensive study of the human body and introduces the student to the macroscopic structure of the human body by using a regional approach. The course emphasizes the correlation between anatomical structure and function, clinical application, and usage of correct anatomical terminology. Topics include cellular anatomy with an emphasis placed on the structural organization of the integument, musculoskeletal, cardiovascular, respiratory, digestive, renal, reproductive, and nervous systems. Students apply these concepts in the anatomy laboratory setting using resources such as cadaver dissection, radiographs, MRI CT scans. The pathophysiology component is a comprehensive study of normal human physiology and focuses on the properties of living cells and tissues and the function of organ systems. Emphasis is placed on integration and control of systems with correlation to anatomical principles.

PHYS—Physics

PHYS 1020 Concepts in Physical Science (3 credits)
This course is designed to introduce the student to the basic concepts of physical science. By surveying the fundamentals of physics and related sciences the student will obtain an appreciation of the basic tenets of science in general. The emphasis will be on the nature of science as a creative human enterprise, the key role that it plays in modern society, its relationship to technology and thereby to the environment, its open-ended character as reflected in the dynamic nature of scientific concepts, and the human qualities of scientists and their social responsibility. Prerequisites: MATH 1030 or higher and COMP 1000 or higher. Frequency: Every Fall and Winter.

PHYS 1500 Introduction to Astronomy (3 credits)
General survey of main topics in astronomy, including the sun/planets, the solar system, galaxies/nebulae, black holes/neutron stars, stellar evolution, and cosmology. Frequency: Every Winter.

PHYS 2160 Essentials of Earth and Space Science (3 credits)
This course will cover topics from earth science, including the basic concepts needed to understand geology, oceanography, the atmosphere, the weather, and earth history. Topics from space science will include the sun, planets, solar system, the galaxy and larger structures, the composition and evolution of stars, cosmology, and exotic objects such as quasars and black holes. Prerequisite: PHYS 1020. Frequency: Every Even Year Winter.

PHYS 2350 General Physics I/Lab (4 credits)
First of a two-part series covering mechanics, thermodynamics, vibrations, and waves. Includes laboratory sessions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 1250 or MATH 2100 or MATH 2100H. Frequency: Every Fall and Winter.

PHYS 2360 General Physics II/Lab (4 credits)
Second of a two-part series covering electricity and magnetism, optics, and modern physics. Includes laboratory sessions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisites: PHYS 2350 and either MATH 1250 or MATH 2100 or MATH 2100H. Frequency: Every Fall and Winter.

PHYS 2400 Physics I/Lab (4 credits)
This course covers the basic principles of kinematics, dynamics, work and energy, momentum, rotational motion, gravitation, oscillatory and wave motion, fluid mechanics, and thermodynamics. Includes laboratory sessions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 2200 or MATH 2200H. Frequency: Every Fall and Winter.

PHYS 2500 Physics II/Lab (4 credits)
This course covers the basic principles of electrostatics, magnetostatics, DC and AC circuits, electromagnetic waves, optics, and modern physics, in particular, the special theory of relativity, early quantum theory, semiconductor diodes, and transistors. Includes laboratory sessions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: PHYS 2400. Frequency: Every Fall and Winter.

PHYS 3000 History of Physics (3 credits)
This course covers some of the major developments in physics from antiquity to the present, puts the physics into a historical context, and introduces some of the associated philosophical issues, in particular, how physics has influenced conceptions of the nature of reality. Prerequisites: PHYS 2500 or both MATH 2100 or MATH 2100H and PHYS 2360. Frequency: Upon request and see academic department chair.

PHYS 3100 Introduction to Biophysics (3 credits)
Applications of physical principles to aspects of biology and medicine. Topics include: Diffusion and osmosis, the thermodynamics of living systems, fluid mechanics, medical imaging and radiation therapy, the nervous system and the physical basis of perception, hydrophobic and hydrophilic interactions, protein folding and aggregation, and cell signaling. Prerequisites: BIOL 1500 and MATH 2100 or MATH 2100H, and PHYS 2360 or PHYS 2500. Frequency: Even Year Fall.

PHYS 3200 Thermodynamics (3 credits)
This is an intermediate course in thermodynamics. The course covers classical thermodynamics and introduces statistical mechanics. Prerequisites: PHYS 2500 and MATH 3200. Frequency: Upon request and see academic department chair.

PHYS 3300 Fundamentals of Optics (3 credits)
This is an introductory optics course that covers the fundamental principles of geometrical and physical optics with some emphasis on the optics of vision. It also serves as an introduction for students of optometry and related sciences. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisites: PHYS 2350 or higher and MATH 2100 or MATH 2100H. Frequency: Every Winter.

PHYS 3400 Astronomy and Astrophysics I (3 credits)
This is the first of a two-part series covering the concepts of astrophysics including the analysis of electromagnetic radiation froam space, telescope technology, celestial mechanics and stellar evolution. Students will study the importance of astrophysics in our society and the topics and methods of modern astronomical research in the field of stellar and galactic astrophysics and instrumentation. Prerequisites: PHYS 2360 or higher, and MATH 2200 or MATH 2200H. Frequency: Upon request and see academic department chair.

PHYS 3450 Astronomy and Astrophysics II (3 credits)
The second of a two-part series covering the concepts of astrophysics such as the structure and physics of galaxies, the distribution of objects in the expanding universe, the Big Bang theory, and the evolution of celestial bodies. Students will study and apply the topics and methods of modern astronomical research in the field of extragalactic astronomy, cosmology, and space science. Prerequisite: PHYS 3400. Frequency: Upon request and see academic department chair.

PHYS 3500 Introduction to Mechanics (3 credits)
This course covers basic topics in the mechanics of systems of particles and rigid bodies. Topics covered include vectors, rectilinear and planar motion, non-inertial coordinate systems and fictitious forces, oscillations, three-dimensional motion, gravity, central forces, and Lagrangian mechanics. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisites: PHYS 2500 and MATH 3400. Frequency: Even Year Fall.

PHYS 3550 Non–linear Dynamics (3 credits)
This course introduces the student to the basic concepts of nonlinear dynamics, chaos, and related topics in nonlinear dynamics, via numerical simulations, and the detection and quantification of chaos in experimental data. Emphasis will be on the physical concepts and examples, rather than mathematical proofs and derivations. Topics covered include: phase planes, limit cycles, bifurcations, Lorenz equations, fractals, and strange attractors. The course will be taught at a level accessible to advanced undergraduate students in all fields of science and engineering. Prerequisites: PHYS 2500 and MATH 3400.Frequency: Upon request and see academic department chair.

PHYS 3610 Electromagnetic Theory I (3 credits)
This course covers the fundamentals of electromagnetic theory. Topics covered include vector calculus, electrostatics, magnetostatics, solutions of Laplace and Poisson equations, electric and magnetic fields inside matter. Prerequisites: PHYS 2500 and MATH 3200. Frequency: Odd Year Fall.

PHYS 3650 Electromagnetic Theory II (3 credits)
This is the continuation of Electromagnetic Theory I. Topics covered include Maxwell?s equations, electromagnetic waves, radiation, and relativity. Prerequisite: PHYS 3610. Frequency: Upon request and see academic department chair.

PHYS 3700 Modern Physics (3 credits)
This is an introductory modern physics course covering special relativity, quantum mechanics, nuclear, and particle physics. The concepts will be applied to a variety of situations, including some in the field of medicine. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: PHYS 2500. Frequency: Odd Year Fall.

PHYS 3750 Modern Physics II (3 credits)
Continuation of PHYS 3700. This course covers introductory quantum mechanics, including Hilbert spaces, the Schrodinger equation, spin, and perturbation theory. Applications to one-dimensional problems, the harmonic oscillator, and the hydrogen atom are included. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: PHYS 3700. Frequency: Even Year Winter.

PHYS 3800 Introduction to Elementary Particle Physics (3 credits)
Introduction to particle physics, covering topics that include group theory, properties of elementary particles, the electromagnetic, strong and weak nuclear interactions, gauge theories, and unification. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: PHYS 3650 or PHYS 3750. Frequency: Upon request and see academic department chair.

PHYS 3900 Mathematical Methods for Physicists (3 credits)
This course introduces and applies the relevant mathematics required to solve advanced problems in physics. Among the topics included are vector analysis, linear algebra, Fourier series and transforms, differential equations, special and complex functions, and probability and statistics. Prerequisite: PHYS 3500 and MATH 3200. Frequency: Upon request and see academic department chair.

PHYS 4000 Advanced Physics Laboratory I (2 credits)
This is an upper-level laboratory course in which a variety of advanced experiments will be performed. This is an intensive laboratory course, with a strong emphasis on independent data analysis and dissemination of results. Students will learn laboratory skills and also gain valuable practice using statistical methods of data analysis. Prerequisite: PHYS 3700. Frequency: Upon request and see academic department chair.

PHYS 4050 Advanced Physics Laboratory II (2 credits)
This is the second part of an upper-level laboratory course in which a variety of advanced experiments will be performed. This is an intensive laboratory course, with a strong emphasis on independent data analysis and dissemination of results. Students will learn laboratory skills and also gain valuable practice using statistical methods of data analysis. Prerequisite: PHYS 4000. Frequency: Upon request and see academic department chair.

PHYS 4400 Science of Planets and Solar Systems (3 credits)
This interdisciplinary course is an advanced introduction to the linked research of planetary systems, extrasolar planets, astrobiology, astrochemistry, and astronautics, as well as the cultural changes expected from future discoveries in those fields. Topics include the physics of the solar system such as the sun, planets, moons, comets and asteroids; the properties of other solar systems and ultimately the search for another Earth and life in space. This course is designed for physics and science students and is also suited for engineering students interested in space science and astronautics. Prerequisite: PHYS 3400. Frequency: Upon request and see academic department chair.

PHYS 4500 Advanced Mechanics (3 credits)
This course will cover advanced topics in mechanics. Topics to be covered include Lagrangian mechanics, two-body central force problems, coupled oscillators and normal modes, Hamiltonian mechanics, non-inertial frames, and rigid body motion. Prerequisite: PHYS 3500. Frequency: Upon request and see academic department chair.

PHYS 4600 Quantum Mechanics I

(3 credits)
First of a two-part series covering the fundamentals of quantum mechanics, covering the wave function, the Schrodinger equation, and elementary statistical mechanics. Prerequisites: PHYS 3500 and PHYS 3700 and MATH 3200. Frequency: Upon request and see academic department chair.

PHYS 4650 Quantum Mechanics II (3 credits)
This course is a second of two-part series covering the fundamentals of quantum mechanics, applications using the time-dependent Schrodinger equation, time-independent and time-dependent perturbation theory, the variational principle, the WKB approximation, the adiabatic approximation, and scattering. Prerequisites: PHYS 4600. Frequency: Upon request and see academic department chair.

PHYS 4900 Special Topics in Physics (1–3 credits)
Topics in physical science that are not included in regular course offerings and may be taken without prerequisites. Special content is announced in the course schedule for a given term. Students may re-enroll for special topics covering differing content. Frequency: Upon request and see academic department chair.

PHYS 4950 Internship in Physics (1–12 credits)
A work experience for 16 weeks in the student's major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of Department Chair. Frequency: Upon request and see academic department chair.

PHYS 4990 Independent Study in Physics (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

PHYS 4990A Independent Study in Physics (A) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

PHYS 4990B Independent Study in Physics (B) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

PHYS 4990C Independent Study in Physics (C) (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and Department Chair. Frequency: Upon request and see academic department chair.

POLS—POLS-Politics & Public Affairs

POLS 1010 American Government and Politics (3 credits)
An introduction to the processes of the American national and local forms of government. Included are the nature and structure of government, its characteristics and functions, and the intimate relation of government to other interests. Frequency: Every Fall and Winter.

POLS 1200 Introduction to Political Science (3 credits)
This course will provide the student with an overview of political science with an emphasis on such topics as: the formation and evolution of government institutions and structures; the evolution of political participation, culture and ideology in both a domestic and international context; and policy formation and implementation (both domestic and foreign); and international relations. In doing this, students will be introduced to the basic vocabulary of the discipline, learning about the different ways that political issues and processes are studied. Frequency: Every Fall and Winter.

POLS 2010 Comparative Government (3 credits)
This course will examine the elements of foreign political systems such as constitutions, political parties, institutions, historical development, and ideology using the United States as a frame of reference. Attention will be given to how legislation is enacted, how elections are conducted, and the relationship between the judicial, executive, and legislative branches of government. Frequency: Every Fall and Winter.

POLS 2100 State and Local Government (3 credits)
This course is designed to provide a basic knowledge of how state and local governments operate, and how political decisions are made by these governments. The course will also address how federalism impacts these units of government. It will examine the political actors--legislators, governors, interest groups--that affect state and local politics, as well as specific local/state policy issues. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

POLS 2300 International Relations (3 credits)
This course will introduce students to various theories and concepts used by scholars in the field of international relations and demonstrate their practical application to understanding major issues in contemporary international politics such as war, globalization, international trade and finance, the role of international organizations, ethnic conflict and peacekeeping, proliferation of nuclear weapons, migration and poverty, and the role of international organizations and NGOs. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Winter.

POLS 2915 Research Methods in Political Science (3 credits)
This course provides an introduction to the methods that political scientists use to answer questions. The course is intended to provide students with analytic tools with which they can critically evaluate political science research, and train the student to pose and answer research questions of their own. Students will learn how to formulate research questions, how to prepare hypotheses, design a research plan to test their hypotheses, select the correct methodology and analyze the information collected. This course will cover both quantitative and qualitative methodologies. The course will discuss statistical analyses, historical case studies, interview techniques, formal modeling and computational modeling. Prerequisites: POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Every Fall.

POLS 3100 Political Theory (3 credits)
This course is designed to familiarize students with major authors and concepts in political theory. Emphasis is placed on both historical and contemporary debates surrounding important political concepts such as authority, justice, liberty, and democracy. The course will also consider major political theories and political ideologies that influenced past societies and continue to shape the world.

Prerequisites: POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Winter.

POLS 3200 The Congress (3 credits)
This course is an intensive look at the legislative branch of the American government, exploring the politics, processes, and policies that make up the Congress. The course focuses on how Congress works, including factors such as constituent pressures, the media, lobbyists, campaigns, representation and elections, party leadership, committee power, rules and procedures, and inter-branch relations. Emphasis is given to the modern Congress and how historical developments have impacted the modern political process, through attention to a variety of current issues such as homeland security, health care, immigration, defense policies, education, and the environment. Prerequisite: POLS 1010 or POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Odd Year Winter.

POLS 3400 The Presidency (3 credits)
This course provides a comprehensive overview of the American presidency, including the evolution of the office; presidential powers; relations with Congress, the courts, the mass media and interest groups; public opinion; electoral politics; White House decision-making; and the president's impact in domestic and foreign affairs. This course will examine both individual presidents and the presidency as an institution. Prerequisites: POLS 1010 or POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Fall.

POLS 3500 Global Politics (3 credits)
This course offers an issue-based examination of world politics. Drawing on theories and practices in the field of international relations, the course will examine pressing and important problems in the world today such as global warming, terrorism, failed states, international public health, transnational organizations, human rights, drug trafficking and global crime. Each issue will be framed in appropriate theoretical, historical and contemporary perspectives, and problem solving exercises will be utilized in order to arrive at a fuller understanding of the dynamics of world politics. Prerequisites: POLS 2300 and COMP 2000 or 2020 or COMP 2000H. Frequency: Odd Year Fall.

POLS 3600 Voting and Elections (3 credits)
This course will focus on the process and procedures by which American public opinion is formally tallied: voting in elections. Emphasis will be placed on deepening an understanding of the theory and practice of American politics by exploring the right to vote, the forces that shape who votes, and the many ways that the vote can be manipulated without breaking the law. Prerequisites: POLS 1010 or POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Winter.

POLS 4100 European Union (3 credits)
This course will examine the historical development, the political parties, and the institutions (Commission, Parliament, Council of Ministers) of the European Union. Attention will be given to how European Union policies are developed, enacted and enforced as well as the effect of European rules upon the domestic legal systems of the twenty-seven member states. Students will consider to what extent the European Union will continue its development in terms of both increased horizontal and vertical integration. Students will also appraise to what extent the European Union protects the human rights and economic interests of its citizens and how effectively it functions as a unit in the international arena. Prerequisites: POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Fall.

POLS 4200 Latin American Politics (3 credits)
This course will examine the politics of Latin America. Emphasis will be placed on the political, economic, and social developments that have contributed to Latin America?s current state of development. The course will also examine the political development of Latin American states, the impact of the Cold War, internal political conflict and the role of the military in these conflicts, and democratization and social movements. Some of the aspects that will be highlighted are the effect of colonization on the region?s economic development, the impact of revolution, and the effects of migration. Prerequisite: POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Odd Year Winter.

POLS 4300 Middle Eastern Politics (3 credits)
This course will examine the politics of the Middle East. Emphasis will be placed on the political, economic and social developments that have contributed to current tensions in the Middle East. The course will also examine the political development of Middle Eastern states, the phenomenon of Arab nationalism, Islamism, the Palestinian-Israeli conflict, democratization, oil and economic development and regional security. Some of the aspects that will be highlighted are an understanding of the Arab-Israeli conflict, events surrounding Iraq, and changing patterns in other countries such as Iran, Syria, Lebanon and Egypt. Prerequisite: POLS 1200 and COMP 2000 or 2020 or COMP 2000H. Frequency: Even Year Winter.

POLS 4900 Special Topics in Politics and Public Affairs (3 credits)
An advanced course in selected topics in politics/public affairs. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one POLS course and COMP 2000, 2010, or 2020 or COMP 2000H.

POLS 4990 Independent Study in Politics and Public Affairs (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One POLS course and COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

PSYC—Psychology

PSYC 1020 Introduction to Psychology (3 credits)
An introduction to theory, research, and applications in the field of psychology. Topics include biological bases of behavior, perception, learning and memory, psychological development, personality, social psychology, and the identification and treatment of mental illness. Frequency: Every Fall and Winter.

PSYC 1020H Introduction to Psychology Honors (3 credits)
An introduction to theory, research, and applications in the field of psychology. Topics include biological bases of behavior, perception, learning and memory, psychological development, personality, social psychology, and the identification and treatment of mental illness.Prerequisite: Honors Students Only. Frequency: Every Fall.

PSYC 2010 Cognitive Processes (3 credits)
This course will provide an introduction to experiments (methods and results) and theory in cognitive psychology. Topics covered will include object recognition, attention, memory, concepts, language, imagery, problem solving and reasoning and the neural bases of cognitive processes. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2020 Foundations of Clinical

and Counseling Psychology (3 credits)
This course serves as an overview of Clinical and Counseling Psychology including a discussion of the training and employment of clinical/counseling psychologists; the assessment tools and treatment approaches routinely utilized by clinical/counseling psychologists; subspecialties of clinical and counseling psychology; and current trends and emerging issues in the field of clinical/counseling psychology. Various other related counseling professions are discussed throughout the course. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2100 Biological Bases of Behavior (3 credits)
This course provides a survey of genetic, neural, and endocrine bases of behavior. Focus topics include brain neuroanatomy, neural communication, sensory processes, motivation, emotion, and arousal. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2110 Human Sexuality (3 credits)
Anatomy/ physiology of the human sexual system, the human sexual response, the range of sexual behaviors, and sources of attitudes and beliefs about sexuality. Prerequisite: PSYC 1020 OR PSYC 1020H OR SOCL 1020. Frequency: Every Fall and Winter.

PSYC 2110H Human Sexuality Honors (3 credits)
Anatomy/ physiology of the human sexual system, the human sexual response, the range of sexual behaviors, and sources of attitudes and beliefs about sexuality. Prerequisite: PSYC 1020 OR PSYC 1020H OR SOCL 1020. Honors Students Only Frequency: Even Year Fall.

PSYC 2160 Social Psychology (3 credits)
This course provides an introduction to the scientific study of how people's thoughts, feelings, and behaviors are influenced by the real or imagined presence of other people. Topics such as self-perception, judgment and decision-making, rationalization, attitude change, conformity, social influence, obedience, attraction, love, aggression, violence, altruism, deception, nonverbal communication, and prejudice will be covered. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2160H Social Psychology Honors (3 credits)
This course provides an introduction to the scientific study of how people's thoughts, feelings, and behaviors are influenced by the real or imagined presence of other people. Topics such as self-perception, judgment and decision-making, rationalization, attitude change, conformity, social influence, obedience, attraction, love, aggression, violence, altruism, deception, nonverbal communication, and prejudice will be covered. Prerequisite: PSYC 1020 or PSYC 1020H and Honors Students Only. Frequency: Odd Year Winter.

PSYC 2300 Behavior Modification (3 credits)
This course introduces students to the concepts and principles of behavior analysis and behavior modification techniques applied to diverse areas such as mild and severe behavior problems in children and adults, behavior medicine, organizational behavior, sports psychology, and self-management. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2330 Interpersonal Communication (3 credits)
Study of human communications, interpersonal relationships, and the impact of communication on behavior. Topics include verbal and nonverbal behavior, development of relationships, and conflict management skills. Experiential learning included. Frequency: Every Fall.

PSYC 2350 Life–Span Human Development (3 credits)
This course is designed to provide the student with an understanding of systematic changes within the individual from conception through death. Unlike many studies of development, this course is structured around issues of development rather than examination of development from a chronological perspective. This structure will allow the student to more completely grasp life-span issues. Family, social roles, lifestyle, psychological disorders, mental abilities, and death and dying will be examined. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 2350H Life–Span Human Development Honors (3 credits)
This course is designed to provide the student with an understanding of systematic changes within the individual from conception through death. Unlike many studies of development, this course is structured around issues of development rather than examination of development from a chronological perspective. This structure will allow the student to more completely grasp life-span issues. Family, social roles, lifestyle, psychological disorders, mental abilities, and death and dying will be examined. Prerequisite: PSYC 1020 or PSYC 1020H. Honors Students Only Frequency: Even Year Winter.

PSYC 2360 Adolescent Psychology (3 credits)
This course will provide an overview of the principles, theories, and research pertaining to the development of the adolescent. Topics include physical, emotional, social, intellectual, moral, and personality development, as well as the importance of the home, school, and community. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall.

PSYC 2370 Early Childhood Growth and Development (3 credits)
Students in this course will critically examine theories and research concerning the cognitive, social-emotional, and physical development of the typical and atypical child from birth to age eight. Emphasis will be placed on the ability to observe and describe child behavior and to understand the principles and processes that govern growth and development in the early childhood years. Implications of knowledge of child development for parental behavior, professional practices, and social policy will also be considered. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 2390 Adulthood and Aging (3 credits)
Developmental experiences of maturity. Physiological and psychological aspects of aging. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 2450 Forensic Psychology (3 credits)
This course describes various interactions between psychology and the legal system. It discusses how psychologists assist law enforcement agencies in the selection, training, and evaluation of law enforcement officers and in conducting criminal investigations. It also describes the various forensic psychology roles in civil and criminal proceedings. Lastly, this course will highlight ways in which forensic psychologists can work to influence public policy. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 2460 Health Psychology (3 credits)
This course covers stressors and health, health behavior promotion, and psychological treatment for cancer, heart disease, and other medical disorders. Prerequisites: PSYC 1020 or 1020H. Frequency: Every Fall.

PSYC 2470 Loss, Grief, and Bereavement (3 credits)
This course addresses the issues of loss accompanying the death of a loved one and the handling of grief for people of all ages. Sensitizes students to their own feelings about death, describes the rites of passage, and identifies methods of resolution for grief. This course will be beneficial to individuals in their own lives, as well as those who will be involved in counseling. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 2575 Introduction to Substance Abuse Studies (3 credits)
This course will provide a sound introduction to the pharmacology and physiology of licit and illicit drugs. Psychological, social, physiological, and pharmacological effects of psychoactive substances will be discussed. Signs and symptoms of substances abuse and diagnostic criteria for evaluating chemical dependency will also be studied. Prerequisite: PSYC 1020 or PSYC 1020H. Frequency: Every Fall.

PSYC 2630 Ethical and Professional Issues in Mental Health (3 credits)
This course examines ethical issues faced by mental health professionals today. Conflicts among personal, legal, and professional demands will be explored in depth. This course will also focus on how mental health professionals are challenged by and learn to manage ethical dilemmas around such issues as self-disclosure, harm reduction, dual relationships, and limits of confidentiality. Frequency: Odd Year Winter.

PSYC 2900 Introduction to Quantitative Psychology (3 credits)
This course is an introduction to the quantitative methods employed by psychologists and other social scientists to answer their empirical questions. You will learn both descriptive and inferential statistics during the semester. After you have taken this course, you should be better able to understand and interpret the results sections of articles in scientific journals. You will understand, for example, what it means to say that two groups have different levels of anxiety at a statistically significant level, and what calculations are involved in drawing such a conclusion. As another example, you should come away from this class with a good understanding of what it means (and, importantly, what it does not mean) to say that crime rates and ice cream sales are positively correlated. Prerequisites: MATH 2020 or MATH 2020H or MATH 3020 or MATH 3020H and PSYC 1020 or PSYC 1020H. Frequency: Every Fall and Winter.

PSYC 3000 Psychological Research Methods (3 credits)
This course covers the methodological tools used in psychological research studies, with specific emphasis on observational, correlational, experimental, and quasi-experimental designs. Students will develop testable hypotheses, design a quantitative experimental research study, and use APA-format to write a report similar to those found in professional psychological journals. Prerequisites: PSYC 2900. Frequency: Every Fall and Winter.

PSYC 3030 Experimental Psychology (3 credits)
This course offers laboratory experience in various areas of experimental psychology. Fundamental assumptions and principles of scientific observation and research design are discussed. Students will learn how to conduct and report experiments in various core areas of psychology. Students will learn how to conduct, interpret and evaluate research and to communicate research findings. Prerequisite: PSYC 3000. Frequency: Every Fall and Winter.

PSYC 3070 Stress Management (3 credits)
This course examines the process and complexities of stress management, its impact on the work place, and the overall quality of work life in an organization. Stressful events and conditions will be presented and analyzed from three perspectives: individual vulnerability to stressors, the environment in which vulnerability is exposed to stressors, and the resulting behavioral symptoms. Prerequisites: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3180 Stereotypes, Prejudice, and Discrimination (3 credits)
This course examines how individuals, groups, and cultures develop stereotypes. The course also explores how these stereotypes are used for prejudicial and discriminatory purposes toward other individuals and/or groups. Finally, the course explores the impact of both implicit and explicit prejudice. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 3200 Evolutionary Psychology (3 credits)
This course will serve as an overview to the theoretical approach of evolutionary psychology as well as a survey of some of the major topics areas that have been approached from an evolutionary perspective. Adaptationism is the position of claiming that many of the traits we observe in organisms (including present-day humans) exist in their current form because of past evolutionary benefits. Students are expected to develop the ability to evaluate adaptationist hypotheses, to understand the fundamental differences between the evolutionary approach and traditional social science approaches (esp. tabula rasa behaviorism), and to recognize/avoid the common errors of naive adaptationism. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall.

PSYC 3210 Personality (3 credits)
Survey of psychoanalytic, humanistic, cognitive, and behavioral theories of personality. Current issues and personality research. Prerequisites: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3260 Abnormal Psychology (3 credits)
Diagnoses, causes, and prognoses for the various categories of psychological disorders. Case studies supplement and illustrate theory and research. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3270 The Psychology of Criminal Behavior (3 credits)
This course provides an overview of the psychology related to criminal actions. The course will focus on some of the developmental, biological, neurological, behavioral, cognitive, and social forces shown to influence criminal thinking and behavior. The class will also cover characteristics of several specific criminal subpopulations including psychopaths, sexual predators, female offenders, substance abusers, serial killers, and mentally disordered criminal offenders. Prerequisite: PSYC 1020 or 1020H. Frequency: Odd Year Winter.

PSYC 3280 Child and Adolescent Psychopathology (3 credits)
This course will review prevalence, etiology, diagnostic criteria, co-morbidity, sampling patterns and outcome across the major childhood and adolescent behavioral disorders. Prerequisite: PSYC 2350 or PSYC 2370 or PSYC 2380 Frequency: Odd Year Winter.

PSYC 3330 Principles of Applied Behavior Analysis (3 credits)
This course will focus on the basic principles of applied behavior analysis (ABA). Students will learn the philosophy and science of applied behavior analysis and their relation to behavioral interventions, the basic vocabulary and concepts in the field, strategies for measuring, increasing, and decreasing behaviors, and ethical considerations in the application of ABA in a variety of settings. Prerequisite: PSYC

2300 Frequency: Even Year Fall.

PSYC 3350 Assessment in Applied Behavior Analysis (3 credits)
This course covers the selection of assessments in Applied Behavior Analysis (ABA), behavioral intervention strategies and change procedures, evaluation and assessment strategies, and methods of accountability in ABA interventions. In addition, focus will be placed on the experimental evaluation of interventions, measurement of behavior, and displaying and interpreting data using single-subject and small group design. The course will also address the ethical use of intervention strategies and making decisions regarding ethical treatment for individuals with a variety of challenges. Prerequisite: PSYC 2300 Frequency: Odd Year Winter.

PSYC 3360 Psychology of Gender (3 credits)
This course examines theories about, as well as the psychological and social factors related to, gendered identities, roles, and behaviors. Prerequisite: PSYC 1020 or 1020H or SOCL 1020. Frequency: Every Fall.

PSYC 3370 Interventions in Applied Behavior Analysis (3 credits)
This course will focus on behavior change procedures and system supports for those interventions. The course will also consider evaluation strategies used in both research and in the ethical provision of interventions. It will cover a variety of effective behavioral strategies as well as measurement and assessment of strategies. Additional focus will be placed on the interpretation of the research literature to make sound decisions about assessment and intervention strategies for a variety of populations. Prerequisite: PSYC 2300 Frequency: Odd Year Fall.

PSYC 3400 Sports Psychology (3 credits)
This course includes an analysis of the social and psychological dimensions in sport. Emphasis is placed on social and psychological theories and research related to physical activity, physical education, corporate fitness, and athletic programs. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3450 Foundations of Therapeutic Interviewing (3 credits)
General principles of effective interviewing. Skills and techniques for achieving various interview goals, with an emphasis on counseling interviews and the establishment of helping relationships. Prerequisite: PSYC 2000 or PSYC 2020. Frequency: Every Fall.

PSYC 3480 Industrial/Organizational Psychology (3 credits)
Survey of psychology as applied to work emphasizing a general knowledge of industrial/organizational psychology as well as its application to the solving of real-world problems. Discussion of personnel decisions, organizational training, organizations and their influence on behavior, job satisfaction, job design, and organizational development, human factors, and environmental stressors on workers. Prerequisite: PSYC 1020 or 1020H. Frequency: Even Year Fall.

PSYC 3520 Principles of Learning (3 credits)
Principles of Learning examines theories and research concerning the basic principles and concepts of learning. Theories of classical and operant conditioning will be explored, in addition to selected theories which explore the interaction between learning, memory and motivation. Additionally, basic neuroanatomy and neurochemistry underlying various learning processes will also be introduced. Prerequisite: PSYC 1020 or 1020H. Frequency: Even Year Winter.

PSYC 3575 Treatment of Substance Abuse (3 credits)
This course will focus on the various therapeutic approaches that may be successfully employed in the treatment of substance abuse problems and will discuss the different types of facilities available for substance abuse treatment. Additionally, treatment planning, clinical documentation and supervision, and the influences of managed care and other third-party payers will be thoroughly examined. Prerequisite: PSYC 2575. Frequency: Every Winter.

PSYC 3710 History and Theories of Psychology (3 credits)
Exploration of the historical roots of psychology, and the bases and growth of psychology as a science. Examines the major historical and contemporary theories of psychology with an emphasis on enduring issues. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3760 Multicultural Issues in Psychology (3 credits)
Issues relevant to the field of psychology. Examinations of different cultural groups and their values as they pertain to the individual, the family, time, proxemics (personal and interpersonal space), communication styles, and body language. Different cultural worldviews will be explored as they pertain to locus of control, conception of mental illness, and attitude toward seeking psychological help. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall and Winter.

PSYC 3800 Current Psychotherapies (3 credits)
This course is a comprehensive introduction into the most popular counseling theories and techniques currently in use. The needs of special populations, including substance abuse clients, adolescents, and clients from other cultures are examined. Prerequisite: PSYC 1020 or PSYC 1020H Frequency: Odd Year Fall.

PSYC 3900 Neuropsychology (3 credits)
This course will introduce students to higher cognitive functioning including language, memory and executive functioning. Neurological syndromes associated with damage to specific brain areas will be discussed along with their behavioral manifestations. Additionally, cerebral asymmetry and sex differences in brain organization will be introduced. This course will conclude with a review of neuropsychological instruments. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall.

PSYC 3920 Sensation and Perception (3 credits)
This class will cover the fundamentals of the sensory world, such as taste, touch, vision, hearing and extrasensory phenomenon. Students in sensation and perception will explore the value of each sense in the perceptual world and will be encouraged to consider what life would be like without each sense. Perceptual illusions will be employed in order to encourage students to delve into the neural underpinnings of sensory perception. Through studying the pathways from sensations to perceptions, students will gain an appreciation of the fragility of perceptions. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 4300 Psychophysiology (3 credits)
This course is designed to introduce students to the field of psychophysiology, with a focus on human psychophysiology and physiological measures of emotion and cognition. Students in this course will examine the theory of psychophysiology as well as common psychophysiological techniques. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Winter.

PSYC 4400 Hormones and Behavior (3 credits)
Students in Hormones and Behavior will develop an understanding of the many topics related to behavioral endocrinology. This course will review the interrelationships

among the major classes of hormones, brain and behavior. Prerequisite: PSYC 1020 or 1020H. Frequency: Every Fall.

PSYC 4700 Practicum in ABA I (3 credits)
This introductory practicum is designed to partially meet the supervision requirements for the BCABA certification. Students will participate in at least 6 hours per week in a supervised experience that will allow them the opportunity to apply ABA principles. Supervision will take place weekly in an individual and group format and will address both increasing and decreasing behavior. Students will be expected to collect and share data on their cases and employ strategies of behavioral assessment and intervention with input from their supervisor. Prerequisite: PSYC 3330. Frequency: Upon Request see academic Department Chair.

PSYC 4800 Practicum in Psychological Research (3 credits)
This course provides practical experience in conducting psychological research. Students will read relevant research literature in professional psychological journals, develop a testable hypothesis, design and run an empirical research study, analyze data from the study, and write a full APA-format research paper. Prerequisite: PSYC 3000. Frequency: Even Year Fall.

PSYC 4810 Practicum in Community Psychology (3 credits)
Experience in in applying psychological principles in a human services agency. Supervision onsite: weekly team meetings at the university. Written reports required. Prerequisites: PSYC 2000 or PSYC 2020 and PSYC 3450. Frequency: Every Winter.

PSYC 4840 Advanced Practicum in Psychology (3–6 credits)
Students will gain experience in a specialty area of psychology by working with teams of faculty members and graduate students. They will be able to observe and participate in both research and applied clinical work. Prerequisites: PSYC 3000. Frequency: Odd Year Winter.

PSYC 4880 Senior Seminar in Psychology (3 credits)
Students will have the opportunity to integrate information from a variety of specialties in psychology. Each seminar will have a focal theme that will allow students to gain new perspectives, as well as apply knowledge from prior courses and experiences. This course is presented as a capstone experience, therefore students with advanced standing in the psychology major will benefit the most from the seminar. Prerequisite: PSYC 3000. Frequency: Every Fall and Winter.

PSYC 4900 Special Topics in Psychology (3 credits)
Advanced study in selected areas in psychology. Specific focus to be announced. May be repeated once for credit if content changes. Prerequisite: PSYC 1020 or 1020H.

PSYC 4901 APS Capstone Course in Psychology/Substance Abuse Studies (3 credits)
APS Capstone Course in Psychology/ Substance Abuse Studies: This course is reserved for students who are enrolled in the Applied Professional Studies Program. Through a series of written assignments, this course provides students with an opportunity to integrate previous learning and experience with a concentration in either psychology or substance abuse studies to form a unique course of academic study. Given that the APS major is individualized to a large extent based on a student's interests and past experiences, this course ordinarily will be conducted as an independent study and will be taken during the student's last semester prior to receipt of their degree. Prerequisite: written consent from department chair. (3 credits). Frequency: Upon request see academic Department Chair.

PSYC 4950 Internship in Psychology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: PSYC 3000, cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of academic director.

PSYC 4950A Internship A in Psychology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: PSYC 3000, cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of department chair. Frequency: Upon request see academic Department Chair.

PSYC 4950B Internship B in Psychology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: PSYC 3000, cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of department chair. Frequency: Upon request see academic Department Chair.

PSYC 4990 Independent Study in Psychology (1–6 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

PSYC 4990A Independent Study in Psychology A (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

PSYC 4990B Independent Study in Psychology B (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

PSYC 4990C Independent Study in Psychology C (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

PSYC 4990D Independent Study in Psychology D (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and department chair. Frequency: Upon request see academic Department Chair.

RAZR—Razor's Edge Program

RAZR 1000 Self Leadership (1 credit)
This seminar provides Razor's Edge participants a coherent and marketable approach to building their leadership portfolio. This particular seminar involves those concepts and skills required to Lead the Self. Students will be exposed to specific skills areas that will enhance their ability to successfully navigate their new role as an emerging leader such as emotional intelligence, ethics, the role of discipline,

etc. as well as provide a character-based leadership development curriculum designed to help students identify and act upon their own personal value system. Prerequisite: None. Frequency: Every Fall.

RAZR 1000R Seminar in Research Design and Implementation I (3 credits)
This seminar course is an introduction to the core philosophical underpinnings of research across multiple disciplines. We will explore foundational concepts concerning how scientific research can be used to study the world, including demarcation, the distinction between what science is and is not, hypothesis development, confirmation and falsification, and causation and explanation. Basic scientific paradigms will be described as well. Students will explore how these issues are applicable both for evaluating published research and planning new research. To that end, the course will employ guided discussions during weekly meetings focusing on published studies. Class presentations will be delivered by teams of selected students focused on demonstrating a clear understanding of the research design and results from published, timely and relevant articles within a chosen field of study. Also, students will design a university-based project. The University-based project will involve formulating a research study that is consistent with core concepts of scientific integrity and ethical standards. Prerequisite/s: None. Frequency: Every Fall

RAZR 2000 Connecting With Others (1 credit)
The seminar involves those concepts and skills required to Connect with Others as a critical leadership capacity. Upon completion of this class, Razor's Edge participants will explore the skills critical in connecting with others and followers such as effective communication, social awareness, handling conflict, etc. Participants will also be provided continued education on connective leadership theories and models such as Servant Leadership, Relational Leadership, etc. Prerequisite: None. Frequency: Every Winter.

RAZR 3030 Applied Leadership (3 credits)
A leadership course designed specifically for campus leaders of student organizations whereby the organizations become the 'lab' from which to apply weekly theories and concepts regarding leadership. Prerequisite: None. Frequency: Every Fall and Winter.

RAZR 3500 Leading Others (1 credit)
RAZR3500 is intended for those students enrolled in the Razor?s Edge Leadership Scholarship program to facilitate their awareness of and skills associated with effectively leading others. Students will learn both conceptual and practical information to increase their leadership capacity in leading others whether individually or in groups. Prerequisites: RAZR 1000 and RAZR 2000. Frequency: Every Winter.

RAZR 4000 Leading Change (1 credit)
RAZR4000 is intended for those students enrolled in the Razor?s Edge Leadership Scholarship program to facilitate their awareness of and skills associated with effectively leading others. Students will learn both conceptual and practical information to increase their leadership capacity in leading others whether individually or in groups. Prerequisites: RAZR 1000, RAZR 2000, RAZR 3000, and RAZR 3500. Frequency: Every Winter.

RCP—Respiratory Therapy

RCP 3001 Medical Terminology for Respiratory Therapy (1 credit)
This course will provide use of medical terminology for appropriate and accurate communication in patient care. Students acquire a medical vocabulary, knowledge of medical terminology and terminology reference material. Frequency: Every Fall.

RCP 3002 Cardiopulmonary Anatomy & Physiology (3 credits)
This course will provide a comprehensive study of cardiopulmonary anatomy and physiology. Topics include normal ventilation, lung mechanics, pulmonary circulation, diffusion, and gas transport in the blood. The course will also include the natural and chemical regulation of breathing, blood flow and pressure, cardiac output with an emphasis on heart-lung relationship, clinical applications of respiratory care and commonly associated disorders. The renal system will be included. Frequency: Every Fall.

RCP 3003 Fundamentals of Respiratory Care w/Lab (4 credits)
This course provides students with an introduction to the field of respiratory care. Historical development of the profession, the principles of chemistry and physics as they apply to respiratory care, cardiopulmonary anatomy and physiology as well as respiratory care procedures are covered. This course will include oxygen delivery devices, humidifiers, aerosol generators, gas delivery, metering and analyzing devices, precursors, vibrators, environmental devices, manometers and gauges and vacuum systems. Specific modes of respiratory care are examined to understand the indications, hazards, contraindications and evaluation of therapy. Modes of care include medical gases, humidity/aerosol therapy, aerosol medications, positive pressure breathing, incentive spirometry, expiratory resistance, postural drainage and percussion/vibration. Frequency: Every Fall.

RCP 3004 Respiratory Care Basics and Assessements w/Lab (4 credits)
This course provides essentials of respiratory assessment which will include review of existing data in the patient record, patient history, physical examination, oximetry, blood gases, respiratory monitoring, laboratory studies, chest and upper airway radiographs, bedside EKG interpretation, cardiovascular monitoring, and nutritional assessment. Basic life support will be covered to include cardiopulmonary resuscitation, artificial ventilation and circulation, endotracheal intubation, airway care, tracheostomy care, recognition and treatment of arrhythmias. Related equipment will also be reviewed to include manual resuscitators, artificial airways, defibrillators and cardiac monitors. Frequency: Every Fall.

RCP 3007 Pulmonary Disease (3 credits)
The course provides a comprehensive approach to etiology, pathophysiology, clinical manifestations, diagnosis, treatment, and prognosis of common pulmonary diseases and syndromes. Main topics include obstructive and restrictive pulmonary and cardiovascular disorders, neoplastic disease of the lung, disordered breathing, cardiac and cardiovascular disorders, neuromuscular disorders, shock, near drowning, burns, smoke inhalation. Frequency: Every Winter.

RCP 3008 Pharmacology for Respiratory Therapy (3 credits)
The purpose of this course is to cover the physiologic and pharmacologic basis of pulmonary and cardiac medications. Preparation, calculation of dosages and mixtures and general principles of pharmacology will be covered followed by an in-depth discussion of the most commonly used respiratory drugs. This will include bronchoactive drugs, and drug groups related to the cardiopulmonary system, neuromuscular blocking agents, central nervous system depressants, cardiovascular agents, diuretics, and commonly used antibiotics, and antifungals. Frequency: Every Winter.

RCP 3009 Patient Monitoring w/ Lab (4 credits)
This course provides a study of invasive

and non-invasive patient monitoring techniques and equipment. Invasive topics include hemodynamic monitoring, arterial pressure monitoring, central venous and pulmonary artery catheters, as well as cardiac output measurement. Non-invasive monitoring topics include pulse oximetry, transcutaneous monitoring, inductance plethysmography, capnography, and electrocardiogram. This course will also include the recognition and treatment of arrhythmias and cardiovascular pharmacology. ACLS instruction will be provided. Frequency: Every Summer I.

RCP 3011 Mechanical Ventilation w/ lab (4 credits)
This course provides instruction in the theory, setup, operation, and maintenance of mechanical ventilators and related equipment. Topics include mechanical ventilator theory, ventilator operation, ventilator maintenance, and troubleshooting. Lab hours will provide students hands on practice in these areas. Frequency: Every Winter.

RCP 3012 Cardiopulmonary Diagnostics and PFT w/Lab (4 credits)
An overview of the various areas comprising cardiopulmonary diagnostics to include normal and abnormal pulmonary function and related technology. The student will learn to perform, interpret, and evaluate pulmonary function studies. In addition, the student will learn the operation and maintenance of pulmonary function and gas analysis equipment. Other topics include stress and exercise testing, metabolic testing, ventilation/perfusion scanning, cardiac catheterization laboratory, nutrition, and non-invasive cardiology. Lab hours will provide students hands on practice in these areas. Frequency: Every Fall.

RCP 3013 Human and Infectious Disease (3 credits)
This course will cover non-respiratory disease managed in the critical care unit and will include neurologic disorders, shock, trauma, sepsis, drug overdose, renal failure, acute G.I. disturbances, and respiratory care of the post-operative patient. Common infectious diseases such as HIV/AIDS, hepatitis, SARS, and influenzas will also be studied. Frequency: Every Summer I.

RCP 3501 Clinical I (2 credits)
This course introduces students to clinical practice in basic respiratory care procedures. Topics include: introduction to the clinical affiliate, patient assessment, chart review, medical documentation, medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment. In addition, intermittent positive pressure breathing, and chest physiotherapy and airway care using nasal, endotracheal, and tracheal tubes is introduced in basic care situations. Critical respiratory care is introduced to include basic care as applied in the intensive care unit including arterial puncture and blood gas analysis, and EKG services (observation and analysis only). Frequency: Every Winter.

RCP 3502 Clinical II (2 credits)
Critical respiratory care is further introduced to include all tasks presented in Clinical Practice I as applied to the intensive care unit. In addition, tracheostomy care, ventilator monitoring, arterial puncture and blood gas analysis, endotracheal intubation, EKG services, and bronchoscopy observation are introduced. Case presentations are required to integrate clinical and classroom theory. Frequency: Every Summer I.

RCP 4001 Neonatal/Pediatric Respiratory Care w/Lab (4 credits)
This course provides an overview of important concepts required for the understanding of the neonatal and pediatric patient. From fetal growth to infant development, students will learn how to assess, identify, and treat the most common respiratory diseases that affect the neonatal and pediatric patient. An overview of common congenital diseases, including respiratory, cardiac, gastrointestinal, and neurologic, will be included. Neonatal/ pediatric critical care and mechanical ventilation are included. Laboratory time will focus on respiratory care equipment used to care for neonates and pediatric patients to include: isolettes, ventilators, specialty gases, intubation, manual resuscitators, airway clearance devices, and airway maintenance. Frequency: Every Fall.

RCP 4002 Cardiopulmonary Technology & Specialties (3 credits)
This course will provide an overview of the various areas comprising cardiopulmonary diagnostics and related technology. Topics include sleep laboratory, disaster management, extracorporeal membrane oxygenation, mechanical circulatory assistance, hyperbaric medicine, bronchoscopy (laser, etc.), flight and ground transport, and perfusion technology. This course will also cover genetics human development, including the application of genetic technology in regard to the pulmonary system. Frequency: Every Summer I.

RCP 4003 Alternate Respiratory Disciplines (3 credits)
This course provides an overview of the concepts, procedures, and equipment utilized in the delivery of long-term care to persons with a chronic cardiopulmonary disorder. The development and implementation of disease management programs for the care of patients with asthma, COPD, and other chronic conditions is presented. Pulmonary rehabilitation, patient education, and smoking cessation programs are reviewed. Provision of health care services in the home and other non-acute settings is examined. Frequency: Every Fall.

RCP 4005 Health Research & Evidence–Based Practice (3 credits)
This course is designed as an introduction to critical analysis of research and medical literature as well as basic research methods. The course includes an introduction to descriptive and inferential statistics and research design. Statistical and research concepts and procedures are combined with an emphasis on Evidenced based research in Respiratory Care. Frequency: Every Winter.

RCP 4006 Leadership & Management in Respiratory Care (3 credits)
Extensive examination of current practices/ trends of techniques used in the leadership of the health care environment. Emphasis will be placed upon specific skill sets used by the managers of today's workforce. Frequency: Every Winter.

RCP 4009 Legal and Ethical Considerations in Respiratory Care (3 credits)
This course will provide a forum for discussion of current ethical, legal and professional issues. We will refer to historical and emerging controversies in health care and society that influence the patient-patient care giver relationship. The method of instruction will primarily be student presentation and classroom. Frequency: Every Winter.

RCP 4040 Statistics & Principles of Scientific Literature & Evaluation (3 credits)
This course is designed to introduce the conceptual foundation of statistical analysis & statistical reasoning of health sciences data, and prepare the student to calculate, interpret and utilize appropriate software packages for basic statistical analysis. This will include the sue of descriptive and inferential statistics, graphical and numerical descriptive measures, probability,common random variables and their distributions. Binomial and normal distributions, the Central Limit Theorem, sampling procedures, confidence intervals, and hypothesis testing will also be

introduced. The course will provide and introduction to basic research methods for respiratory care. Frequency: Every Fall.

RCP 4100 Clinical Seminar 1 (2 credits)
This is a hybrid course. Review of respiratory care as it pertains to the credentialing examinations administered by the National Board for Respiratory Care (NBRC). A series of written and simulation examinations will be used to prepare the students for these exams. Emphasis will be placed on decision-making and problem-solving as they relate to clinical respiratory care. Students will also obtain Medical Error certification necessary for licensure. Current processes for Respiratory Therapy Protocol development and initiation will be discussed. Frequency: Every Winter.

RCP 4101 Clinical Seminar 2 (2 credits)
This is a hybrid course. Continued review of respiratory care as it pertains to the registry (RRT) credentialing examinations administered by the National Board for Respiratory Care (NBRC). A series of written and simulation examinations will be used to prepare the students for these exams. Emphasis will be placed on decision-making and problem solving as they relate to clinical respiratory care. In conjunction with the review, a final case study presentation will be required and presented to the Program Director, Medical Director, Director of Clinical Education and faculty (at a minimum) to assess the understanding of being a respiratory therapy professional. Frequency: Every Summer I.

RCP 4501 Clinical III (4 credits)
Students will have an opportunity to further develop skills required in the intensive care of the respiratory patient. Topics include comprehensive ventilator management, measurement and evaluation of hemodynamic variables, noninvasive monitoring, and pulmonary function laboratory. Specialty rotations include: intubation, hyperbaric oxygen therapy units, cardiac catheterization, echocardiography, pulmonary rehabilitation, and home care. Case presentations are required to integrate clinical and classroom theory. Bronchoscopy observation is introduced. Frequency: Every Fall.

RCP 4502 Clinical IV (6 credits)
This course focuses on perinatal, neonatal, and pediatric respiratory care. Topics include: medical gas therapy, oxygen delivery devices, aerosol therapy, hyperinflation therapy, airway clearance devices, patient assessment, monitoring (invasive and noninvasive), airway care, vent management, and labor and delivery assistance. Specialty rotations include the burn unit. Case presentations are required to integrate clinical and classroom theory. Frequency: Every Winter.

RCP 4503 Clinical V (6 credits)
Students will have an opportunity for in-depth application and reinforcement of adult intensive care. In addition, students are provided with the opportunity to develop an area of specialization. Specialization areas may include neonatal/pediatrics, adult critical care, pulmonary function laboratory, advanced diagnostics, pulmonary rehabilitation, home care, management, research, or education. Frequency: Every Winter.

REE—Real Estate

REE 3301 Real Estate Principles, Practices, and Law (3 credits)
This course covers real estate licensing, brokerage, property rights, legal descriptions, contracts, financing, title, valuation, taxes, planning, and zoning.

REE 3900 Property Management Internship (3 credits)
The Huizenga College of Business and Entrepreneurship fosters learning through the application of classroom theory in the workplace. Undergraduate students have the option of participating in a university-sponsored internship for academic credit. The minimum internship work requirement is 180 hours during one semester. Registration for an internship is done through the HCBE Office of Academic Advising, not online, after conferral with the NSU Office of Career Development. ACADEMIC REQUIREMENTS: Good academic standing, GPA of 2.5 or higher, and completion of at least 36 credit hours.

REE 4302 Residential Property Management (3 credits)
This course focuses on managing and marketing residential properties using condominiums, apartment buildings, and mixed use properties as the basis for discussion and analysis. Issues include maintenance, marketing, location analysis, lease provisions, risk management, leasehold improvements, and government and tax incentive programs. Students discuss best practice examples and analyze and visit properties to meet industry leaders.

REE 4303 Commercial Property Management (3 credits)
This course focuses on managing and marketing commercial property using retail buildings, office buildings, warehouses, medical buildings, factories, and industrial properties as the basis for discussion and analysis. Issues include maintenance, marketing, location analysis, lease provisions, risk management, leasehold improvements, and government and tax incentive programs. Students discuss best practice examples and analyze and visit properties to meet industry leaders.

REE 4304 Facilities Management (3 credits)
This course focuses on the physical buildings, grounds, and services associated with an organization. Topics covered include issues in architecture, computer and telecommunication systems, interior design, real estate acquisition and disposition, construction project administration, and energy management.

REE 4305 Property Portfolio and Asset Management (3 credits)
This course focuses on maximizing the performance and value of the company's portfolio of property assets that are owned and/or managed through acquisitions, dispositions, or operations. Attention is focused on formulating and implementing a long-range property asset management and/or fund management strategy. While asset managers typically focus on a single property type, e.g., office properties. Within the company's real estate investment portfolio, portfolio managers would be responsible for all the product types within the fund, which may include office, retail, and multifamily properties.

RRT—Reg. Respiratory Therapy

RRT 3014 Advanced Patient Monitoring and Assessment (3 credits)
This course studies techniques and methods used to analyze and evaluate the health status of critically ill adult patients with emphasis on the respiratory, cardiovascular, and renal systems. Frequency: Every Summer II.

RRT 3015 Critical Care Pathophysiology for Respiratory Therapy (3 credits)
This course provides a survey of the disease processes which affect the tissues, organs of the body as a whole. Special emphasis is placed on infectious diseases, their causes, prevention and treatment in the critical care setting. Frequency: Every Winter.

RRT 3016 Advanced Cardiopulmonary Physiology for Respiratory Therapy (3 credits)
This course covers advanced physiology

of the cardiovascular and pulmonary systems. It includes the study of respiratory physiology, cardiac and circulatory function with relevant clinical application of concepts in ECG interpretation, blood pressure regulation, gas exchange and transport, breathing regulation, respiratory insufficiency as well as congenital abnormalities. Frequency: Every Fall.

RRT 3017 Outpatient Services in Respiratory Therapy (3 credits)
This course is an introduction to the history, trends, issues, and evolution of the outpatient services. It also covers reimbursement for respiratory therapy services in various healthcare settings. The course includes selected respiratory care theories and practices in alternate-care sites including pulmonary diagnostics, pulmonary rehabilitation, home care and sub-acute care. Frequency: Every Spring.

RRT 3018 Advanced Pharmacology in Respiratory Therapy (3 credits)
This course builds upon a basic understanding of the concepts and principles of pharmacology as applied in the respiratory therapy in the management of patient with cardiopulmonary disease and critical care. Frequency: Every Winter.

RRT 3020 Quality Improvement in Healthcare (3 credits)
This course provides an introduction and evaluation of current approaches to assessing risk as well as improving health care quality through the practice of continuous quality improvement. The focus is on conceptual understanding and experiential learning. Frequency: Every Summer II.

RRT 3021 Sleep Medicine (3 credits)
The course provides an in-depth overview of sleep medicine to include the anatomical and physiological considerations of sleep and breathing. Sleep disorders and polysomnography are explored to include monitoring techniques and instrumentation. Frequency: Every Spring.

RRT 4005 Evidence–Based Practice (3 credits)
This course will provide the student with an introduction to evidence-based practice, and an opportunity to acquire the skills necessary to incorporate evidence and best practices into professional work. This will include an understanding of research methods and critical appraisal of the research literature. Frequency: Every Spring.

RRT 4006 Leadership and Management for Respiratory Care (3 credits)
This course provides an extensive examination of current practices/trends of techniques used in the leadership of the health care environment. Emphasis will be placed upon specific skill sets used by the managers of today's workforce. Frequency: Every Spring.

RRT 4007 Education Principles in Health Care (3 credits)
This course provides an introduction to basic principles of education and their application to the current health care environment. Course content includes information on designing a lecture or course for the classroom, as an in-service or in a continuing education program. It focuses on assessing educational needs, organizing instruction, instructional methods and education. Frequency: Every Summer II.

RRT 4009 Legal and Ethical Considerations in Respiratory Care (3 credits)
This course will provide a forum for discussion of current ethical, legal and professional issues. We will refer to historical and emerging controversies in health care and society that influence the patient-patient care giver relationship. The method of instruction will primarily be student presentation and classroom. Frequency: Every Fall.

RRT 4010 Case Management Theory and Process (3 credits)
This course on case management uses the framework of the strengths-based model in working with different populations with a special focus on pulmonary patients. Through an integration of online activities and discussion, key issues will be explored and examined in-depth. Frequency: Every Summer II.

RRT 4502 Practicum (3 credits)
This course includes experiences in a chosen focus area (clinical, administrative, or population-based). This experience will culminate in a capstone project in the form of research, or other scholarly activity that articulates the design, organization, statistics and data analysis used and includes a written presentation of the project. Upon request. See academic Department Chair.

RRT 4505 Scientific Investigation (3 credits)
This course provides the student with an opportunity to gain experience in applying the scientific method. Emphasis will be on literary inquiries, statistical analysis, research design, and the preparation of material for publication. The student will develop an independent project or thesis proposal under the supervision of a faculty adviser, and prepare and submit a final report prior to the end of the students academic program. Upon request. See academic Department Chair.

RRT 4506 Internship (3 credits)
Designed to have the student demonstrate competency related to clinical processes in an advanced practice area (neonatal critical care, pediatric critical care, adult critical care, pulmonary rehabilitation, pulmonary function laboratory, polysomnography, hyperbaric therapy, respiratory care management or respiratory care education). Students should select the specialty section that reflects their area of expertise. A written presentation will be required. Upon request. See academic Department Chair.

RRT 4507 Scientific Investigation 2 (3 credits)
This course provides the student with the opportunity to perform a systematic review or meta-analysis. Emphasis will be on study protocol design, define inclusion/exclusion criteria, literature search strategies, and statistical methods for analysis. The student will develop an independent systematic review or meta-analysis with the aid of a faculty advisor and submit as a final project prior to graduation. Upon request. See academic Department Chair.

RT—Recreational Therapy

RT 1100 Recreational Therapy: Theory and Foundations (3 credits)
This course examines the history, concepts, theories, and foundations of therapeutic recreation. It introduces the role of therapeutic recreation for disadvantaged populations and persons with disabilities and illnesses in health care and community settings. Students will examine the application of therapeutic recreation in prevention services and the link between social, psychological, and physical health. Students will also gain a basic understanding of the disabilities, impairments and illnesses most often encountered in the provision of therapeutic recreation services. Students will gain a basic understanding of the principles and techniques in therapeutic recreation programming to include: client assessment, individual programming planning, behavioral techniques, activity analysis, documentation, specific program design, and program evaluation. Frequency: Every Fall and Winter.

RT 1200 Recreational Therapy with Physically Disabled Individuals (3 credits)

Addressing physical and psychological needs of individuals with physical disabilities. This course will also provide appropriate recreational therapy techniques and methods used in providing services to individuals in clinical and community settings. Frequency: Every Fall.

RT 1400 Current Trends in Recreational Therapy (3 credits)
This course will examine the most recent trends in the field of Therapeutic Recreation. Topics that will be discussed will include: the current settings in which recreational therapists are typically employed, various treatment modalities, collaboration entities that are beneficial to clients treated in recreational therapy environments, and future developments within the Therapeutic Recreation field, including evaluation of current research in this area. Prerequisite: RT 1100. Frequency: Every Fall.

RT 2000 Recreational Therapy: Processes and Techniques (3 credits)
An introduction to the processes and techniques of therapeutic recreation to meet the unique needs of people with disabilities. This course is designed to discuss the assessment, planning, implementation, and evaluation strategies utilized in recreational therapy. The course will also take an in-depth look at the challenges associated with the recreational treatment process and examine the various methods used in overcoming these challenges. Frequency: Every Fall.

RT 2100 Recreational Therapy for Individuals with Mental Illness (3 credits)
This course will address psychiatric, social, behavioral, and addiction difficulties through recreational therapy interventions in behavioral and mental health settings. This course will discuss the therapeutic recreation strategies and techniques that can improve functional abilities, enhance recreation skills and attitudes, build confidence, ease fears, promote greater self-reliance, strengthen interpersonal skills, manage stress and emotional difficulties, and enrich the client?s quality of life. Prerequisite: PSYC 3260. Frequency: Every Winter.

RT 2200 Multicultural Issues in Therapeutic Recreation Settings (3 credits)
This course examines multicultural competence and helps students develop awareness, knowledge, and skills that will enable them to work effectively in cross-cultural situations. The course will also discuss the challenges and ethical considerations associated with working with diverse populations in a therapeutic recreation environment and the various methods used in overcoming these challenges. Frequency: Every Fall and Winter.

RT 3050 Clinical Assessment and Evaluation in Recreational Therapy (3 credits)
This course will examine the importance of reliable assessment and evaluation in the recreational therapy treatment planning process. There will be a focus on assessment, developing measurable treatment goals, evaluating outcomes, and documentation. Frequency: Every Fall.

RT 3100 Recreational Therapy Services for Children and Adolescents (3 credits)
This course will address physical, psychological, and social needs of children and adolescents through recreational therapy. The course will also take an in depth look at assessment, treatment, and evaluation considerations when working with children and adolescents. Age-appropriate activities to provide support, pain management, and coping education for medical and therapy procedures will be discussed, as well as activities that involve families to facilitate coping skills for the child and the family. Frequency: Every Winter.

RT 3200 Recreational Therapy Services for Older Adults (3 credits)
This course will address the physical, psychological, and social needs of older adults through recreational therapy. This course will also take an in depth look at assessment, treatment, and evaluation considerations when working with the older adult population. Frequency: Every Fall.

RT 3250 Human Anatomy and Physiology (3 credits)
This course deals specifically with form and function of human systems. The course stresses human anatomy and physiology. A comprehensive coverage of the musculoskeletal system, articulations and the neural system is discussed. The application of kinesiological principles to the analysis of movement and the description of movement in anatomical terms is also a focus of the course. Frequency: Every Fall and Winter.

RT 3300 Supervision in a Therapeutic Recreation Setting (3 credits)
This course will examine specific management, supervision, and leadership skills when overseeing therapeutic recreation practice. Operational and program evaluation procedures specific to therapeutic recreation settings will be discussed, including components such as developing quality improvement measures, directing and advising staff, and managing conflicts with clients and staff. Frequency: Every Winter.

RT 4100 Field Placement in Recreational Therapy I (3 credits) (Revised: see *Addendum N)*
The field placement courses will be individually arranged and will provide a supervised on-site training experience (480 hours total). Students will select their choice of a Community Based Organization (CBO) and will complete their field experience in this site. This experience will provide a hands-on implementation of principles and theory learned as they relate to recreational therapy settings. Students will be supervised by an onsite supervisor who is NCTRC CTRS certified on a weekly basis. Frequency: Every Fall.

RT 4200 Field Placement in Recreational Therapy II (3 credits) (Revised: see *Addendum N)*
The field placement courses will be individually arranged and will provide a supervised on-site training experience (480 hours total). Students will select their choice of a Community Based Organization (CBO) and will complete their field experience in this site. This experience will provide a hands-on implementation of principles and theory learned as they relate to recreational therapy settings. Students will be supervised by an onsite supervisor who is NCTRC CTRS certified on a weekly basis. Prerequisite: RT 4100. Frequency: Every Winter.

SCIE—Science

SCIE 1150 Great Experiments in Science (1–6 credits)
An outline course in which students review some of the experiments and scientists that have shaped the fields of biology, chemistry, and physics. Students will receive one unit of credit for completion of 10 modules. Completion of 60 modules results in six credits. The course culminates in a lecture given by a prominent scientist concerning a current topic in scientific research. The course is intended to advance scientific literacy and examine the impact of science on our health, technology, and culture. Students may re-enroll but cannot accrue more than a total of six credits. Frequency: Upon request and see academic department chair.

SCIE 3210 History of Science (3 credits)
The course is a survey of science and scientists from ancient to modern times.

The major advancements in life science, medicine, and oceanography will be discussed from the perspective and tenor of the times. Some original literature and autobiographies as well as historical reviews will be assigned and discussed. Prerequisite: BIOL 1040 or MBIO 1050 or higher. Frequency: Odd Year Fall.

SCIE 4490 Research Methods (3 credits)
This course will present a broad theoretical outline for the design and implementation of research projects. Topics to be covered include problem definition, principles of design, sampling, measurement concepts, and research proposal preparation. Although this is not a course in statistics, a brief overview of univariate and bivariate statistics will be presented. This course will also cover the presentation of results, including graphics. It is assumed that the student will have some background in basic statistics and have some familiarity with computers. Prerequisite: MATH 3020 or MATH 3020H or MATH 2020 or MATH 2020H. Frequency: Every Even Winter.

SEBI—SEBI-Sci Ed Biology Internship

SEBI 4570 Secondary Biology Education Internship (12 credits)
This course for Secondary Biology Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours in a secondary biology classroom setting that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; secondary biology student assessment; NSTA safety guidelines for the science lab, including the safety and welfare of all living things in the science lab, and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, EDUC 3535, SECE 3550, SECE 4320, EDUC 4200, SECE 4550, SECE 4560, ESOL 4565, BIOL 1070, CHEM 1100, BIOL 2400, BIOL 1500, BIOL 1510, BIOL 3200, BIOL 3312, MATH 2020, and passing scores on all subtests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

SECE—Secondary Education

SECE 3530 Methods of Teaching Middle and Secondary Social Studies (3 credits)
This course is a study of content, methodology, program development, appropriate activities, and assessment techniques for middle and secondary school social studies. In addition, students will implement ESOL strategies in planning and presenting lessons. Students will also become familiar with the Florida Accomplished Practices as appropriate. Students are required to teach a social studies lesson in a classroom during the 10 hour field experience required for this class. This is an ESOL infused course. Prerequisites: EDUC 3330, EDUC 3350, EDUC 3360, and EDUC 3525. Frequency: Every Fall.

SECE 3550 Methods of Teaching Middle and Secondary Science (3 credits)
The purpose of this course is to examine content and methods for teaching science in middle and secondary school. You will explore a variety of techniques and reflect on approaches most applicable to teaching and learning in the middle school and high school science classroom. "Hands-on" approaches, resources, materials, technology, and ideas drawn from the student's experience will be discussed. A full and comprehensive grasp of the National and State standards in science will be developed. There will be a Field experience in a community school required. Prerequisites: EDUC 3525, EDUC 3350, ESOL 3340, and passing scores on the Florida Teacher Certification Examination General Knowledge Test. Frequency: Every Fall.

SECE 4320 Middle and Secondary Classroom Management (3 credits)
This course examines research-based knowledge, skills, and strategies that promote effective classroom management at the middle and secondary school levels. Teacher candidates apply the content learned in the course by developing a classroom management plan that focuses on safety and instruction for diverse students. Ten hours of field experiences are required to further promote candidates' application of knowledge, skills, and strategies. This course is ESOL infused. Prerequisite: None. Frequency: Every Fall and Winter.

SECE 4350 Methods of Teaching Middle & Secondary Mathematics (3 credits)
This course will focus on methods of teaching mathematics in middle and secondary school. Students will explore major concepts and procedures that define the following mathematical domains: Number, Algebra, Geometry, Trigonometry, Statistics, Probability, Calculus, and Discrete Mathematics. Emphasis is on mathematical problem solving; the necessary training for lifelong learning; use of mathematics-specific technology and varied representational tools, including concrete models; alternative assessment; and techniques of assertive discipline including analyzing and considering research. Students will explore a variety of techniques and reflect on approaches most applicable to teaching and learning in the middle school and high school mathematics classroom. "Hands-on" approaches, resources, materials, technology, and ideas drawn from the student's experience will be discussed. A full and comprehensive grasp of the National and State standards in Mathematics will be developed along with the historical development and perspectives of each domain including contributions of significant figures and diverse cultures. There will be a 10 hour field experience in a middle or secondary school. Supervised field experience activities: collecting observation data using pre-selected tools, incorporating mathematics-specific technology, teaching a lesson with activities to promote critical thinking, and working with the teacher and ESOL/LEP students in the classroom will require students to know, understand, teach, and be able to communicate their mathematical knowledge of the competencies. Prerequisites: EDUC 2500, EDUC 3330, EDUC 3350, EDUC 3360, and EDUC 3525. Frequency: Every Fall and Winter.

SECE 4370 Methods of Teaching Middle & Secondary English (3 credits)
This course addresses current instructional methodologies in English in the middle and secondary school. The emphasis is on identifying strategies and procedures for comprehensive instruction across the written language arts areas. Students will implement ESOL strategies in planning and presenting lessons. In addition to class meetings, at least 10 hours of field experience are required. Prerequisites: EDUC 3330, EDUC 3350, EDUC 3360, and EDUC 3525. Frequency: Every Fall.

SECE 4550 Teaching Inquiry Science

in Middle and Secondary Schools (3 credits)
The design of this course is to prepare and equip all secondary biology education majors with the knowledge, skills, principles, major concepts, current theories, practices, and dispositions of teaching science in the secondary school. Concepts and methods of teaching science through inquiry based learning and hands-on investigation activities will be explored, discussed, and each teacher candidate will develop hands-on activities and assessments that promote scientific inquiry. There is a ten hour field experience requirement. Pre-requisite: SECE 3550. Frequency: Every Winter.

SECE 4560 Methods of Teaching Middle and Secondary Reading (3 credits)
This course addresses the significance of reading ability and study skills throughout the secondary school curriculum. The emphasis is on identifying sources of difficulties experienced by secondary school students in reading and learning from instructional materials. General strategies for learning from textbooks are examined as well as study skills and specific strategies for dealing with text materials from particular content areas. Students will implement ESOL strategies in planning and presenting lessons. In addition to class meetings, at least 10 hours of field experiences are required. Prerequisites: EDUC 2500, EDUC 3330, EDUC 3350, EDUC 3360, and EDUC 3525. Frequency: Every Fall and Winter.

SECE 4565 Teaching Controversial Topics in Social Studies (3 credits)
This course is designed to develop the knowledge and skills required to teach about controversial topics by examining history/social science curriculum and appropriate instructional methods. Students explore ways to teach about the dangers of indifference and the values of participation in a democracy by confronting the complexities of history. Specifically, students will develop their knowledge of a critical discourse educational model including (1) understanding multiple perspectives, (2) contextualizing facts, and (3) connecting information to grades 6-12 students' lives for relevancy. Prerequisites: SECE 3530 and SECE 4320. Frequency: Every Fall.

SEEN—SEEN-Sec Eng Edu Internship

SEEN 4570 Secondary English Education Internship (12 credits)
This course for Secondary English Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours in an English classroom setting that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, EDUC 3535, SECE 4320, SECE 4370, EDUC 4200, SECE 4560, ESOL 4565, SPCH 1010, LITR 2010, LITR 2020, LITR 2021, LITR 2030, LITR 2031, LITR 3040, LITR 3060, LITR 3520, and passing scores on all subtests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

SEMA—SEMS - Secondary Educ Math

SEMA 4570 Secondary Mathematics Education Internship (12 credits)
This course for Secondary Mathematics Education majors offers a comprehensive review and practical application of educational philosophy, methods, and strategies through a 12-week clinical experience (internship) consisting of 450 hours in a secondary mathematics classroom setting that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, EDUC 3535, SECE 4320, SECE 4350, EDUC 4200, SECE 4560, ESOL 4565, MATH 1200, MATH 1250, MATH 2020, MATH 2100, MATH 2200, MATH 2250, MATH 3300, MATH 3350, and passing scores on all subtests of the Florida Teacher Certification Examnation. Frequency: Every Fall and Winter.

SENG—Software Engineering

SENG 4100 Software Development Processes and Quality (3 credits)
An examination of the various processes, design techniques, and quality measures used in software development. Topics include the software life cycle, trade-off analysis, rapid prototyping, and design patterns; software engineering processes, quality assurance, metrics, and control; software management. Prerequisite: CSIS 3750. Frequency: Every Fall.

SENG 4110 Measurement and Verification of Software (3 credits)
An examination of the engineering foundations for software development, as well as the terminology and foundations for software verification and validation. Topics include the empirical and experimental techniques used for analyzing CPU and memory usage, statistical analysis related to the theory of measurements and metrics, systems development, and engineering design; software verification and validation techniques, unit testing, reviews, and program documentation and reporting. Prerequisite: CSIS 3750. Frequency: Every Fall.

SENG 4750 Software Construction Technologies and Methods (3 credits)
This course examines the various construction technologies used in the design and construction of software products. Topics include API design and use, code reuse and libraries, objected oriented run-time issues, parameterization, error handling and fault tolerance, state-based and table driven construction techniques, parsing, concurrency primitives, middleware, distributed software, heterogeneous hardware and software systems, GUI builders, and formal construction methods. Prerequisites: CSIS 3750. Frequency: Every Fall.

SENG 4800 Software Architecture, Modeling, and Analysis (4 credits)
This course examines the modeling and analysis tools that are essential to documenting and evaluating design decisions and alternatives. Topics include modeling principles and properties of programming languages, pre and post conditions, syntax vs. semantics, and explicitness; types of models such as

informational, behavioral, structural, domain oriented, and functional; formal analysis methods such as traceability, prioritization, trade-off, risk, and impact analysis; architectural design trade-offs, evolution processes, and evolution activities. Prerequisites: CSIS 3750. Frequency: Every Winter.

SENG 4890 Special Topics in Software Engineering (3 credits)
Topics in software engineering that are not included in regular course offerings. Specific contents are announced in the course schedule for a given term. Prerequisite: Consent of division director. Frequency: Infrequent: less than once every two years.

SENG 4900 Senior Capstone Design (3 credits)
This course covers a general design methodology and consideration of alternative solutions in project planning and design. Teams of students will be assigned a major design problem that will be the focus of the capstone design project throughout the course. Oral presentation and report writing are required. Prerequisite: Consent of department chair. Frequency: Every Winter.

SENG 4910 Senior Seminar (1 credit)
This course is designed to allow senior undergraduates to meet speakers from industry to explore intellectual topics in Software Engineering (at the upper-division level). Topics will vary from semester to semester. Overall, the course focuses on a lecture style presentation of topics of interest to Software Engineering students such as software standards, new paradigms in software design, software systems, procedures, applications, and career topics. Prerequisite: Consent of division director. Frequency: Upon Request see academic Department Chair.

SENG 4950 Internship in Software Engineering (1–12 credits)
Consult academic division for specific details and requirements. A work experience for 16 weeks in the student?s major area of study or area of career interest. Prerequisites: cumulative GPA of 2.0 or higher, major GPA of 2.25 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of academic director. Frequency: Upon Request see academic Department Chair.

SENG 4990 Independent Study in Software Engineering (1–3 credits)
The student selects and independently carries out independently library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and the division director. Pre-Requisites: To be determined by the faculty and the division director. Frequency: Upon Request see academic Department Chair.

SESS—Secondary Edu Social St

SESS 4570 Secondary Social Studies Education Internship (12 credits)
This course for Secondary Social Studies Education majors offers a comprehensive review and practical application of educational philosophy, methods including NCSS 10 standards, and strategies through a 12-week clinical experience (internship) consisting of 450 hours in a social studies classroom setting that includes coursework and seminars. The central coursework is composed of a 12-week clinical experience, with the concurrent seminar serving as a supportive and reinforcing component. During the seminar sessions, the teacher candidate will explore, in depth, such topics as school board rules, regulations and policies; professional ethics; best practices; national and state standards; teaching strategies; current trends in education; teaching competencies; social studies student assessment; and reflective practices. This course requires candidates to demonstrate professional, pedagogical, and content standards, including ESOL competencies and skills. Prerequisites: EDUC 2500, ESOL 2903, EDUC 3330, ESOL 3340, EDUC 3350, EDUC 3360, EDUC 3525, EDUC 3535, SECE 3530, SECE 4320, EDUC 4200, SECE 4560, ESOL 4565, SECE 4565, HIST 1090, ECN 2020, GEOG 2050, HIST 2140, HIST 3010, SOCL 3130, HIST 3300, HIST 3430, HIST 3450, and passing scores on all subtests of the Florida Teacher Certification Examination. Frequency: Every Fall and Winter.

SOCL—Sociology

SOCL 1020 Introduction to Sociology (3 credits)
This course is concerned with the nature and needs of people, their relationships to their societies, and the manner in which they govern those relationships by establishing groups and institutions, engaging in social processes and bringing about social change. Special emphasis will be placed on culture in the United States and the impact of technology on the modern person. Frequency: Every Fall and Winter.

SOCL 2000 Introduction to Social Work (3 credits)
This course covers the basic theoretical and professional approaches to general social work in society. The class includes examination of social justice issues and social welfare policies, as well as the role of social workers among different populations and in various settings. Prerequisite: SOCL 1020. Frequency: Every Fall.

SOCL 2021 Sociology of Deviance (3 credits)
Students will examine ways in which sociologists have tried to explain deviant behavior, what makes someone or something deviant, and how society responds to deviant behavior. Students will be exposed to a range of theories and data about deviance as well as various forms of deviance such as family violence, suicide, murder, prostitution, alcoholism, corporate crime and robbery. Prerequisite SOCL 1020. Frequency: Odd Year Fall.

SOCL 2030 Medical Sociology (3 credits)
The course uses sociological concepts, perspectives and research methods to develop an understanding and awareness of how social, cultural, and behavioral factors influence health, illness and healthcare. Students will study the explanations and theories relating to the distribution of diseases among various population groups, the behaviors or actions taken by individuals to maintain, enhance or restore health or cope with illness, disease and disability. Prerequisite SOCL 1020. Frequency: Even Year Fall.

SOCL 2100 Sociology of Sexuality (3 credits)
This course reviews the sociology of sexuality from a socio-historical perspective. Among the topics to be discussed are the theoretical approaches to sexuality, the making of sexual identities, the relationship between sexuality and social institutions, sexual politics, and ethics. Prerequisites: SOCL 1020. Frequency: Every Fall and Winter.

SOCL 2130 Family Relationships (3 credits)
Contemporary patterns of marriage and family living. Approaches to effective living together in family units. Covers both adult and parent-child relationships. Emphasis on communication, supportiveness, and contingency management. Frequency: Every Fall and Winter.

SOCL 2200 Ghana: Through a Sociological Lens (3 credits)
This course will help students to develop ?intercultural competence? by expanding their knowledge, experience

and understanding of the diversity of cultures, and at the same time, the interconnectedness of these cultures. Learning and experiencing other cultures are necessary preparations for life in our thoroughly globalizing world. Students in this course will travel to Ghana, a country located in West Africa, on a study abroad trip. Ghana?s history, unique features and conditions make it an ideal location for a study abroad program. Within the African continent Ghana stands out for its unique sociocultural and historical location. The first sub-Saharan country in Africa to gain its independence [in 1957], Ghana is currently one of the most peaceful and stable democracies and rapidly growing economies in Africa. Furthermore, Ghana, formerly called the Gold Coast has an intriguing colonial history, a rich cultural heritage and offers an example of a post-colonial African society with a seamless transition between tradition and modernity. Also, Ghanaian people are noted for their warmth, hospitality, and peaceful and easy going attitudes. Visiting Ghana will offer students the opportunity to explore and experience first-hand the rich diversity of Ghana?s cultural heritage through their direct interaction with the people and visits to several historical, geographical and cultural sites. More important, visiting a country in which modern forms of living and indigenous traditions co-exist, will further enhance students? understanding of the dynamics of social and cultural change. Prerequisites: None. Frequency: Odd Year Winter.

SOCL 2510 Social Problems (3 credits)
Focuses on a number of contemporary social problems, analyzing causative factors and exploring alternative solutions. Examines the role of community service agencies in the improvement of some of these problems. Prerequisite: SOCL 1020. Frequency: Every Fall and Winter.

SOCL 2600 Sociology of Sport (3 credits)
This course will use the investigative tools of sociology to explore the myths and realities of sport, with a particular focus on contemporary American society. It will attempt to answer such questions as: Do sports “build character”? Is “amateurism” a myth? Should professional athletes be paid exorbitant sums of money? Are there elements of racial and sexual prejudice in sports? Do governing bodies exploit athletes? What is the role of athletics in society? Do our established athletic (and societal) institutions serve this purpose? Do sports provide a valid means of upward mobility? Should professional athletes be considered role models? What tools are available to assess the frequency of drug use in sports? Prerequisite: SOCL 1020 Frequency: Odd Year Winter.

SOCL 3000 Research Methods in the Social Sciences (3 credits)
Introduction to qualitative research designs commonly used in the social sciences. Discussion of data collection methods such as participant observation and interviewing, focus groups, case studies and ethnographies. Prerequisites: SOCL 1020 or ANTH 1020 Frequency: Every Winter.

SOCL 3100 Sociology of Religion (3 credits)
The class will explore religion from a sociological perspective. We will use theory to examine churches, cults, and sects across the globe. In addition, the class will explore the concepts of tradition, belief, ritual, spirituality, and fundamentalism. The class will also look at how religion interacts with other sectors of society such as politics, economics, and social movements. Prerequisites: COMP 2000 or COMP 2000H and SOCL 1020 or ANTH 1020. Frequency: Even Year Winter.

SOCL 3150 Social Movements (3 credits)
This course examines how and why people attempt to bring about social change as well as forces that oppose social change. Various theoretical viewpoints will be used for analysis. Concentration is on twentieth and twenty-first century social movements from case study perspectives. Prerequisite: SOCL 1020. Frequency: Odd Year Fall.

SOCL 3250 Social Theory (3 credits)
This course concentrates on the historical development of sociological theory with special reference to its European origins. It will also provide a comparative study and critique of various theoretical accounts on the rise and of the transformations of modern society in the 19th and 20th centuries. Selected topics include the individual, society, and polity; economy, class, and status; organization and ideology; religion and society; moral and instrumental action. Prerequisite: SOCL 1020. Frequency: Every Fall.

SOCL 3350 Gender, Society, and Culture (3 credits)
This course examines women and men in the context of society and culture to ascertain what gender means and how gender plays a role in everyday lives and social institutions. Gender will be examined in regard to various areas including: relationships, work, economy, education, media, justice, deviance, politics, religion, and health. Prerequisite: SOCL 1020 or ANTH 1020. Frequency: Every Winter.

SOCL 3500 Race and Ethnicity in the U.S. (3 credits)
This course covers race and ethnic divisions, discrimination, conflict and cooperation. Further, it explores the impact of global processes on race and ethnicity in the United States. There will be a comparison of US racial and ethnic patterns to other countries. Prerequisite: SOCL 1020. Frequency: Even Year Fall.

SOCL 3600 Environmental Sociology (3 credits)
This course examines the relationships between societies and the physical environment in the U.S. and at the global level as well as the ways in which environmental problems are also social problems. It will explore materialism, technology, development, population, and environmental activism and attitudes including the pivotal role that social inequality plays in relation to environmental problems. Prerequisites: SOCL 1020 or ENVS 1100 or ENVS 1200. Frequency: Every Fall and Winter.

SOCL 3800 Family Life Cycle (3 credits)
A study of family functioning over the life span of the family. Various issues such as culture, class, race, and gender will be covered and how these impact family functioning. Emphasizes marriage, divorce, remarriage, death, and other major determinants of family operation. Prerequisite: SOCL 2130. Frequency: Odd Year Fall.

SOCL 4010 Lesbian, Gay, Bisexual, and Transgender Cultures (3 credits)
This course examines topics in lesbian, gay, bisexual, and transgender cultures from theoretical, historical and political perspectives. Topics might include an examination of the essentialist versus constructionist debates and their respective implications, sex policing, political resistance, and the politics of AIDS. Prerequisite: SOCL 1020. Frequency: Odd Year Winter.

SOCL 4880 Senior Seminar (3 credits)
“Students will analyze and integrate information from a variety of sub-disciplines within sociology. Topics may include, but are not limited to, sociological perspectives on race/ethnicity, gender, environment, religion, medicine, deviance, sexuality, and family. Each seminar will have a focal theme that will require students to develop and use their sociological imagination, as well as apply knowledge from prior courses and experiences. This course is presented

as a capstone experience, therefore students with advanced standing within the sociology major will benefit the most from the seminar. Prerequisites: SOCL 3000 or SOCL 3200. Frequency: Every Winter."

SOCL 4950 Internship in Sociology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of academic director. Frequency: Every Fall and Winter.

SOCL 4950A Internship A in Sociology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of academic director. Frequency: Every Fall and Winter.

SOCL 4950B Internship B in Sociology (1–3 credits)
A 10-20 hour per week, paying or nonpaying work experience for 16 weeks (or more) in the student's major area of study. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credit hours, and permission of academic director. Frequency: Every Fall and Winter.

SOCL 4990 Independent Study in Sociology (1–6 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Frequency: Every Fall and Winter.

SOCL 4990A Independent Study in Sociology A (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and division director. Frequency: Every Fall and Winter.

SOCL 4990B Independent Study in Sociology B (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and division director. Frequency: Every Fall and Winter.

SOCL 4990C Independent Study in Sociology C (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and division director. Frequency: Every Fall and Winter.

SOCL 4990D Independent Study in Sociology D (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisites: Written consent of instructor and division director. Frequency: Every Fall and Winter.

SPAN—Spanish

SPAN 1210 Elementary Spanish I (3 credits)
Essentials of Spanish language with emphasis on grammar, vocabulary, writing, and oral skills. Introduction to Spanish culture. Not open to native speakers. Frequency: Every Fall and Winter.

SPAN 1220 Elementary Spanish II (3 credits)
Essentials of Spanish language with emphasis on grammar, vocabulary, writing, and oral skills. Not open to native speakers. Prerequisite: SPAN 1210 or a Spanish Challenge Exam score of 70 to 79. Frequency: Every Fall and Winter.

SPAN 2210 Intermediate Spanish I (3 credits)
Intermediate Spanish I: Readings in Spanish literature and culture. Study of Spanish idioms and syntax. Further development of oral and written Spanish. Not open to native speakers. Prerequisite: SPAN 1220 or a Spanish Challenge Exam score of 80 to 89. Frequency: Every Fall.

SPAN 2220 Intermediate Spanish II (3 credits)
Continuation of SPAN 2210. Readings in Spanish literature and culture. Study of Spanish idioms and syntax. Further development of oral and written Spanish. Not open to native speakers. Prerequisite: SPAN 2210 or a Spanish Challenge Exam score of 90 to 92. Frequency: Every Winter.

SPAN 2350 Spanish for Heritage Learners (3 credits)
This intermediate level course is designed for students who have had little or no formal instruction in Spanish, but who, because of their exposure to the language via their familial ties or previous social exposure, can understand much of casual spoken Spanish or can passively understand the language, but may not speak it or write it themselves. The focus of the course is to build upon their knowledge and develop formal speaking, reading and writing skills. Frequency: Every Fall.

SPAN 3000 Conversation and Composition (3 credits)
A course for students with intermediate-level Spanish reading and writing competency who wish to increase their oral and written competency in the language. Prerequisite: SPAN 2220 or SPAN 2350 or a Spanish Challenge Exam score of 93 or higher. Frequency: Every Fall.

SPAN 3200 Business Spanish (3 credits)
Introduces business terminology and usage to develop fluent oral and written communication in business and professional settings. Special attention is given to understanding the cultural context for conducting business in both Spain and Latin America. Group projects, class discussions, oral and written work all in Spanish. Prerequisite: SPAN 2210 or SPAN 2350 or a Spanish Challenge Exam score of 93 or higher. Frequency: Odd Year Winter.

SPAN 3240 Introduction to Spanish Literature (3 credits)
An introductory literature course intended to familiarize students with the literature of Spain from the medieval period until the twentieth century and to develop skills in literary analysis. Class discussions, readings, oral and written work all in Spanish. Prerequisite: SPAN 2350 or SPAN 3000 or a Spanish Challenge Exam score of 93 or higher. Frequency: Even Year Winter.

SPAN 3250 Introduction to Latin American Literature (3 credits)
An introductory literature course intended to familiarize students with the literature of Latin America through selected readings in all genres and to develop skills in literary analysis. Class discussions, readings, oral and written work all in Spanish. Prerequisite: SPAN 2350 or SPAN 3000 or a Spanish Challenge Exam score of 93 or higher. Frequency: Odd Year Winter.

SPAN 3300 Spanish for Health Professions (3 credits)
This course focuses on intermediate-level Spanish grammar and vocabulary designed to help current and future health care professionals communicate with Spanish-speaking patients and their families. Students will also learn about the cultural context for discussing medical issues in both Spain and Latin America. Prerequisite:

SPAN 2210 or SPAN 2350 or a Spanish Challenge Exam score of 93 or higher. Frequency: Odd Year Fall.

SPAN 3400 Spanish for Legal Professions (3 credits)
This course introduces legal terminology and usage to develop fluent oral and written communication in legal and professional settings. Special attention is given to understanding a variety of major cultural complexities that envelop the law and communication when working with a Hispanic population. Students will be required to translate short legal documents (cases and studies) and interpret through role playing. Group projects, class discussions, oral and written work are all in Spanish. Prerequisite: SPAN 2210 or SPAN 2350 or a Spanish Challenge Exam score of 93 or higher. Frequency: Even Year Winter.

SPAN 4900 Special Topics in Spanish (3 credits)
An in-depth study of a period, an author or a literary genre in the Spanish language. Class discussions, readings, oral and written work all in Spanish. May be repeated once for credit, if content changes, and with written consent of division director. Prerequisite: one 3000-level SPAN course. Frequency: Even Year Winter.

SPAN 4990 Independent Study in Spanish (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One SPAN course and COMP 2000, COMP 2010 or COMP 2020 or COMP 2000H. Frequency: Every Fall and Winter.

SPCH—Speech

SPCH 1010 Public Speaking (3 credits)
Training and practice in the fundamentals of public speaking, including audience analysis, topic development, research, organization, language use, and delivery. Frequency: Every Fall and Winter.

SPCH 1010H Public Speaking Honors (3 credits)
Training and practice in the fundamentals of public speaking, including audience analysis, topic development, research, organization, language use, and delivery. Honors students only. Frequency: Even Year Fall.

SPCH 2000 Fundamentals of Human Communication (3 credits)
This course surveys major concepts, theories, and research in the study of human communication. The course assists students in developing knowledge and skills in the development of their own communication competence. The course covers basic human communication processes in the contexts of interpersonal, group/team, and public communication. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

SPCH 2020 Argument and Debate (3 credits)
Training and practice in fundamentals of oral argumentation, including methods of obtaining and organizing materials, delivery, and audience analysis, with an emphasis on researching evidence and constructing and refuting an argument in a debate format. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall and Winter.

SPCH 3120 Speech Communication for the Professions (3 credits)
Emphasis on public communication skills required of the person in business and/or professional settings. Topics include business interviews, public speaking, presentation aids, listening, team communication, and cultural diversity in the workplace. Frequency: Every Fall and Winter.

SPT—Sport and Recreation Mgt

SPT 1050 Introduction to Sport and Recreation Management (3 credits)
This course introduces students to the discipline of sport management. This includes an overview of the sport and recreation industry from youth sports to professional sports. This course also provides students with a foundation in key components of sport management including sport marketing and sponsorship, sport event and facility management, sport finance and economics, as well as sport in society and popular culture. Frequency: Every Fall and Winter.

SPT 2050 Sport in Popular Culture (3 credits)
Examines sport in today's popular culture, this includes music, film, television, advertising, fashion, toys, magazines, and cyberspace. Through critical analysis the connection between sport, popular culture and issues of race, gender, sexuality, censorship, and social class will be analyzed and discussed. Frequency: Every Winter.

SPT 2150 Sport in Society (3 credits)
Studies the impact sport has on our society. The course examines the different levels of sport and emphasizes issues related to economics, education, race, gender, youth sports, social mobility, violence, and deviance. Frequency: Every Fall.

SPT 2350 Ethics in Sport and Recreation Management (3 credits)
This course examines morality and ethical issues pertaining to sport. Topics include sportsmanship, fan behavior, performance-enhancing drugs, drug testing, gender equity in sport, violence on and off the field, and youth sport participation. Frequency: Every Fall.

SPT 2950 Sport and Recreation Practicum (3 credits)
This course is designed to give students the opportunity to gain practical experience with a sport or recreation organization. Allowing the student to experience first hand what it is like to work in the industry. Students must work 75 hours within one academic term (16 weeks). Prerequisites: SPT 1050 and Instructor Approval. Frequency: Every Fall and Winter.

SPT 3150 Facility and Event Management (3 credits)
This course studies the guidelines and principles of managing sport and recreation events and facilities. Topics include event logistics, critical planning techniques, negotiations, funding, and facility design, operation, and maintenance. Prerequisite: SPT 1050. Frequency: Every Winter.

SPT 3550 Principles of Economics and Finance in Sport (3 credits)
This course introduces students to economic and financial issues in the sport industry. This includes such topics as financial fundamentals, financial systems, financial markets, budgeting, financial management, economic impact of sport facilities, and financial issues facing sport organizations. Prerequisites: SPT 1050, ECN 2020. Frequency: Every Fall.

SPT 3650 Sport Marketing (3 credits)
This course introduces students to the principles and practices of marketing in the sport industry. Topics include segmentation, brand building, the marketing mix, consumer behavior, and marketing research. The course focuses on the application of marketing through competitions as well as the creation of a sport marketing plan. Frequency: Every Winter.

SPT 3925 The Business of College Sports (3 credits)
This course examines the business side of college sports. Topics include the formation and history of college sports, the

basics of the NCAA, athletic conferences, and university athletic departments, as well as current issues involving student athletes, college coaches, and financial issues that impact big-time college sports. Prerequisite: SPT 1050. Frequency: Every Fall.

SPT 4550 Legal Aspects of Sport and Recreation (3 credits)
Reviews the legal considerations, responsibilities, and liabilities of institutions and their personnel as related to sport and recreation. Examines event management, personnel relations, and governmental regulations that impact sport and recreation. Prerequisite: SPT 1050 or SPT Faculty approval. Frequency: Every Winter.

SPT 4850 Seminar in Sport and Recreation Management (3 credits)
A capstone course for senior sport and recreation management majors. Students will examine trends in the industry, career paths, and discuss current topics in sport and recreation. Prerequisites: SPT 1050, Senior Standing, and SPT Faculty approval. Frequency: Every Fall.

SPT 4950 Sport and Recreation Management Internship (12 credits)
A supervised work placement for a period of 16 weeks in the student's major area of study. A minimum of 420 hours is required. There is also a classroom component for this course. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credits within Major Requirements and permission from SPT faculty. Sport and Recreation Management Majors Only. Frequency: Every Fall and Winter.

SPT 4951 Sport and Recreation Internship (6 credits)
A supervised work placement for a period of 16 weeks in the student's major area of study. A minimum of 210 hours is required. There is also a classroom component for this course. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credits within Major Requirements and permission from SPT faculty. Sport and Recreation Management Majors Only. Frequency: Every Fall and Winter.

SPT 4952 Sport and Recreation Internship (6 credits)
A supervised work placement for a period of 16 weeks in the student's major area of study. A minimum of 210 hours is required. There is also a classroom component for this course. Prerequisites: cumulative GPA of 2.5 or higher, completion of 36 or more credits within Major Requirements and permission from SPT faculty. Sport and Recreation Management Majors Only. Frequency: Every Fall and Winter.

TECH—Information Technology

TECH 1110 Technology in Information Age (3 credits)
In this course, students work for mastery of basic computer application skills in file management, word processing, spreadsheet, charting, database, Internet research, and web authoring/publishing. In addition, students acquire a deeper understanding of technology as used by professionals in all information technology fields, current trends, ethical use of technology, and technology management. A challenge exam (passing score = 75 percent) is available for those students who believe they already possess these skills. Frequency: Every Fall and Winter.

TECH 1111 Computer Applications (3 credits)
This course covers technology survival skills needed for school, work, and life in our information age. Students work for mastery of computer application skills needed today for success in academic coursework and tomorrow for the lifelong learning required in any profession. Students use today's popular software packages to create real-world documents in word processing, spreadsheets, charting, databases, and web authoring. Frequency: Every Fall and Winter.

TECH 1800 Introduction to Information Technology (3 credits)
This course introduces students to the discipline of information technology, and provides an overview of the discipline of IT, describes how it relates to other computing disciplines, and instills an IT mindset. The goal is to help students understand the diverse contexts in which IT is used and the challenges inherent in the diffusion of innovative technology. The course will cover pervasive themes, history and application domains. Prerequisites: TECH 1111 or Tech challenge exam. Frequency: Every Fall.

TECH 2100 Introduction to Programming (4 credits)
This course introduces students to computer programming using a general purpose programming language. The course will focus on the syntax of the programming language. Topics covered include: syntax, semantics, function definitions, function applications, conditional statements, selection statements, iteration statements, arrays, files, classes, objects, and methods. Prerequisite: MATH 1040. Frequency: Every Winter.

TECH 2130 Business Applications of Microcomputers (3 credits)
This course covers the fundamental theories and applications of business programs for microcomputers that are useful in the small-to mid-size business environment. Accounting, relational database management, and information system management programs will be included. This is a computer laboratory course. Prerequisite: TECH 1110 or TECH 1111. Frequency: Every Winter.

TECH 2150 Introduction to Internet Resources (3 credits)
In this course, students will discover and explore the internet and a multitude of its resources. Students will examine fundamental concepts and terminology of the Internet, explore a host of multimedia applications used through the Internet, and learn different skills for searching the Web and getting more out of the Internet. Specifically, the course will allow students to briefly examine the history of the Internet, explore its architecture, and become knowledgeable on some of its applications such as the Web, Email and File Transfer Protocol (FTP). Students will develop the skills necessary for searching precise Internet content and then critically assessing these findings for value and credibility. Students will also learn about Internet technologies and security, and learn about e-business models. Finally, it will introduce students to design principles for developing usable and accessible Web sites, and allow students to employ tools on how to improve page ranking. Prerequisite: TECH 1110 or TECH 1111 or the Challenge Exam. Frequency: Every Winter.

TECH 3000 Multimedia Design (3 credits)
This course offers students literacy in the basic principles of 2-dimension digital multimedia. Students will explore a variety of software applications to create projects and presentations in multiple interfaces including digital photos, animations, sound, video, color and typography, visual culture management, and time-based art. Students will discuss multimedia frontiers, emerging technology, and societal issues including human impact, regulation, copyright, fair use, equity, cost, and universal access. Students should have a working knowledge (point-and-shoot and file transfer) of and access to their own digital cameras, camcorders, microphones, etc. Prerequisite: TECH 1800 or CSIS 1800. Frequency: Every Winter.

TECH 3010 Principles of Web Site Design (3 credits)
This course gives students an in-depth understanding of web design techniques,

principles and skills for navigation, functional/visual design, digital media incorporation and content development, and includes the ongoing process of web site management. Students gain technical proficiency in programming with HTML, Cascading Style Sheets and JavaScript, and File Transfer Protocol (FTP) to plan, create, publish and maintain interactive web pages. Projects will focus on effective site structure, page design, consistent layout, internationalization, and the incorporation of forms, images, video, and sound. Prerequisite: TECH 3000. Frequency: Every Fall.

TECH 3022 Integrative Programming and Technologies (3 credits)
This course will describe how distributed applications and systems of disparate technologies are integrated so that components and services running on multiple machines communicate with each other. Currently dominant implementation choices will be discussed. Students will learn how to make object-oriented integration architectural and development decisions that will result in secure, scalable and manageable systems. Prerequisite: TECH 2100 or CSIS 2101 or CSIS 2100, TECH 3010, and CSIS 2000. Frequency: Every Fall.

TECH 3810 Computing Platforms (3 credits)
This course covers the fundamentals of hardware and software and how they integrate to form a computing platform. Students will learn how to select, deploy, integrate and administer platforms or components to support an organization's IT infrastructure. Virtualization will be used to allow students to work with multiple operating systems. Prerequisite: TECH 3022. Frequency: Every Winter.

TECH 4055 System Architecture (3 credits)
This course develops the skills to gather requirements, then source, evaluate and integrate components into a single system, and finally, to validate the system. It also covers the fundamentals of project management and the interplay between IT applications and organizational processes using modeling tools and methodologies in project lifecycle phases. Prerequisites: TECH 2150 and TECH 3022. Frequency: Every Winter.

TECH 4310 Web Services and Systems (3 credits)
This course covers the architecture, deployment, implementation and testing of web-based applications including related software, databases, interfaces and digital media. It also covers social, ethical and security issues arising from the Web, networking and social software. Prerequisite: TECH 3022. Frequency: Every Winter.

TECH 4350 Human–Computer Interaction (3 credits)
This course stresses the importance and the advocacy of the user in the development of Information Technology (IT) applications and systems. Students will develop knowledge of Human Computer Interaction (HCI), such as user and task analysis, human factors, ergonomics, accessibility standards, and cognitive psychology. They will also learn about human cognition, HCI theories, user observation, prototyping and evaluation techniques, user interface modalities and graphical user interface components. Prerequisite: TECH 2100 or CSIS 2101 or CSIS 2100. Frequency: Every Winter.

TECH 4500 Wireless Network Infrastructures (3 credits)
This course begins with a simplified discussion on propagation characteristics of radio waves and discusses the distinctions between CDMA and TDMA technologies. Students discuss the concept of cellular infrastructure and how to calculate the network capacities for the two technologies. The course then covers various mobile protocols as well as Bluetooth, 802.11, WiMax protocols and other emerging protocols. Students also discuss VoIP technologies and UTMS standard to understand how VoIP technologies will evolve in the future. Prerequisite: CSIS 3500. Frequency: Every Winter.

TECH 4710 Basic Computer Forensics (3 credits)
This course introduces students to the collection, preservation, presentation and preparation of computer-based evidence for the purposes of criminal law enforcement or civil litigation using investigative software to learn about criminology, data recovery, computer operating systems, network security, and cyber crime investigations. The course maps to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification to provide credible, standards-based information. Topics include coverage of the latest technology including PDAs, cell phones, and thumb drives. Prerequisites: CSIS 3023 and CSIS 4500. Frequency: Odd Year Fall.

TECH 4890 Special Topics in Information Technology (3 credits)
Topics in advanced information technology that are not included in a regular course offering. Prerequisites may be required. Specific content and prerequisites are announced in the course schedule for the given term. Students may re-enroll for Special Topics covering different content. Frequency: Infrequent: less than once every two years.

TECH 4900 Directed Project (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Every Winter.

TECH 4900A Directed Project (A) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

TECH 4900B Directed Project (B) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

TECH 4900C Directed Project (C) (3–8 credits)
A major project will be completed by the student under the direction of a faculty member. Frequency: Upon Request see academic Department Chair.

TECH 4901 APS Capstone Course in Information Technology (3 credits)
This course is reserved for students who are enrolled in the Applied Professional Studies Program. Through a series of written assignments, this course provides students with an opportunity to integrate previous learning and experience with a concentration in information science to form a unique course of academic study. Given that the APS major is individualized to a large extent based on a student's interests and past experiences, this course ordinarily will be conducted as an independent study and will be taken during the student's last semester prior to receipt of their degree. Prerequisite: to be determined by supervising faculty and the division director. Frequency: Every Winter.

TECH 4950 Internship in Technology (1–12 credits)
A work experience for 16 weeks in the student?s major area of study or area of career interest. Consult academic division for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, major GPA of 3.0 or higher, completion of 60 or more credit hours, supervision of instructor, and permission of department chair. Frequency: Every Winter.

TECH 4990 Independent Study in Technology (1–12 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Prerequisite: to be determined by the faculty and department chair. Frequency: Every Fall and Winter.

THEA—Theatre

THEA 1500 Comedy and Improvisation (3 credits)
This course introduces students to the basic techniques of improvisational theatre, sketch and stand-up comedy. Frequency: Every Fall and Winter.

THEA 2000 Voice and Movement (3 credits)
Study and practice in breathing, phonation, standard speech, text analysis, scansion and cold readings, as well as kinesthetic awareness, warm-up, use of space, stage movement, stage blocking, and stage combat. Frequency: Every Winter.

THEA 2020 Acting I (3 credits)
A performance-oriented course designed to introduce, develop and reinforce fundamental acting skills and techniques. Frequency: Every Fall and Winter.

THEA 2025 Performance for Film and Television (3 credits)
This course focuses on camera performance techniques relevant to film, television, and broadcasting. Frequency: Every Fall.

THEA 2030 Play Analysis (3 credits)
Training and practice in the fundamentals of text analysis for the purposes of theatrical production. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Even Year Winter.

THEA 2060 Technical Theatre (3 credits)
A laboratory approach to technical theatre with focus on backstage operations, crew assignments, and practical application in actual productions. Frequency: Every Fall and Winter.

THEA 2101 Theatre Laboratory I (1 credit)
Participation in one or more of NSU's theatre productions. Assigned duties may include set construction, costume, technical support, acting, directing, management, or administration. Pass/fail only. Frequency: Every Fall and Winter.

THEA 2102 Theatre Laboratory II (1 credit)
Participation in one more of NSU's theatre productions. Assigned duties may include set construction, costume, technical support, acting, directing, management, or administration. Pass/fail only. Prerequisite: THEA 2101. Frequency: Every Fall and Winter.

THEA 2103 Theatre Laboratory III (1 credit)
Participation in one or more of NSU's theatre productions. Assigned duties may include set construction, costume, technical support, directing, management, or administration. Pass/fail only. Prerequisite: THEA 2102. Frequency: Every Fall and Winter.

THEA 2104 Theatre Laboratory IV (1 credit)
Participation in on or more of NSU's theatre productions. Assigned duties may include set construction, costume, technical support, acting, directing, management, or administration. Pass/fail only. Prerequisite: THEA 2103. Frequency: Every Fall and Winter.

THEA 3020 Acting II (3 credits)
Emphasis on the development and use of techniques for in-depth research and analysis of characters for public performance. Prerequisite: THEA 2020. Frequency: Every Winter.

THEA 3025 Audition Techniques (3 credits)
A performance-oriented course designed to explore audition techniques and career planning for the professional theatre, film, and television industries. The course will focus on monologue selection and performance, cold readings, movement/dance calls, warm-ups and basic audition etiquette and protocol. Prerequisite: THEA 2020. Frequency: Even Year Fall.

THEA 3050 Costuming and Makeup (3 credits)
Study of sewing, fabrics, patterns and practical application of costume construction techniques; materials and techniques for stage makeup with emphasis on practical application for theatrical production. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Every Winter.

THEA 3060 Scene Design (3 credits)
A study of the fundamental principles and techniques of stage design. Prerequisite: THEA 2060. Frequency: Odd Year Fall.

THEA 3070 Lighting and Sound Design (3 credits)
This course provides the study of advanced techniques of lighting design and sound design, including exploration of various lighting/sound boards, and design styles. Students in this course complete a lab component that focuses on practical applications. Prerequisite: THEA 2060. Frequency: Even Year Fall.

THEA 3200 Theatre History I (3 credits)
This course explores the history of theatre from the origin of performance to the Renaissance. Prerequisite: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Even Year Fall.

THEA 3250 Theatre History II (3 credits)
This course explores the history of theatre from the Restoration to the present. Prerequisites: COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Odd Year Fall.

THEA 3500 Stage and Production Management (3 credits)
Stage and Production Management: An in-depth look at the management aspects of the theatre. The course will focus on the individual roles of stage manager and production manager and how these roles are applied in performing arts events. Prerequisites: one THEA course; and COMP 1500 or COMP 1500H. Frequency: Every Winter.

THEA 4100 Directing for the Stage (3 credits)
The history of the director, the function of the director, and the examination of theoretical viewpoint, including textual analysis, establishing group work for the director's approach to production, play selection, analysis, and patterning of auditory and visual elements of production. Directing of a one-act play. Prerequisite: THEA 2020 and completion of 60 or more credit hours. Frequency: Every Winter.

THEA 4900 Special Topics in Theatre (3 credits)
An advanced course in a particular dramatist, period, or form of theatre. Specific focus to be announced. May be repeated once for credit, if content changes and with written consent of division director. Prerequisites: one THEA course and COMP 2000, 2010, or 2020 or COMP 2000H. Frequency: Upon Request; see academic department chair.

THEA 4930 Senior Seminar (1 credit)
Seminar style course designed to synthesize coursework and performing experience with preparation for a professional career or graduate study in the performing arts. Course topics will include formulation of artistic philosophy, the business of the performing arts, professional development, interview/audition skills, and culminate in

a final capstone performance or project. Prerequisite: Completion of at least 90 credit hours and permission of director. Frequency: Every Winter.

THEA 4950 Internship in Theatre (3–6 credits)
Training and practice at a professional theatre or arts venue. Prerequisites: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and written consent of division director. Frequency: Every Fall and Winter.

THEA 4990 Independent Study in Theatre (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and division director required. Prerequisites: One THEA course and COMP 2000, 2010 or 2020 or COMP 2000H. Frequency: Upon Request; see academic department chair.

TXX—Taxation

TXX 3110 Federal Taxation I (3 credits)
Examines the fundamentals of individual income taxation. A background of accounting courses is not essential for this course. The course may be of special interest to non business majors. Topics include exemptions, exclusions, and deductions available to the individual. These concepts will aid the student in the preparation of an individual tax return. Prerequisite: ACT 2200. Frequency: Every Fall.

TXX 4110 Federal Taxation II (3 credits)
A study of the income taxation of corporations and their shareholders; partnerships and their partners; and estates and trusts and their beneficiaries. Includes a study of the rights and obligations of the taxpayers in dealing with the Internal Revenue Service. Prerequisites: TXX 3110 and ACT 3050. Frequency: Every Fall.

UABA—Behavioral Analysis

UABA 3010 Introduction to Applied Behavior Analysis (3 credits)
This course will focus on the basic tenets of the science of applied behavior analysis that are the underpinnings of effective teaching strategies. Students will study the philosophy and science of applied behavior analysis, an overview of the areas of ABA and its relation to education and psychology, basic vocabulary and concepts in the field, and strategies for measuring behavior. The course will focus on basic strategies for increasing and decreasing behaviors of students and ethical considerations in the application of ABA in a variety of settings with an emphasis on research of education with children ages birth to 8 years old. Frequency: Every Fall.

UABA 3020 Assessment in Applied Behavior Analysis (3 credits)
This course will expand upon the introductory course to address the selection and implementation of assessments in ABA based on those principles. The selection of interventions and outcome strategies resulting from the assessment process will also be addressed. In addition, focus will be placed on the experimental evaluation of interventions, measurement of behavior, and displaying and interpreting data using single-subject and small group designs. Assessment choices and procedures will be evaluated for practical application in educational setting with children ages birth to 8 years old. Frequency: Every Fall.

UABA 3030 Intervention in Applied Behavior Analysis (3 credits)
This course will focus on intervention strategies for increasing skills and decreasing challenging behaviors with young children (birth to 8 years of age) in educational settings and with families. Focus will be placed on the effects of systems on intervention efforts, the ethical practice of applied behavior analysis within systems, and creating systems that support behavior change. Evaluation of research on intervention with children for both increasing and decreasing behaviors will be evaluated to help students become informed consumers of research-based information. Frequency: Every Winter.

UABA 3040 Positive Behavioral Support for Children with Challenging Behaviors (3 credits)
Positive Behavioral Support (PBS) is the application of ABA principles within natural contexts and from a systems perspective. This course will focus specifically on addressing challenging behavior for children in the home and classroom settings. Students will learn to assess challenging behaviors using functional assessments, select and implement interventions based on those assessments within the natural environment, and to train families and staff members to implement behavioral programming to support children whose behavior often limits their opportunities for education and childcare services. Frequency: Every Winter.

UNIV—University

UNIV 1000 First Year Seminar (3 credits)
This course introduces first-year students to fundamental expectations of college learning and the range of opportunities and experiences both in and outside the classroom that Nova Southeastern University provides. The course promotes a pathway to student success by fostering academic inquiry in various academic disciplines and knowledge of essential resources that facilitate a successful transition to college life. This course develops the foundation that serves as a pathway to graduation and a thriving professional career. Frequency: Every Fall and Winter

WRIT—Writing

WRIT 2100 Introduction to Professional Writing (3 credits)
This course provides an introduction to the writing and research practices active in the field of professional writing. Students will examine the various approaches to language, writing, and research active in professional communities and explore them in their own original works. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

WRIT 2200 Civic and Community Writing (3 credits)
This course examines the relationships between academic and community writing. Students will explore the history of literacy practices and civic discourses. Students engage in service learning projects in their local community by partnering with local organizations to address local needs. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Even Year Fall.

WRIT 2400 Style and Grammar (3 credits)
This course examines the history and practice of written style and grammar, highlighting the differences between the two traditions. Students will study word choice, sentence structure, and paragraphing in texts of varying genres. Drawing on analyses of written texts, students will learn to apply the stylistic and grammatical principles of deviation and convention, respectively, to their own writing. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

WRIT 2500 Introduction to Creative Writing (3 credits)
This course examines the fundamentals of writing poetry and fiction, introducing students to creative writing techniques and strategies. Students will read works of fiction and poetry by published authors and write their own works using various models and styles. Through workshopping

their original poetry and fiction, students will learn the importance of finding one's voice and the necessity of revision in the writing process. Prerequisite: COMP 1500 or COMP 1500H. Frequency: Every Fall.

WRIT 3020 Poetry Workshop (3 credits)
An examination of the fundamentals of writing poetry; learning to use metrical language and seeking the universal in individual human experience. Students will read a wide variety of contemporary poems and will attempt to develop their own poetic language. Prerequisite: COMP 2000 or COMP 2000H. Frequency: Odd Year Winter.

WRIT 3030 Fiction Workshop (3 credits)
An examination of the fundamentals of writing fiction; learning to use the techniques and tools of the fiction writer. Students will read a variety of fictional works and will attempt to develop their own voices and narrative style. Prerequisite: COMP 2000 or COMP 2000H. Frequency: Even Year Winter.

WRIT 3150 Business Writing (3 credits)
This course focuses on techniques for effective communication in global business environments. Students learn various strategies for writing letters, memos, proposals, electronic communication, and other types of writing in the workplace. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Every Fall and Winter.

WRIT 3160 Scientific and Technical Writing (3 credits)
This course focuses on developing techniques for writing reports, descriptions, instructions, graphic arts, and other types of writing in formats appropriate to the scientific or technical working world. Students will practice explaining technical issues to various audiences, analyze technical objects and processes, and write reports, technical manuals, and user instructions. The course will emphasize writing understandable, concise language, integrating text and graphics, and designing documents. Prerequisite: COMP 2000 , COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

WRIT 3200 Writing for Popular Culture (3 credits)
This course introduces students to professional writing for popular culture through the study and creation of texts such as zines, blogs, and fan sites. Students will identify various rhetorical features used by communities of writers in the public sphere, paying careful attention to theories of the production and consumption of popular culture texts. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Odd Year Winter.

WRIT 3350 Document Design and Publishing (3 credits)
This course focuses on the skills necessary to produce well-designed documents for private and commercial publication. Students will analyze various publication models and produce print-ready documents for various professional or commercial audiences. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Odd Year Winter.

WRIT 3400 Language and Society (3 credits)
This course examines variables such as class, ethnicity, gender, geography, technology, and history that influence language behavior and language change. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Even Year Fall.

WRIT 3600 Writing Center Studies (3 credits)
The course provides students with theoretical and experiential grounding in peer conferencing. Students will study writing center theory and practice, and they will apply such strategies in conferences with writers. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Every Winter.

WRIT 4000 Writing for Technologies (3 credits)
This course focuses on emerging forms of writing produced with, focused on, and distributed through contemporary mobile and web-based technologies. Students in this course will closely examine and practice the theories and approaches to writing within such digital environments and networks. Prerequisite: COMP 2000 or COMP 2020 or COMP 2000H. Frequency: Even Year Winter.

WRIT 4100 Advanced Research Methods (3 credits)
This course focuses on designing, conducting, and analyzing research projects using qualitative and quantitative methods. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Every Winter.

WRIT 4600 Composition and Rhetoric (3 credits)
This course introduces students to the discipline of Composition and Rhetoric through the key concepts, philosophies, and frameworks involving teaching, theory, and research. Students will learn how theories and practices affect classroom settings and their own writing processes. Prerequisite: COMP 2000 or COMP 2000H or COMP 2020. Frequency: Odd Year Fall.

WRIT 4800 Professional Writing Capstone (3 credits)
Students will undertake a significant project reflecting their area of professional writing interest. Prerequisite: completion of at least 90 credit hours and permission of department chair. Frequency: Every Fall.

WRIT 4900 Special Topics in Writing (3 credits)
Topics, which vary from year to year, will focus on specialized genres and techniques in writing. Topics may include memoir/autobiographical writing, travel writing, creative non-fiction writing, and screenwriting. Specific focus to be announced. May be repeated once for credit, if content changes and with department approval. Prerequisite: one WRIT course above the 2000-level. Frequency: Every Fall and Winter.

WRIT 4950 Internship in Writing (3–6 credits)
A 10-20 hour per week field or work experience for one semester in the student's major area of study. Consult academic department for specific details and requirements. Prerequisite: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of department chair. Frequency: Every Fall and Winter.

WRIT 4950A Internship in Writing (3–6 credits)
A 10-20 hour per week field or work experience for one semester in the student's major area of study. Consult academic department for specific details and requirements. Prerequisites: cumulative GPA of 2.5 or higher, completion of 60 or more credit hours, and permission of department chair. Course Frequency: Every Fall and Winter.

WRIT 4990 Independent Study in Writing (1–3 credits)
The student selects, and carries out independently, library and/or empirical research. Faculty supervision is provided on an individual basis. Written consent of instructor and department chair required. Prerequisites: One WRIT course and COMP 2000, COMP 2020, or COMP 2000H. Frequency: Every Fall and Winter.

ADDENDUM

Addendum

Purpose of this Addendum

The purpose of this addendum is to provide additional information and/or to represent approved revisions or changes to programs and courses as well as changes in policies and degree requirements that occurred after publication of the 2016-2017 Undergraduate Student Catalog on July 1, 2016. All changes and additions listed here take precedence over the information contained in the 2016-2017 Nova Southeastern University Undergraduate Student Catalog. All information contained in this addendum is subject to change without notice.

Details of Changes

Addendum A

Effective revision date: July 22, 2016

This is to replace Academic Programs section on pages 19 to 23 of this catalog.

Academic Programs

Majors

Major Fields of Study	Degrees	Offered by:
Accounting	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Applied Professional Studies	B.S.	College of Arts, Humanities, and Social Sciences
Art and Design	B.A.	College of Arts, Humanities, and Social Sciences
Arts Administration	B.A.	College of Arts, Humanities, and Social Sciences
Athletic Training	B.S.	College of Health Care Sciences
Behavioral Neuroscience	B.S.	College of Psychology
Biology	B.S.	Halmos College of Natural Sciences and Oceanography
Business	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Cardiovascular Sonography	B.S.	College of Health Care Sciences
Chemistry	B.S.	Halmos College of Natural Sciences and Oceanography
Communication	B.A.	College of Arts, Humanities, and Social Sciences
Computer Engineering	B.S.	College of Engineering and Computing
Computer Science	B.S.	College of Engineering and Computing
Criminal Justice	B.S.	College of Arts, Humanities, and Social Sciences
Dance	B.A.	College of Arts, Humanities, and Social Sciences

Major Fields of Study	Degrees	Offered by:
Early Child Development	B.S.	Abraham S. Fischler College of Education
Early Childhood Education	A.A.	Abraham S. Fischler College of Education
Elementary Education with ESOL/Reading Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Elementary Education (Nevada)	B.S.	Abraham S. Fischler College of Education
English	B.A.	College of Arts, Humanities, and Social Sciences
Environmental Sciences/Studies	B.S.	Halmos College of Natural Sciences and Oceanography
Exceptional Student Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Exceptional Student Education (Nevada)	B.S.	Abraham S. Fischler College of Education
Exercise and Sport Science	B.S.	College of Health Care Sciences
Finance	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
General Engineering (pending approval by the Southern Association of Colleges and Schools Commission on Colleges, will begin fall 2016)	B.S.	College of Engineering and Computing
General Studies	B.S.	College of Arts, Humanities, and Social Sciences
Health Science—Online	B.H.Sc.	College of Health Care Sciences
History	B.A.	College of Arts, Humanities, and Social Sciences
Human Development and Family Studies	B.S.	College of Arts, Humanities, and Social Sciences
Human Services Administration	B.S.	College of Arts, Humanities, and Social Sciences
Information Technology	B.S.	College of Engineering and Computing
International Studies	B.A.	College of Arts, Humanities, and Social Sciences
Legal Studies	B.S.	College of Arts, Humanities, and Social Sciences
Management	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Marine Biology	B.S.	Halmos College of Natural Sciences and Oceanography
Marketing	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Mathematics	B.S.	Halmos College of Natural Sciences and Oceanography
Medical Sonography	B.S.	College of Health Care Sciences
Music	B.A.	College of Arts, Humanities, and Social Sciences
Nursing	B.S.N.	College of Nursing
Paralegal Studies	B.S.	College of Arts, Humanities, and Social Sciences
Philosophy	B.A.	College of Arts, Humanities, and Social Sciences
Political Science	B.A.	College of Arts, Humanities, and Social Sciences
Prekindergarten/Primary Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Psychology	B.S.	College of Psychology
Public Administration	B.S.	H. Wayne Huizenga College of Business and Entrepreneurship
Recreational Therapy	B.S.	College of Arts, Humanities, and Social Sciences

Major Fields of Study	Degrees	Offered by:
Respiratory Therapy First Professional	B.S.R.T.	College of Health Care Sciences
Respiratory Therapy Post-Professional Program—online	B.S.R.T.	College of Health Care Sciences
Secondary English Education with ESOL Endorsement (Florida)	B.S.	Abraham S. Fischler College of Education
Secondary Mathematics Education (Florida)	B.S.	Abraham S. Fischler College of Education
Sociology	B.S.	College of Arts, Humanities, and Social Sciences
Software Engineering	B.S.	College of Engineering and Computing
Speech-Language and Communication Disorders	B.S.	College of Health Care Sciences
Sport and Recreation Management	B.S.B.A.	H. Wayne Huizenga College of Business and Entrepreneurship
Theatre	B.A.	College of Arts, Humanities, and Social Sciences

Minors

Minor Fields of Study	Offered by:
Accounting	H. Wayne Huizenga College of Business and Entrepreneurship
African Diaspora Studies	College of Arts, Humanities, and Social Sciences
Anthropology	College of Arts, Humanities, and Social Sciences
Applied Behavior Analysis	College of Psychology
Applied Statistics	Halmos College of Natural Sciences and Oceanography
Arts Administration	College of Arts, Humanities, and Social Sciences
Behavioral Neuroscience	College of Psychology
Bioinformatics	Halmos College of Natural Sciences and Oceanography
Business (for non-business majors)	H. Wayne Huizenga College of Business and Entrepreneurship
Chemistry	Halmos College of Natural Sciences and Oceanography
Computer Information Systems	College of Engineering and Computing
Communication	College of Arts, Humanities, and Social Sciences
Criminal Justice	College of Arts, Humanities, and Social Sciences
Dance	College of Arts, Humanities, and Social Sciences
Digital Media Production	College of Arts, Humanities, and Social Sciences
Economics	H. Wayne Huizenga College of Business and Entrepreneurship
Education Professional Training Option	Abraham S. Fischler College of Education
English	College of Arts, Humanities, and Social Sciences
Entrepreneurship	H. Wayne Huizenga College of Business and Entrepreneurship
Exercise Science	College of Health Care Sciences
Film Studies	College of Arts, Humanities, and Social Sciences
Finance	H. Wayne Huizenga College of Business and Entrepreneurship

Minor Fields of Study	Offered by:
Folklore and Mythology	College of Arts, Humanities, and Social Sciences
Forensic Studies	
Gender Studies	College of Arts, Humanities, and Social Sciences
Geographic Information Science	Halmos College of Natural Sciences and Oceanography
Graphic Design	College of Arts, Humanities, and Social Sciences
History	College of Arts, Humanities, and Social Sciences
Human Resource Management	H. Wayne Huizenga College of Business and Entrepreneurship
Humanities	College of Arts, Humanities, and Social Sciences
Information Assurance/Security	College of Engineering and Computing
Information Technology	College of Engineering and Computing
International Business	H. Wayne Huizenga College of Business and Entrepreneurship
International Law	College of Arts, Humanities, and Social Sciences
International Studies	College of Arts, Humanities, and Social Sciences
Irish Studies	College of Arts, Humanities, and Social Sciences
Journalism	College of Arts, Humanities, and Social Sciences
Latin American and Caribbean Studies	College of Arts, Humanities, and Social Sciences
Leadership	H. Wayne Huizenga College of Business and Entrepreneurship
Legal Studies	College of Arts, Humanities, and Social Sciences
Management	H. Wayne Huizenga College of Business and Entrepreneurship
Marine Biology	Halmos College of Natural Sciences and Oceanography
Marine Ecology	Halmos College of Natural Sciences and Oceanography
Marketing	H. Wayne Huizenga College of Business and Entrepreneurship
Mathematics	Halmos College of Natural Sciences and Oceanography
Medical Humanities	College of Arts, Humanities, and Social Sciences
Music	College of Arts, Humanities, and Social Sciences
Paralegal Studies	College of Arts, Humanities, and Social Sciences
Philosophy	College of Arts, Humanities, and Social Sciences
Physical Education	Abraham S. Fischler College of Education
Physics	Halmos College of Natural Sciences and Oceanography
Property Management	H. Wayne Huizenga College of Business and Entrepreneurship
Psychology	College of Psychology
Public Administration	H. Wayne Huizenga College of Business and Entrepreneurship
Sales	H. Wayne Huizenga College of Business and Entrepreneurship
Sociology	College of Arts, Humanities, and Social Sciences
Spanish	College of Arts, Humanities, and Social Sciences
Speech-Language Pathology	College of Health Care Sciences

Minor Fields of Study	Offered by:
Sport and Recreation Management	H. Wayne Huizenga College of Business and Entrepreneurship
Strategic Communication	College of Arts, Humanities, and Social Sciences
Studio Art	College of Arts, Humanities, and Social Sciences
Theatre	College of Arts, Humanities, and Social Sciences
Writing	College of Arts, Humanities, and Social Sciences

Certificate Programs

Field of Study	Offered by:
Post-Baccalaureate Certificate in Paralegal Studies	College of Arts, Humanities, and Social Sciences
Web Programming and Design	College of Engineering and Computing

Razor's Edge Scholars Programs

Field of Study	Offered by:
Razor's Edge Global	Abraham S. Fischler College of Education
Razor's Edge Leadership	Abraham S. Fischler College of Education
Razor's Edge Research	Abraham S. Fischler College of Education
Razor's Edge Shark Cage	H. Wayne Huizenga College of Business and Entrepreneurship
Razor's Edge Shark Talent	College of Arts, Humanities, and Social Sciences

Other Program Offerings and Initiatives

	Offered by:
Distinguished Speakers Series	Farquhar Honors College
Honors in Major	Farquhar Honors College
Multi-disciplinary Honor Societies	Farquhar Honors College
Scholars Program	Farquhar Honors College
Undergraduate Honors Program	Farquhar Honors College
Undergraduate Student Symposium	Farquhar Honors College

Addendum B

Effective revision date: July 22, 2016

This is to replace Grade Forgiveness section on pages 69 to 70 of this catalog.

Grade Forgiveness

The grade forgiveness policy enables an undergraduate student to repeat a limited number of courses to improve his or her cumulative NSU grade point average (GPA), by excluding the original (and lower) grade from calculation. Undergraduate students may use the forgiveness policy for a **maximum of three NSU courses****, and only for courses in which a grade of "C-" or lower was earned, no more than one excluded grade per course will be allowed.

Students who choose to exercise this option must meet with their academic advisor and complete the Grade Forgiveness Policy Form, which should be submitted once the course has been successfully repeated and a grade has been received, no later than one semester after the repeated course has been completed. If approved, the grade for the previous attempt will be excluded from the calculation of the term and cumulative NSU GPA, although it will remain on the transcript.

Grade exclusions may not apply to certain programs such as dual admission, graduate/professional school admission, and transfer to other institutions, or to continuing and returning students. Due to external factors including but not limited to areas such as regional and national accreditation as well as state licensure, certain colleges/programs reserve the right to require a level of academic performance that is greater than the base level established by the university for all undergraduate students.

Only courses taken at NSU qualify for grade forgiveness. Grade exclusions are subject to availability of the course, and there is no guarantee that a particular course will be offered again. This policy does not restrict the number of attempts to repeat courses, but does restrict the number of course grades to be excluded from the cumulative GPA. Course credit may be applied only once toward completion of degree requirements. While this policy may retroactively change a semester GPA, it will not affect related academic standing sanction, and cannot be applied once a degree has been conferred.

**** Please be aware of the Repeat Course Policy for Financial Aid and the maximum number of attempts for an individual course that will be covered by Financial Aid. Go to** *nova.edu/financialaid/apply-for-aid/repeat-course.html* **for additional information.**

Addendum C

Effective revision date: July 22, 2016

This is to replace Applie Professional Studies Major section on pages 162 to 165 of this catalog.

Applied Professional Studies Major

The applied professional studies (APS) major is available only to students enrolled in the non-traditional program. It offers a program for adults who have gained significant professional experience and who have earned a large number of college credits toward their particular career goal. The program allows students to select a course of study that best fits their career plans. A student's prior learning and credits earned represent concentration I. Courses earned in the APS major comprise concentration II. The APS major may be offered to students in all locations, subject to course availability. Acceptance into this major is determined by the appropriate department chair.

Applied Professional Studies Major Learning Outcomes

A successful applied professional studies graduate is expected to:

1. Explain the integration of information from both concentrations;
2. Identify the fundamental theories and principles underlying concentration II;
3. Demonstrate a comprehensive understanding of the fundamental theories and principles underlying concentration II.

Applied Professional Studies Major Curriculum

Students may apply an unlimited number of prior learning credits toward their applied professional studies degree; a minimum of 30 credits must be completed at NSU. Students majoring in applied professional studies may demonstrate learning competencies for one of their concentrations through NSU coursework, transfer courses from other institutions, prior learning, or testing (e.g., DANTES and CLEP). Specific requirements are:

1. General Education Framework: 30 credits
2. Major Requirements:
   a. Concentration I (18 credits prior to entering the major)
   b. Concentration II (number of credits depends on the concentration)
3. Open Electives 33–48 credits (depending on the concentration)

Total Degree Requirements: 120 credits

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the General Education Program in the Academic Policies and Procedures section of this catalog.

Admission to the Applied Professional Studies Major

Eligibility for the Applied Professional Studies Major

To be eligible for the applied professional studies major, students must:

1. Have completed a minimum of 45 credits prior to applying to the applied professional studies major.
2. Have completed an 18-credit concentration before applying to the applied professional studies major.

Admission Criteria for the Applied Professional Studies Major

In addition to the documents described in the *Required Documentation* in the Admissions section of this catalog, applicants to the applied professional studies major must complete and provide a portfolio containing the following documents. The assistance of an academic advisor should be sought for advice in the preparation of these documents.

1. A letter of intent in which the student:
   a. Identifies his/her career goals;
   b. Identifies his/her prior coursework and approved prior learning experiences that comprise concentration I;
   c. Provides a rationale for considering concentration I as a coherent body of work;
   d. Identifies concentration II and explains how concentrations I and II integrate into an academic program focused on his/her career goals;
2. Copies of transcripts with the 18-credits that comprise concentration I highlighted;
3. One or more documents such as academic papers, projects, work products, letters of recommendation, written reviews of prior course work, written reviews of relevant professional experience, etc., that demonstrates the student's competency in concentration I. For the teaching and learning concentration, two letters of recommendation are required. One letter must be from a principal, vice principal, or senior teacher who can attest to the applicant's performance as a classroom teacher. The school seal or stamp must be affixed in order for the document to be considered official. The second letter of recommendation can be from any colleague of the student's choice.

The portfolio is submitted to the academic advisor for review by the director of the appropriate academic unit.

Applied Professional Studies Concentrations

Students choose one of the following concentrations after consultation with their academic advisor. Not all concentrations are offered at every location.

Biological and Physical Sciences Concentration

Program Requirements (8 credits)

Select 8 credits from the following courses:

BIOL 1500	Biology I/Lab (4 credits)
BIOL 1510	Biology II/Lab (4 credits) *OR* BIOL 1510H Biology II/Lab Honors (4 credits)
CHEM 1300	General Chemistry I/Lab (4 credits) OR CHEM 1300H General Chemistry I/Lab Honors (4 credits)
CHEM 1310	General Chemistry II/Lab (4 credits) OR CHEM 1310H General Chemistry II/Lab Honors (4 credits)

Core Course (3 credits)

BIOL 4901	APS Capstone Course in Biological and Physical Sciences (3 credits)

Major Electives (24–28 credits)

Select seven 2000 or higher level courses. Three courses must be at the 3000-level or higher. At least three of the courses must be courses that include laboratory. This selection is from the following prefixes: BIOL, CHEM, PHYS, MBIO, ENVS, SCIE.

Computer Studies Concentration

Major Prerequisites (or equivalents) (6 credits)

MATH 1200	Precalculus Algebra (3 credits)
TECH 1110	Technology in Information Age (3 credits)

Core Courses (26–27 credits)

CSIS 1800	Introduction to Computer Science (3 credits)
CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 4901	APS Capstone Directed Independent Study (3 credits)

Select 6–7 credits from the following courses:

CSIS 3020	Web Programming and Design (3 credits)
CSIS 3500	Network and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 4890	Special Topics in Computer Information Systems (3 credits)

Information Technology Concentration

Core Courses (24 credits)

CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
TECH 1110	Technology in Information Age (3 credits)
TECH 2150	Introduction to Internet Resources (3 credits)
TECH 4901	APS Capstone Course in Information Technology (3 credits)

Select 12 credits from the following courses:

CSIS 3500	Network and Data Communication (3 credits)
PHIL 3010	Ethical Issues in Communication (3 credits)
TECH 2130	Business Applications of Microcomputers (3 credits)
TECH 3000	Multimedia Design (3 credits)
TECH 3010	Principles of Web Site Design (3 credits)

Pre-Optometry Studies Concentration

The APS degree with a concentration in pre-optometry studies is available only to admitted students in the Pre-Optometry Program offered by the College of Optometry. To complete this bachelor's degree program, students must complete the pre-optometry studies concentration along with a course in mathematics (MATH 1030, MATH 1040, MATH 1200, or MATH 1250) and a communications course (SPCH 1010, SPCH 3120, WRIT 3150, or WRIT 3160) to total 32.5 credits at NSU. OPT and OPTC courses can be viewed in the catalog of the College of Optometry.

Core Courses (26.5 credits)

BIOL 4901	APS Capstone Course in Biological and Physical Sciences (3 credits)
OPT 1011	Histology and Embryology (1 credit)
OPT 1233	Biochemistry (3 credits)
OPT 1323	Microbiology (3 credits)
OPT 2422	Ocular Anatomy (3 credits)
OPTC 1134	Gross Anatomy/Head and Neck (4 credits)
OPTC 2023	General Neuroanatomy (2.5 credits)
OPTC 2144	General Physiology (4 credits)
PHYS 3300	Fundamentals of Optics (3 credits)

Psychological Studies Concentration

Acceptance into this major is determined by the director of the Division of Social and Behavioral Sciences.

Major Prerequisites (or equivalents) (9 credits)

MATH 2020	Applied Statistics (3 credits) OR MATH 2020H Applied Statistics Honors (3 credits)
PSYC 1020	Introduction to Psychology (3 credits)
PSYC 2900	Quantitative Psychology (3 credits)

Core Courses (24 credits)

PSYC 2100	Biological Bases of Behavior (3 credits)
PSYC 2160	Social Psychology (3 credits)
PSYC 2350	Life-Span Human Development (3 credits)
PSYC 3000	Psychological Research Methods (3 credits)
PSYC 3210	Personality (3 credits) OR PSYC 3260 Abnormal Psychology (3 credits)
PSYC 3520	Principles of Learning (3 credits)
PSYC 4901	APS Capstone Course in Psychology/Substance Abuse Studies (3 credits)

One 3000/4000-level PSYC course, selected with assistance from academic advisor (3 credits)

Addendum D

Effective revision date: July 22, 2016

This is to replace Human Services Administration Major section on pages 149 to 152 of this catalog.

Human Services Administration Major

The Bachelors of Science in Human Services Administration program is designed to provide students with an understanding of administration, public policy, ethics and practice in the field of Human Services Administration, in addition to a working knowledge of vulnerable and underrepresented populations. This program is suited to individuals who have the desire to enhance the quality of life for individuals and families in need through the development and administration of agencies involved in service delivery.

The B.S. in Human Services Administration will provide an excellent foundation for students who intend to pursue careers

in human services administration, the aviation industry, other related professions, or graduate studies in areas such as health administration, public administration, social work, and business administration.

Multiple enrollment opportunities exist as courses are offered both on-site at NSU's main campus and online providing students with greater flexibility in attending classes. The program is designed to take knowledge and skill preparation to the next level by providing real life scenarios on the many fundamental trends and issues facing professionals within the human services field today.

Human Services Administration Major Learning Outcomes

A successful human services administration graduate is expected to:

1. Demonstrate knowledge and application of the leadership dynamics of administrators, managers, and directors in the field of human services administration as they relate to client support, family participation, and collaborative community partnerships;
2. Demonstrate knowledge of social issues and an understanding of how common Evidenced-Based Practices are used within Human Services organizations to enhance the well-being of vulnerable populations, including assessment, rehabilitation, and family intervention practices;
3. Articulate and define the character and qualities of human services organizations unique to the community and to the community members they serve;
4. Identify the importance and functions of human resources and supervision for human services administration;
5. Demonstrate an understanding of current concepts and trends in management and their application within the field of human services;
6. Identify, evaluate, and apply legal aspects and implications for human services administration;
7. Articulate the principles of program planning and evaluation as these impact human services organizations;
8. Demonstrate the ability to communicate effectively both orally, in writing, and with the use of technology such as Blackboard and Microsoft Office applications (i.e., Word, Powerpoint);
9. Demonstrate the ability to integrate personal experiences in human services organizations with current research and emerging human service administrative issues (at the conclusion of the field placement experiences).

Human Services Administration Major Curriculum

The Bachelor of Science in Human Services Administration requires successful completion of 120 credit hours including 30 credit hours of General Education, 54 credit hours of major (core) courses, which include two 3-credit field placements and 36 hours of elective courses. The elective courses may be selected to count towards specific concentrations, which consist of 12-18 credits each.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Human Services Administration Major (54 credits)

Core Courses (54 credits)

HS 1100	Social Issues and Human Services Delivery Systems (3 credits)
HS 1200	Introduction to Human Services Administration (3 credits)
HS 1300	Interpersonal Assessment Skills in Human Relations (3 credits)
HS 1400	Counseling and Assessment in Human Services (3 credits)
MGT 2050	Principles of Management (3 credits)
ECN 2025	Principles of Macroeconomics (3 credits)
ACT 2200	Financial Accounting (3 credits)
MGT 3020	Business Communications (3 credits)
PADM 1000	Introduction to Public Administration (3 credits)
MATH 2020	Applied Statistics (3 credits)
HS 3300	Ethical and Professional Issues in Human Services (3 credits)
HS 3315	Human Services and Cultural Diversity (3 credits)

HS 3990	Supervised Experience in Human Services I* (3 credits)
HS 4100	Rehabilitation Principles and Case Management (3 credits)
HRM 4160	Human Resource Management (3 credits)
HS 4200	Accountability in Human Services Administration (3 credits)
HS 4250	Program Planning and Evaluation (3 credits)
HS 4995	Supervised Experience in Human Services II* (3 credits)

* These field placement courses allow the development of skills through hands-on experience. Field placements will consist of 10–12 hours per week within a human services agency within the community and are designed to enable the student, under the direction and guidance of on-site and faculty supervisors, to apply what has been learned to a real world work experience.

Electives (36 credits)

Select 12 credits from any combination of courses listed as major electives or under the following concentrations. Select an additional 24 credits of open electives from any courses, including those listed under the following concentrations.

Major Electives

HRM 4300	Managing Workplace Diversity (3 credits)
MGT 4170	Organizational Behavior (3 credits)
PSYC 2630	Ethical and Professional Issues in Mental Health (3 credits)
HS 2100	Administration of Recreational and Leisure Services (3 credits)
PADM 3000	Public Policy (3 credits)
PADM 3200	Public Budgeting (3 credits)
GERO 2030	Gerontology and the Law (3 credits)
PSYC 2470	Grief, Loss, and Bereavement (3 credits)

Concentrations (12 or 18 credits)

Students may choose to select one of the following concentrations:

*Basics in Aviation Concentration** (12 credits)*

HS 3500	Introduction to Human Factors in Aviation (3 credits)
HS 3510	Systems Analysis of the Impact of Human Factors on Decision-Making in Aviation (3 credits)
HS 3520	Strategic Forecasting of and Evaluation of Human Performance Factors in Aviation (3 credits)
HS 3530	Integration of Technical Foundations of Flight Management (3 credits)

*Professional Development in Aviation Concentration** (18 credits)*

HS 3500	Introduction to Human Factors in Aviation (3 credits)
HS 3510	Systems Analysis of the Impact of Human Factors on Decision-Making in Aviation (3 credits)
HS 3520	Strategic Forecasting of and Evaluation of Human Performance Factors in Aviation (3 credits)
HS 3530	Integration of Technical Foundations of Flight Management (3 credits)
HS 3540	Application of Fundamental Competencies in Commercial Aviation (3 credits)
HS 3550	Leadership Principles and Effective Communication in Flight Instruction (3 credits)

Advocacy/Case Management Concentration (12 credits)

HS 3410	Case Management Methods (3 credits)
HS 3420	Advocating for Individuals with Special Needs (3 credits)
HS 3430	Special Topics in Advocacy (3 credits)
HS 3440	Assessment and Treatment Planning (3 credits)

Gerontology Concentration (12 credits)

GERO 2000	Introduction to Gerontology (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
HS 3230	Cultural Competence in Aging Services (3 credits)
HS 3240	Long-term Care and Services to the Aging (3 credits)

Health Administration Concentration (12 credits)

BHS 3110	Health Care Ethics (3 credits)

BHS 3151	Health Services Management (3 credits)
BHS 3161	Concepts of Health Care Finance (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)

Nonprofit Management, Philanthropy, and Grantsmanship Concentration (12 credits)

HS 3120	Grant Writing and Management (3 credits)
HS 3130	Nonprofit Leadership (3 credits)
HS 3140	Fundraising and Philanthropy (3 credits)
HS 3150	Strategic Planning in Human Services (3 credits)

Social Work Concentration (12 credits)

SOCL 2000	Introduction to Social Work (3 credits)
HS 3330	Human Behavior and the Social Environment (3 credits)
HS 3340	Interviewing and Assessment (3 credits)
HS 3350	Social Work Practice (3 credits)

Substance Abuse Studies Concentration (12 credits)

PSYC 2020	Foundations of Clinical and Counseling Psychology (3 credits)
PSYC 2575	Introduction to Substance Abuse Studies (3 credits)
PSYC 3575	Treatment of Substance Abuse (3 credits)
PSYC 3800	Current Psychotherapies (3 credits)

** The Basics in Aviation and Professional Development in Aviation with a comprehensive understanding of the human factors associated with flight. These factors include problem solving skills, decision-making, communication, attention, stress management and physical condition. Within the Professional Development in Aviation concentration, students have the opportunity to obtain a commercial pilot license, multi-engine rating, and flight instructor certification. Admission for flight instruction is subject to comprehensive medical exams.

By focusing on the knowledge, skills, and human factors such as critical thinking, problem solving, communication and effective emergency management, students are prepared with a comprehensive understanding of the various elements associated with flight. In addition, effective resource management and safety awareness are emphasized throughout this curriculum.

Addendum E

Effective revision date: July 22, 2016

This is to replace course description for course HS 3530 on page 356 of this catalog.

HS 3530 Integration of Technical Foundations of Flight Management (3 credits)
In this course, students will gain Instrument Flight Rules (IFR) training. This training will enable students to develop proficiencies in using the aircraft's instruments and navigational equipment. Organization and planning are emphasized to effectively combine the information from charts, plates, radios and ATC. Furthermore, this course will provide students with an understanding of instrument management through take-off, flight, and landing while simultaneously exploring the human factors that affect each phase of flight. Examines in detail how human factors such as stress, emotion, attention management, health/physiology, and human psychology impact cockpit management. Advanced strategies for monitoring and modulating human factors are also discussed. Case examples will be utilized to further students understanding of how mistakes could have been avoided or have been avoided in the aviation industry. Prerequisite HS 3520. Students must possess a private pilot's license. Frequency: Every Winter.

Addendum F

Effective revision date: July 22, 2016

This is to replace Athletic Training Major section on pages 212 to 215 of this catalog.

Athletic Training Major

The athletic training major is designed to prepare students to become certified athletic trainers who specialize in injury and illness prevention, assessment, treatment, and rehabilitation for physically active people. The curriculum provides a balance between classroom instruction and clinical experience that prepares students to become competent allied health care professionals.

NSU's athletic training major, established in 2003, is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), effective March 2007. Athletic training students will graduate with a Bachelor of Science degree in Athletic Training and will be eligible to sit for the Board of Certification (BOC) examination. The athletic training major is designed to ensure that students who graduate from the program meet all requirements necessary to pass the BOC examination.

Athletic Training Program Goals

The athletic training program will:

1. Develop communication, critical thinking, and professional skills to prepare students for the allied health field of athletic training;
2. Meet the standards, guidelines, and requirements for accreditation and from governing organizations such as the National Trainers' Association (NATA), the Board of Certification (BOC), and the Commission on Accreditation of Athletic Training Education (CAATE);
3. Provide an effective and interactive learning environment as well as a solid educational foundation both in didactic and clinical experience settings. The program will utilize modern educational media and advanced technology regularly in the clinical and educational settings. It will expose students to hands-on experiences, clinical settings, and professionals representing a wide range of allied and medical health care professions. Students will receive clinical instruction by professionals representing other medical and allied health disciplines, such as medical doctors, physical therapists, physician assistants, occupational therapists, and osteopathic physicians;
4. Create an optimal learning community of faculty, clinical athletic trainers, and students that will provide quality health care for intercollegiate athletic programs and varied affiliated sites at all levels of sport, from grade school to professional sports teams;
5. Prepare program students to attain graduate or professional school placement, or entry-level employment within six months of graduating from the program. Additionally, program graduates will obtain state licensure and other necessary professional designations from the appropriate regulatory agencies in the states where they will be employed.

Athletic Training Major Learning Outcomes

A successful athletic training graduate is expected to:

1. Demonstrate the ability to prevent, evaluate, treat, rehabilitate, and document athletic related injuries in the field of athletic training;
2. Analyze and comprehend the physical, psychological, and emotional demands of physically active individuals and the sports medicine professionals involved in their care;
3. Develop the effective communication skills necessary for a successful allied health care career in athletic training;
4. Illustrate and differentiate the ethical practices as it relates to athlete/patient care.

Athletic Training Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course

requirements, refer to the *General Education Program* section in the Academic Resources and Procedures segment of this catalog.

Athletic Training Major Requirements (68 credits)

During the athletic training major's pre-professional phase (first two semesters), students must successfully complete (i.e., earn a C or better in) all introductory courses: ATTR 1100 Introduction to Athletic Training, ATTR 1200 Principles of Athletic Training, and ATTR 1300 Emergency Care and First Aid. During the pre-professional phase, students are also required to spend 100 hours observing certified athletic trainers in a variety of settings. Completion of the pre-professional phase (or the Pre-Athletic Training Program) does not guarantee admission into the athletic training major (professional phase). It is a competitive matriculation process.

Core Courses (68 credits)

ATTR 1100	Introduction to Athletic Training (3 credit)
ATTR 1200	Principles of Athletic Training (4 credits)
ATTR 1300	Emergency Care and First Aid (3 credits)
ATTR 1400	Health and Fitness (3 credits)
ATTR 2100	Injury Evaluation I (4 credits)
ATTR 2200	Injury Evaluation II (4 credits)
ATTR 2300	Sports Nutrition (3 credits)
ATTR 2400	Strength and Conditioning (3 credits)
ATTR 2610	Athletic Training Clinical I (3 credits)
ATTR 2620	Athletic Training Clinical II (3 credits)
ATTR 3100	General Medicine in Sports (3 credits)
ATTR 3300	Therapeutic Modalities/Lab (4 credits)
ATTR 3500	Rehabilitation of Athletic Injuries/Lab (4 credits)
ATTR 3630	Athletic Training Clinical III (3 credits)
ATTR 3640	Athletic Training Clinical IV (3 credits)
ATTR 4100	Athletic Training Administration (3 credits)
BIOL 1400	Introductory Cell Biology (3 credits)
BIOL 3312	Human Anatomy and Physiology/Lab (5 credits)
EXSC 3700	Kinesiology (3 credits)
EXSC 3740	Exercise Physiology with Lab (4 credits)

Athletic Training Major Phases

The NSU Athletic Training Education Program (ATEP) consists of three phases divided into four levels. Level I of the ATEP is the pre-professional phase (or Pre-Athletic Training Program). Levels II and III compose the professional phase (or the athletic training major). Level IV is the completion phase.

Students admitted into the athletic training major must first complete the Pre-Athletic Training Program. The Pre-Athletic Training Program includes successful completion (C or better) of six courses: ATTR 1100 Introduction to Athletic Training, ATTR 1200 Principles of Athletic Training, ATTR 1300 Emergency Care, ATTR 1400 Health and Fitness, BIOL 1400 Introduction to Cell Biology or equivalent, and BIOL 3312 Human Anatomy and Physiology/Lab or equivalent. In addition, each student must complete a minimum number of clinical experience hours, as part of the ATTR 1100 and ATTR 1200 courses, observing ATEP-Approved Preceptors (i.e., Certified Athletic Trainers) in a variety of settings.

Students in the Pre-Athletic Training Program are eligible to submit a professional portfolio as part of the ATTR 1200 course. Submission of the professional portfolio does not guarantee matriculation into the professional phase of the program (the athletic training major). Acceptance in the Professional Phase of the program will be based on students' scores in the following categories: overall cumulative 2.5 GPA, portfolio assessment, and a professional interview. Detailed information is available on the college's athletic training program Web page. Transfer students are eligible for this major but must complete all program requirements (ATEP Levels I through III) at Nova Southeastern University for degree completion. There are additional opportunities for the Level IV student to complete an internship in the area of sports medicine.

The NSU Athletic Training Education Program is nationally accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Upon the completion of this program, students will be eligible to sit for the Board of Certification (BOC) examination to become Certified Athletic Trainers (ATC). Additional student costs associated with the Athletic Training

Education Program include but are not limited to transportation to the clinical sites off campus, professional rescuer (CPR) certifications, required background checks, etc.

Level I of ATEP: Pre-Professional Phase (Pre-Athletic Training Program) Requirements:

1. Successful completion (C or better) of ATTR 1100, ATTR 1200, ATTR 1300, ATTR 1400, BIOL 1400, and BIOL 3312 with lab
2. Athletic Training Student Portfolio; signed Technical Standards; and compliance with other accreditation documents as part of ATTR 1100 and ATTR 1200 course requirements
3. Completion of 100 clinical observation hours, supervised by an ATEP-Approved Preceptor as required by ATTR 1100 and ATTR 1200

Level II of ATEP: Professional Phase (Athletic Training Major) Requirements:

1. Successful completion (C or better) of ATTR 2100, ATTR 2200, ATTR 2300, ATTR 2400, ATTR 2610, ATTR 2620, and ATTR 3300 with lab
2. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications, as required for clinical experience hours
3. Completion of minimum of 300 clinical experience hours, supervised by an ATEP-Approved Preceptor as part of both ATTR 2610 and ATTR 2620 course requirements.

Level III of ATEP: Professional Phase (Athletic Training Major) Requirements:

1. Successful completion (C or better) of ATTR 3100, ATTR 3500 with lab, ATTR 3630, ATTR 3640, EXSC 3700, EXSC 3740, and ATTR 4100
2. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications, as required for clinical experience hours
3. Completion of a minimum of 300 clinical experience hours, supervised by an ATEP-Approved Preceptor, as required by ATTR 3630 and ATTR 3640

Level IV of ATEP: Completion Phase (Athletic Training Major) Requirements:

1. Maintenance of CPR for the Professional Rescuer (or equivalent) certifications
2. Students are eligible for athletic training electives and an optional Internship (ATTR 4950) that will be supervised by an athletic training faculty member at an assigned clinical site off campus to be determined by the student.
3. Completion of degree requirements as outlined in the Graduation Requirements section of the Nova Southeastern University Undergraduate Student Catalog
4. Completion of registration for the Board of Certification Examination (BOC)

Addendum G

Effective revision date: July 25, 2016

This is to replace major in bachelor of science in respiratory theraphy section on pages 207 to 211 of this catalog.

Bachelor of Science in Respiratory Therapy

B.S.R.T. Mission Statement

The mission of NSU's Department of Cardiopulmonary Sciences is to advance the respiratory care profession through leadership in teaching, research, and service. We will provide a premiere health care education experience in a learning environment that cultivates critical thinking, inspires professional leadership, encourages and promotes research, and

imparts a strong awareness of ethical standards and social diversity. By engaging all faculty and students in research and scholarly activity we intend to cultivate the knowledge, attitudes, and skills necessary to support not only national leadership for the respiratory care profession, but develop future educators and providers in professionally-related health care arenas.

Bachelor of Science in Respiratory Therapy—Program Goals

The goal of the respiratory therapy program is contained within the college mission, in that the program graduates students who serve as competent advanced level respiratory therapists and leaders who will provide benefit to the community and their professions.

The intellectual, moral, ethical, and professional competencies are explicitly stated in terms of three program objectives. Program objectives are as follows:

1. Demonstrate cognitive behaviors (knowledge) in the clinical setting to include recall, application, and analysis of information consistent with an advanced-level respiratory therapist.
2. Exhibit the psychomotor skills in the clinical setting necessary to perform as an advanced-level respiratory therapist.
3. Demonstrate caring and positive attitudes and professional behaviors (affective) in the clinical setting consistent with an advanced-level respiratory therapist.

Working toward its goals and objectives, the respiratory therapy program addresses NSU's larger mission to benefit the community and foster academic excellence.

Bachelor of Science in Respiratory Therapy—Program Learning Outcomes

Graduates of the Bachelor of Respiratory Therapy degree post-professional program will demonstrate command of the following learning outcomes as evidenced by their participation in class, completion of class assignments, presentations, and projects.

Graduates will be able to:

1. Demonstrate knowledge of the physiological bases for all therapeutic interventions, advanced patient monitoring, assessment, and treatment, as well as diagnostic procedures in all areas of respiratory therapy practice.
2. Demonstrate critical thinking and problem-solving skills to physicians and other healthcare personnel in developing and carrying out various cardiopulmonary care strategies.
3. Demonstrate proficiency in establishing an evidence base for best practice through research and interpretation of the professional scientific literature.
4. Demonstrate knowledge of the ethical obligations and responsibilities of healthcare professionals and institutions.
5. Demonstrate knowledge of current issues and trends in healthcare, including public policy, access, quality improvement, legal, and ethical topics.
6. Demonstrate proficiency in oral and written communication.
7. Demonstrate knowledge of roles in respiratory education and management.
8. Apply knowledge successfully in practical and experiential arenas.

Bachelor of Science in Respiratory Therapy for the Practicing RRT—Post-Professional Program

The B.S.R.T. Post-Professional program is designed for Registered Respiratory Therapists with an A.S. degree from a regionally accredited institution. This degree allows Respiratory Therapists to further expand their expertise with advanced knowledge in a variety of areas. Delivered entirely online, through a combination of synchronous (real-time) and asynchronous instruction, the B.S.R.T. program is designed for students who are unable to be physically present, on campus, or for those with schedule or family constraints that make traditional college class schedules challenging.

Computer Literacy

Access to a computer will be required for all students to successfully complete the online courses in the Department of Cardiopulmonary Science. Each student is expected to acquire computer hardware and software appropriate for the program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and necessary for graduation.

Continuous Enrollment

Although continuous enrollment is not a requirement, the B.S.R.T. program strongly recommends students to enroll in two courses per semester, for the duration of their B.S.R.T. studies.

Online Student Center—Program and Course Communication

All students are required to visit the online student center at least once per week. All communication and programmatic information will be posted in the online student center. It is required that all B.S.R.T. post-professional students use the online student center when communicating with the program. All class communication must take place through the university's secure course management platform.

Bachelor of Science in Respiratory Therapy—Post-Professional Program Curriculum

- The program requires that all core coursework be completed through the NSU B.S.R.T. program. A minimum total of 120 credit hours, of which 30 credit hours must fulfill general education requirements, are required to graduate with the B.S.R.T. degree.
- All students are required to obtain a grade of C or better (greater than or equal to 74 percent) in every required core course.
- Students receiving a C-, D+, D, or F in a required core course will be required to retake the course at its next scheduled offering.
- The B.S.R.T.—Post-Professional Program is presented in a distance-learning format and requires no on-campus time.
- The coursework is professor-paced using Web-based delivery. The curriculum and coursework follow a standard 12-week semester calendar. The curriculum is designed to build upon the existing knowledge base of the Registered Respiratory Therapist while focusing on the overall health care picture. Leadership, evidenced- based practice, and education, are a selected few of the areas covered in the curriculum.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Block Grant (45 credits)

Students will be grants a 45 credit block grant for their registered respiratory therapist (RRT) credential and current licensure.

Generalist Track Major Requirements (45 credits)

Core Courses (39 credits)

RRT 3014	Advanced Patient Monitoring and Assessment (3 credits)
RRT 3015	Critical Care Pathophysiology for Respiratory Therapy (3 credits)
RRT 3016	Advanced Cardiopulmonary Physiology for Respiratory Therapy (3 credits)
RRT 3017	Outpatient Services in Respiratory Therapy (3 credits)
RRT 3018	Advanced Pharmacology in Respiratory Therapy (3 credits)
RRT 3020	Quality Improvement in Health Care (3 credits)
RRT 3021	Sleep Medicine (3 credits)
RRT 4005	Evidence-Based Practice (3 credits)
RRT 4006	Leadership and Management for Respiratory Care (3 credits)
RRT 4007	Education Principles in Health Care (3 credits)

RRT 4009	Legal and Ethical Considerations in Respiratory Care (3 credits)
RRT 4010	Case Management Theory and Process (3 credits)
BHS 4031	Statistics for Health Sciences (3 credits)

Health Professions Division Practical Coursework and Experiences (6 credits)

Select two courses from the following:

RRT 4502	Practicum (3 credits)
RRT 4505	Scientific Investigation I (3 credits)
RRT 4506	Internship (3 credits)
RRT 4507	Scientific Investigation II (3 credits)

Total Degree Requirement: 120 credits (minimum)

Optional Specialization in Management (15 credits)

Successful completion of the following courses, in addition to the requirements for the Bachelor of Science in Respiratory Therapy—Post-Professional Program Generalist Track, will grant a B.S.R.T. degree with the added specialization in management:

BHS 3155	Conflict Management in Health Care (3 credits)
BHS 3161	Health Care Finance (3 credits)
BHS 3162	Economics of Health Services (3 credits)
RRT 4103	Strategic Planning and Organizational Development for Health Care (3 credits)
RRT 4014	Operational Analysis and Quality Improvement (3 credits)

Bachelor in Science in Respiratory Therapy—First Professional Program

This program is designed for the First-Professional or entry-level student to obtain their B.S.R.T. through didactic and clinical training. This program is a full-time two- year, on-campus program which requires the student to complete 40 prerequisite credits prior to matriculation.

Prerequisites/General Education Courses

Courses	*Credits*
Written Communication at or above 1500 level	6
Mathematics at or above 1040 level	6
(one of which must be college algebra)	
Humanities	6
Social and Behavioral Sciences	6
Human Anatomy and Physiology I and II with Lab	8
Microbiology with Lab	4
General Chemistry with Lab	4
Total Prerequisite/General Education Courses	**40**

Highly Recommended Courses

Courses	*Credits*
Genetics	3
Organic/Inorganic Chemistry with Lab	4
Physics	3

Bachelor of Science in Respiratory Therapy—First Professional Program Curriculum

- The program requires that all core coursework be completed though the NSU B.S.R.T. program. A minimum total of 120 credit hours, of which 30 credits must fulfill general education requirements.

- All students are required to complete 40 prerequisite courses prior to matriculation.
- All students are required to obtain a grade of C or better (greater than or equal to 74 percent) in every required core course.
- Students receiving a C-, D+, D, or F in a required core course will be required to retake the course at its next scheduled offering.
- The program is offered in a two year full-time on campus format with a lock step sequence.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Core Course Requirements (80 credits)

RCP 3001	Medical Terminology for Respiratory Therapy (1 credit)
RCP 3002	Cardiopulmonary A & P (3 credits)
RCP 3003	Fundamentals of Respiratory Care with Lab (4 credits)
RCP 3004	Respiratory Care Basics and Assessments with Lab (4 credits)
RCP 4040	Statistics and Principles of Scientific Literature Evaluation (3 credits)
RCP 3501	Clinical I (2 credit)
RCP 3007	Pulmonary Disease (3 credits)
RCP 3008	Pharmacology for Respiratory Therapy (3 credits)
RCP 3009	Patient Monitoring with Lab (4 credits)
RCP 4009	Legal and Ethical Considerations in Respiratory Care (3 credits)
RCP 3502	Clinical II (3 credits)
RCP 3011	Mechanical Ventilation with Lab (4 credits)
RCP 3012	Cardiopulmonary Diagnostics and PFT with Lab (4 credits)
RCP 3013	Human and Infectious Disease (3 credits)
RCP 4501	Clinical III (4 credits)
RCP 4001	Neonatal/Pediatric Respiratory Care and Lab (4 credits)
RCP 4002	Cardiopulmonary Technology and Specialties (3 credits)
RCP 4003	Alternate Respiratory Disciplines (3 credits)
RCP 4100	Clinical Seminar I (2 credits)
RCP 4006	Leadership and Management in Respiratory Care (3 credits)
RCP 4005	Health Research and Evidence-Based Practice (3 credits)
RCP 4502	Clinical IV (6 credits)
RCP 4503	Clinical IV – Specialization (6 credits)
RCP 4101	Clinical Seminar II (2 credits)

Addendum H

Effective revision date: July 25, 2016

This is to replace major in bachelor of health science—online program section on page 218 to 223 of this catalog.

Bachelor of Health Science—Online Program

The Bachelor of Health Science (B.H.Sc.)—Online Program is an online degree advancement program for graduates from associate's degree, diploma, or certificate programs in the health sciences such as military trained health care technicians, radiology technicians, respiratory therapists, etc. The NSU B.H.Sc. generalist track course of study is interdisciplinary and is designed to provide career advancement for health care practitioners as well as deliver a well-rounded curriculum. This cutting-edge program offers the opportunity for numerous health care occupations to complete their under graduate degree coursework online, conveniently from their own home or office, without compromising career or other obligations.

The B.H.Sc. Online program also offers a Pre -Master of Occupational Therapy (Pre-MOT) track for Certified Occupational Therapy Assistants. This educational opportunity is available to Certified Occupational Therapy Assistants (COTAs) to earn a Bachelor in Health Science degree and upon completion of the Pre-MOT Track be guaranteed admission to the Master of Occupational Therapy at NSU's main campus in Fort Lauderdale, Florida.

There have been dramatic changes in the health care market and delivery systems in the United States over the past decade. As health care becomes increasingly competitive, it becomes more important to distinguish one self professionally and academically. The Bachelor in Health Science—Online Program is offered via the College of Health Care Sciences Web-based distance learning technology that allows health care professionals to remain in their current location and employment.

Upon successful completion of the B.H.Sc. program, students are eligible to apply for admission to continue their education in health sciences in the online Master of Health Science (M.H.Sc.) and later the Doctor of Health Science (D.H.Sc.) program or other graduate program.

B.H.Sc. Mission Statement

The mission of the Nova Southeastern University (NSU) Bachelor of Health Science (B.H.Sc.) program is to provide an online, post-professional degree advancement/completion program for graduates from associate's degree, diploma, and certificate programs through an interdisciplinary course of study; to provide career and academic advancement opportunities for health care practitioners; and deliver a well-rounded curriculum allowing the enrolled students to complete their undergraduate degree online while continuing to work.

Bachelor of Health Science—Online Program Goals

The Bachelor of Health Science will enable students to:

1. Pursue a well-rounded and diverse educational degree completion program for health professionals in an online environment that allows them to continue gainful employment in their chosen field while attending and completing course work.
2. Enhance and develop the student's leadership and health care knowledge through academic inquiry while using current, practical health care models.
3. Enhance their understanding of diverse populations in health care and to prepare the student to take a leadership role in the rapidly changing health care environment.
4. Enhance the student's understanding of the political, social, legal and ethical issues that may be encountered and have an impact on areas of health care practice.
5. Develop knowledge that helps bridge between clinical care, health care diversity and critical inquiry.

Bachelor of Health Science—Online Program Learning Outcomes

Graduates of the Bachelor of Health Science degree completion program will demonstrate command of the following learning outcomes as evidenced by their participation in class, completion of class assignments, presentations, and projects.

Graduates will be able to:

1. Communicate effectively in writing on a variety of topics related to health care
2. Demonstrate an awareness and appreciation of the delivery of culturally competent health care.
3. Effectively communicate and acknowledge the impact of the legal, ethical, and political environment on health care policy and delivery.
4. Demonstrate the knowledge and ability to search and retrieve information and materials related to individual clinical practice issues or overall health policy concerns.
5. Describe and demonstrate management / leadership skills and theories that can be applied in preparation to lead or manage effectively in a health care environment.

6. Demonstrate knowledge of and effectively apply health care models, theories, and tools to issues impacting health care delivery

Computer Literacy

Access to and ongoing use of a computer will be required for all students to successfully complete the online programs and courses in the Department of Health Science. Each student is expected to acquire computer hardware and software appropriate to the program. Competency in the basic use of a computer and the ability to navigate and interact with the course and curriculum content is the responsibility of the student and necessary for graduation.

Continuous Enrollment

Although continuous enrollment is not a requirement, the B.H.Sc. program strongly recommends students to enroll in at least two courses per semester, for the duration of their B.H.Sc. studies.

Online Student Center—Program and Course Communication

All students are required to visit the online student center at least once every two weeks. All communication and programmatic information will be posted in the online student center. It is required that all B.H.Sc. online students use the online student center when communicating with the program. All class communication must take place through the university's secure course management platform.

Bachelor of Health Science—Online Program Curriculum

The B.H.Sc—Online Program is designed for completion in a distance-learning format and requires no on-campus time. The coursework is professor-paced using Web-based delivery. The curriculum and coursework follow a standard 12-week semester calendar. The curriculum is designed to build upon the existing knowledge base of the health care professional while focusing on the overall health care picture. Leadership, diversity, and conflict resolution are but a few of the areas covered in the curriculum.

The program curriculum requires that a minimum of 30 semester hours of course work (including 21 semester hours of required core course work) be completed through the NSU B.H.Sc. program. To be eligible to graduate with the B.H.Sc. degree, a student must have completed a minimum of 30 credits of General Education course work in addition to the B.H.Sc. curriculum, with a resulting minimum total of 120 semester hours with a 2.0 cumulative grade point average and a 2.25 grade point average in the B.H.Sc. major.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Generalist Track Major Requirements (30 credits)

Core Courses (21 credits)*

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership (3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits); (Must be taken during the first semester of enrollment in the program)

* Students are required to obtain a grade of C or better (greater than or equal to 73 percent) in required core courses. Students receiving a grade of C- or lower in a required core course will be required to retake the course at its next scheduled offering.

Major Electives (minimum 9 credits)

The number of major electives requires is variable, based on the number of credit hours accepted for transfer.

BHS 3100	Current Issues in Health Care (3 credits)
BHS 3101	History of the US Health System (3 credits)
BHS 3130	Research and Design for Health Care (3 credits)
BHS 3140	Health Care Practice (3 credits)
BHS 3145	Principles of Environmental Health (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3161	Concepts of Health Care Finance (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)
BHS 3190	Patient Education in Health Care (3 credits)
BHS 3195	Therapeutic Communications for Health Care Professionals (3 credits)
BHS 4001	Individuals with Disabilities and Special Needs (3 credits)
BHS 4005	Alternative Medicine in Health Care (3 credits)
BHS 4006	Fundamentals of Chinese Medicine (3 credits)
BHS 4009	Sports Medicine: Principles and Practice (3 credits)
BHS 4010	Health Promotion and Disease Prevention (3 credits)
BHS 4011	Bioterrorism: Health Care Readiness and Response (3 credits)
BHS 4012	Torture, Violence, and Trauma—Health Care's Healing Role (3 credits)
BHS 4020	Topics in Maternal, Child Health (3 credits)
BHS 4031	Statistics for Health Professions (3 credits)
BHS 4110	Health Care and Aging (3 credits)
BHS 4130	Internship** (3 credits)
BHS 4140	Independent Study** (3 credits)
BHS 4150	The Science of Sound** (3 credits)
BHS 4151	Linguistics & Psycholinguistic Variables of Normal Language Development** (3 credits)
BHS 4153	Speech and Language Disorders for Health Care Practitioners (3 credits)
BHS 4160	Education for Health Professions (3 credits)

** Student must receive departmental and academic advisor approval in order to be allowed to register for these courses.

Open/Transfer Electives (60 credits)

Students are required to complete 60 credit hours of open/transfer electives, consisting of transfer credits or additional B.H.Sc. elective coursework.

Total Degree Requirement: 120 credits (minimum)

Bachelor of Health Science—Online Pre-MOT Track Curriculum

Pre-Master of Occupational Therapy (Pre-MOT) Track for Certified Occupational Therapy Assistants

This educational opportunity is available to Certified Occupational Therapy Assistants (COTAs) to earn a Bachelor in Health Science (B.H.Sc.) degree and, upon completion of the Pre-MOT Track, be guaranteed admission to the Master of Occupational Therapy program at NSU's main campus in Fort Lauderdale, Florida.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Pre-MOT Track Major Requirements (34 credits)

BIOL 1500	Biology I/Lab (4 credits)*
BIOL 3321	Human Anatomy and Physiology (3 credits)*
PHYS 2350	General Physics/Lab (4 credits) *OR* EXSC 3700 Kinesiology (3 credits)*
BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)
BHS 3150	Principles of Leadership (3 credits)

BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (3 credits); (Must be taken during first semester of enrollment in program)
BHS 4031	Statistics for Health Sciences (3 credits)

*May be used to fulfill General Education requirements

Major Electives (6 credits minimum)

Any BHS courses not counted as a core course.

The number of major electives required varies based on the number of credit hours accepted.

Open/Transfer Electives (60 credits)

Students are required to complete 60 credits of open/transfer electives, consisting of transfer credits or additional B.H.Sc. elective coursework.

Subtotal Required Courses: 40 credits (minimum)

Total Degree Requirement: 120 credits (minimum)

Bachelor of Health Science—Pre-O.T.D. Track for Occupational Therapy Assistants

This educational opportunity is available to certified Occupational Therapy Assistants (O.T.As) to earn a Bachelor in Health Science (B.H.Sc.) degree and upon completion of the Pre-O.T.D. Track be guaranteed admission to the Doctor of Occupational Therapy (O.T.D.) Entry Level Program at Nova Southeastern University, Tampa, FL.

Classes for NSU's three-and-a-half year, blended distance/face-to-face OTD program takes place at the NSU Tampa campus and online. The program, designed to attract creative and compassionate individuals who like to help others achieve their potential, meets the need for occupational therapy education beyond a Masters degree by students who want flexibility while performing their current occupations.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Pre-Doctor of Occupational Therapy (Pre-O.T.D.) Track Requirements

The Pred-O.T.D. Track Requirements can also be used to fulfill natural and physical science requirements.

Courses	***Credits***
Biology with Lab	4
Anatomy and Physiology	3
Physics with lab or Kinesiology (PHYS 2350 or EXSC 3700)	3

Additional Pre-O.T.D. Track Requirements (can be used towards open elective requirements)

Courses	***Credits***
Medical Terminology	1
Human growth and development or developmental psychology	3

Required B.H.S. Courses (30 credits)

BHS 3110	Health Care Ethics (3 credits)
BHS 3120	Introduction to Epidemiology (3 credits)

BHS 3150	Principles of Leadership(3 credits)
BHS 3155	Conflict Resolution in Health Care (3 credits)
BHS 3160	Health Policy (3 credits)
BHS 4000	Cultural Competency in Health Care (3 credits)
BHS 4100	Academic and Professional Writing (must be taken during first semester of enrollment in program) (3 credits)
BHS 4031	Statistics for Health Sciences (3 credits)

Major Electives (6 credits minimum)

Any BHS courses not counted as a Core Course.

Open/Transfer Electives (60 credits minimun)

Any combination of coursework consisting of additional BHS prefixed elective courses and/or transfer courses of any prefix with a course level of 1000 or above resulting in a total of 60 credits

Subtotal Required B.H.S. Courses: 30 credits (minimum)

Total Degree Requirement: 120 credits (minimum)

Many of the general education, pre-O.T.D. track and open elective requirements may be fulfilled through prior OTA course work.

Addendum I

Effective revision date: July 25, 2016

This is to replace application deadline section on pages 43 to 44 of this catalog.

Application Deadlines

Prospective undergraduate students may apply for admission and be accepted to NSU by stated deadlines. Students should apply early to ensure their application receives prompt consideration. For more information on a specific program's application deadline or how to apply for priority consideration, students should contact an admissions representative at the Office of Undergraduate Admissions at (954) 262-8000 or refer to *nova.edu/undergraduate/admissions/*.

Please note the following deadlines:

Program	Term	Application Deadline	Class start
A.A., B.A., and B.S. degrees— Abraham S. Fischler College of Education; College of Arts, Humanities, and Social Sciences; College of Engineering and Computing; College of Health Care Sciences; College of Psychology; H. Wayne Huizenga College of Business and Entrepreneurship; and Halmos College of Natural Sciences and Oceanography;	Fall	Early Decision and Early Action: November 1, 2015 Regular Decision: January 1, 2016	August 22, 2016
	Winter	November 28, 2016	January 9, 2017
	Summer	April 3, 2017	May 8, 2017

B.H.Sc. Online, B.S.R.T. Post-Professional (Online)	Summer	May 23, 2016	June 27, 2016
	Fall	August 22, 2016	September 26, 2016
	Winter	November 28, 2016	January 3, 2017
	Spring	February 27, 2017	April 3, 2017
Respiratory Therapy B.S.R.T. First-Professional (entry-level)	Fall	July 18, 2016	August 22, 2016
Entry B. S. N.*	Fall	June 1, 2016	August 22, 2016
	Winter	November 1, 2016	January 4, 2017
R.N. to B.S.N./M.S.N.*	Fall	July 30, 2016	August 22, 2016
	Winter	November 30, 2016	January 4, 2017
B.S. Cardiovascular	Summer	April 3, 2017	May 8, 2017
B.S. Medical Sonography	Summer	April 3, 2017	May 8, 2017

* Please see additional requirement in the Bachelor of Science in Nursing section on page 46.

Addendum J

Effective revision date: July 25, 2016

This is to replace bachelor of science in respiratory therapy first professional and post-professional programs section on pages 44 to 45 of this catalog.

Bachelor of Science in Respiratory Therapy First Professional and Post-Professional Programs

For prerequisite information and admissions requirements, please visit *healthsciences.nova.edu/rrt.*

In addition to the documents described in the *Required Documentation* section, students applying for entry to the Bachelor of Science in Respiratory Therapy—First Professional Program must submit evidence of the following:

- Completion of 40 credits, with a minimum grade of C, from a regionally accredited college of university.
- Minimum cumulative GPA of 2.5 on a 4.0 scale from all undergraduate work.
- Minimum cumulative Science GPA of 2.5.
- Application and a non-refundable application fee.

Students applying for the Post-Professional (online) must submit evidence of the following:

- NBRC Registration as a Registered Respiratory Therapist. (A block grant of 45 credits will be applied toward the B.S.R.T. upon proof of RRT and Licensure where applicable, and successful completion of all B.S.R.T. course work).
- A license to practice respiratory therapy, where applicable.
- Application and non-refundable application fee.
- Official transcripts from each high school, university/college attended.
- Completion of the following prerequisite general education coursework, with a minimum grade of C. All general education coursework will be evaluated for equivalency.
- Students must have at a minimum 2 Written Communication above 1500 level (6 credits), 2 Math above 1040 level (6 Credits)—one of which much be college algebra, 2 Social and Behavioral Sciences (6 Credits), 2 Humanities (6 credits), and 2 Natural and Physical Sciences (6 credits) to enter the B.S.R.T. Post-Professional program.
- Students may be concurrently enrolled while completing any additional general education requirements. Credits

can be transferred in prior to completion of the program. Degree will not be granted until all general education requirements are met.

Addendum K

Effective revision date: July 25, 2016

This is to replace prekindergarten/primary education/ESOL major section on pages 122 to 123 of this catalog.

Prekindergarten/Primary Education/ESOL Major

The Bachelor of Science in Prekindergarten/Primary Education (age three-grade 3) with ESOL endorsement is a state-approved initial certification program in Florida that focuses on training teacher candidates to enter the classroom, while emphasizing the teaching of early childhood students by combining theoretical components with practical application. This major provides future educators with a foundation in classroom management and methods of teaching, as well as skills for working with children age three through grade three. Course content is research based and infuses best practices in education and strategies for teaching English as a second language (ESOL). An emphasis is placed on the appropriate uses of technology. The program aligns directly with the Florida Department of Education's certification requirements for prekindergarten/primary education (age three-grade 3) and endorsement requirements for ESOL.

Prekindergarten/Primary Education/ESOL Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Prekindergarten/Primary Education/ESOL Program Requirements (3 credits)

EDUC 2500	Education Pre-enrollment Seminar (0 credits)
ESOL 2903	Cross-Cultural Studies (3 credits)

Prekindergarten/Primary Education/ESOL Major Requirements (72 credits)

Teacher candidates in the state-approved program in the prekindergarten/primary education (age three through grade three) major must also keep track of field experiences within the courses. A supervised field experience occurs in EECP 4340.

ECA 203	Foundations of Early Care and Education (3 credits)
ECDP 3334	Child Development during the Preschool and Primary Age Years (3 credits)
EDEC 2405	Children with Special Needs (3 credits)
EDEC 3420	Families of Children with Special Needs: Challenges and Opportunities (3 credits)
EDEC 3530	Diagnosis, Assessment, and Evaluation of Young Children (3 credits)
EECP 3550	Child Guidance and Classroom Management (3 credits)
EDEC 4320	Cultural Diversity and Family-Community Development (3 credits)
EECP 4330	Health, Nutrition, Safety, and Physical Development in Early Childhood (3 credits)
EECP 4340	Developmentally Appropriate Practices for Teaching Literacy and Language Arts in Early Childhood Education (3 credits)
EECP 4345	Principles and Practices of Reading and Language Arts Assessment in Early Childhood Education (3 credits)
EDUC 4200	Simulation Experience-Diversity and Ethics (3 credits)
EECP 4520	Developmentally Appropriate Practices for Teaching Reading in Early Childhood (3 credits)
EECP 4530	Developmentally Appropriate Practices for the Integration of Creative Arts Across the Early Childhood Curriculum (3 credits)
EECP 4545	Developmentally Appropriate Practices for Integrating Math and Science in Early Childhood Education (3 credits)

EECP 4550	Developmentally Appropriate Practices for Teaching Social Studies in Early Childhood (3 credits)
EECP 4560	Integrating Literacy Throughout the Early Childhood Curriculum (3 credits)
ESOL 4901	Methods of Teaching ESOL (3 credits)
ESOL 4902	ESOL Curriculum and Materials Development (3 credits)
ESOL 4904	Linguistics for ESOL Educators (3 credits)
ESOL 4905	Testing and Evaluation in ESOL (3 credits)
EECP 4570	Prekindergarten/Primary Education Internship and Seminar (12 credits)

Open Electives (21 credits)

Total Credits Required for Degree Completion: 120 credits

Addendum L

Effective revision date: July 25, 2016

This is to replace computer science major section on pages 185 to 186 of this catalog.

Computer Science Major

The computer science (CS) major prepares responsible, well-rounded graduates capable of designing, developing, and using software systems. They should understand critical aspects of software systems and associated ethical implications to society. The curriculum covers technical and professional requirements with electives to prepare students for professional careers and further study in the discipline of computer science. In this program, students get theoretical and applied current coverage of fundamental and advanced topics in software development and management, software and system design, operating systems, data communications, computer architecture, algorithms, and data structures. Students can also choose between many electives including security, various topics in applied mathematics, development of Web applications, and databases. The program incorporates mathematics and sciences including calculus, discrete mathematics, statistics, and a solid base in physical science with laboratories. Successful graduates will be equipped with the theoretical knowledge, practical experience, and background to work effectively in the field of computer science, and to successfully advance to graduate studies.

The CS curriculum is consistent with recommendations outlined under the Computer Science criterion specified by the Computer Accreditation Commission of Accreditation Board for Engineering and Technology, which is based on the recommendations of the national ACM/IEEE Joint Curriculum Task Force.

Computer Science Program Educational Objectives

Graduates of the computer science program are expected to:

1. Apply computer science knowledge and skills to analyze problems and create solutions.
2. Communicate effectively and perform well in teams.
3. Understand and apply professional standards of ethics and social responsibility.
4. Continue to develop their knowledge and skills through advanced study and lifelong learning.

Computer Science Major Learning Outcomes

By graduation, students in the computer science program are expected to have attained:

1. Demonstrate understanding of the field of computing, both as an academic discipline and as a profession within An ability to analyze a problem and to identify computing requirements appropriate to its solution.
2. An ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline.
3. An ability to communicate effectively with a range of audiences about technical information.

4. An ability to make informed judgments in computing practice based on legal and ethical principles, and identify impacts on individuals and society.
5. An ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables.
6. An ability to apply theory in the design and implementation of computer-based solutions.
7. An ability to reason about and explain computer-based solutions at multiple levels of abstraction.
8. An ability to recognize the ongoing need for additional knowledge and to locate, evaluate, integrate, and apply this knowledge effectively.

Computer Science Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Computer Science Major Requirements (82 credits)

Core Courses (73 credits)

MATH 2100	Calculus I (4 credits) *OR* MATH 2100H Calculus I Honors (4 credits)
MATH 2200	Calculus II (4 credits) *OR* MATH 2200H Calculus II Honors (4 credits)
MATH 3300	Introductory Linear Algebra (3 credits)
MATH 4500	Probability and Statistics (3 credits)
PHYS 2400	Physics I/Lab (4 credits)
PHYS 2500	Physics II/Lab (4 credits)
CSIS 1800	Introduction to Computer and Information Sciences (3 credits)
CSIS 2050	Discrete Mathematics (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
CSIS 3050	Assemblers and Assembly Language Programming (4 credits)
CSIS 3101	Advanced Computer Programming (4 credits)
CSIS 3400	Data Structures (4 credits)
CSIS 3460	Object Oriented Design (3 credits)
CSIS 3500	Networks and Data Communication (3 credits)
CSIS 3750	Software Engineering (4 credits)
CSIS 3810	Operating Systems Concepts (3 credits)
CSIS 4050	Computer Architecture (3 credits)
CSIS 4600	Systems Programming (4 credits)
CSIS 4610	Design and Analysis Algorithms (3 credits)

Capstone:

CSIS 4903	Capstone Project for Computer Science (3 credits) *OR*
CSIS 4953	Capstone Internship in Computer Science (3 credits)

Major Electives (9 credits)

Select 9 credits from the following courses:

Any 3000/4000-level CSIS, CENG, EENG and SENG courses not counted as core courses for the major

Addendum M

Effective revision date: July 26, 2016

This is to replace recreational therapy major section on pages 153 to 155 of this catalog.

Recreational Therapy Major

The Bachelor of Science in Recreational Therapy is designed to prepare professionals with the therapeutic and evaluation skills necessary to pursue certification as a therapeutic recreation specialist or seek employment in a multitude of settings.

The B.S. in Recreational Therapy trains students to be able to interact with clients, create and manage a therapeutic environment, and apply a working knowledge of best practices and issues related to the provision of services. There is an emphasis on training in clinical interventions that will assist individuals with illnesses or disabling conditions in improving or maintaining physical and emotional well-being.

The program is offered entirely online, giving students flexibility in managing demanding schedules, as well as having the opportunity to work in an easily accessible learning environment.

Recreational Therapy Major Learning Outcomes

A successful recreational therapy graduate is expected to:

1. Demonstrate an understanding of history, service models, theory/philosophy, ethics, credentials, professional conduct, evidence-based practice and professional development with recreational therapy practice.
2. Demonstrate competence in areas such as, screening, assessing and collecting comprehensive data and information regarding clients, and analyzing this information collected to determine the course of action when developing individualized treatment plans with clients.
3. Demonstrate competence in the planning and development of individualized treatment plans that identify objective, measurable, and functional outcome goals, as well as facilitate techniques and interventions, based on assessment data collected which reflect improvement in the diagnosed specific medical, psychiatric or other disabling condition.
4. Identify and implement appropriate evidence-based treatment interventions and programs to restore, remediate, or rehabilitate client functioning within a therapeutic recreation setting.
5. Utilize specific skills used in facilitating client treatment success in recreational therapy practice.
6. Be able to conduct evaluation procedures and research to determine the effectiveness of treatment interventions and programs used in obtaining client treatment goals and outcomes within the therapeutic recreation environment.
7. Demonstrate the basic skills necessary when managing their own practice or organizations such as organization and delivery of health care and human services, facility planning, financial planning, and providing clinical supervision and education to staff and students.
8. Demonstrate an understanding of human anatomy and physiology, human development, and psychological and social behavior, as knowledge of these areas serve to guide treatment and client outcomes.
9. Demonstrate the ability to integrate skills learned within the program and be able to display positive clinical, professional, and leadership skills (at the conclusion of the field placement experiences).

Recreational Therapy Major Curriculum

The Bachelor of Science in Recreational Therapy requires the completion of 120 credit hours, including 30 credits in general education, 54 credits of major (core) courses within the major (includes 6-credits of supervised field experience), one 12 credit concentration within the program, and 24 credits of open electives. In addition, the open elective courses may be selected to count toward an additional 12-credit concentration(s) of their choice, which will be recorded on the student's transcripts.

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the *General Education Program* in the Academic Policies and Procedures section of this catalog.

Recreational Therapy Major (54 credits)

Core Courses (54 credits)

BHS 3110 Health Care Ethics (3 credits)

LED 3000	Introduction to Leadership (3 credits)
HS 1300	Interpersonal Assessment Skills in Human Relations (3 credits)
HS 2100	Administration of Recreational and Leisure Services (3 credits)
HS 3330	Human Behavior and the Social Environment (3 credits)
HS 4100	Rehabilitation Principles and Case Management (3 credits)
HS 4250	Program Planning and Evaluation (3 credits)
PSYC 2350	Life Span Human Development (3 credits)
RT 1100	Recreational Therapy: Theory and Foundations (3 credits)
RT 1200	Recreational Therapy with Physically Disabled Individuals (3 credits)
RT 1400	Current Trends in Recreational Therapy (3 credits)
RT 2000	Recreational Therapy: Processes and Techniques (3 credits)
RT 2100	Recreational Therapy for Individuals with Mental Illness (3 credits)
RT 2200	Multicultural Issues in Therapeutic Recreation Settings (3 credits)
RT 3050	Clinical Assessment and Evaluation in Recreational Therapy (3 credits)
RT 3250	Human Anatomy and Physiology (3 credits)
RT 4100	Field Placement in Recreational Therapy I* (3 credits)
RT 4200	Field Placement in Recreational Therapy II* (3 credits)

* These field placement courses allow the development of skills through hands-on experience. Field placements will consist of 18 hours per week, over two semesters (totaling at least 560 hours), within a therapeutic recreation services agency within the community, and are designed to enable the student, under the direction and guidance of on-site and faculty supervisors, to apply what has been learned to a real world work experience.

Concentrations (12 credits)

Students are required to select one of the following concentration areas of study. However, they may also select courses as electives to count toward an additional 12-credit concentration(s) of their choice.

Child Life and Development

PSYC 2300	Behavior Modification (3 credits)
PSYC 2360	Adolescent Psychology (3 credits)
PSYC 2370	Early Childhood Growth and Development (3 credits)
RT 3100	Recreational Therapy Services for Children and Adolescents (3 credits)

Adult Therapeutic Services

GERO 2000	Introduction to Gerontology (3 credits)
PSYC 2390	Adulthood and Aging (3 credits)
BHS 4110	Health Care and Aging (3 credits)
RT 3200	Recreational Therapy Services for Older Adults (3 credits)

Health and Recreation Management

MGT 2050	Principles of Management (3 credits)
MGT 4170	Organizational Behavior (3 credits)
HRM 4300	Managing Workplace Diversity (3 credits)
RT 3300	Supervision in a Therapeutic Recreation Setting (3 credits)

Electives (24 credits)

Students can select 24 credits of open electives from any courses, including the following suggested courses:

PSYC 2010	Cognitive Processes (3 credits)
PSYC 3520	Principles of Learning (3 credits)
PSYC 3920	Sensation Perception (3 credits)
BHS 3170	Health Care Delivery Systems (3 credits)
EXSC 3700	Kinesiology (3 credits)
BHS 3151	Health Services Management (3 credits)
BHS 3190	Patient Education in Health Care (3 credits)
HS 3240	Long-term Care and Services to the Aging (3 credits)
GERO 2030	Gerontology and the Law (3 credits)
PSYC 2470	Grief, Loss, and Bereavement (3 credits)

Addendum N

Effective revision date: July 25, 2016

This is to replace course descriptions for courses RT 4100 and RT 4200 on page 397 of this catalog.

RT 4100 Field Placement in Recreational Therapy I (3 credits)
The field placement courses will be individually arranged and will provide a supervised on-site training experience (280 hours total). Students will select their choice of a Community Based Organization (CBO) and will complete their field experience in this site. This experience will provide a hands-on implementation of principles and theory learned as they relate to recreational therapy settings. Students will be supervised by an onsite supervisor who is NCTRC CTRS certified on a weekly basis. Frequency: Every Fall.

RT 4200 Field Placement in Recreational Therapy II (3 credits)
The field placement courses will be individually arranged and will provide a supervised on-site training experience (280 hours total). Students will select their choice of a Community Based Organization (CBO) and will complete their field experience in this site. This experience will provide a hands-on implementation of principles and theory learned as they relate to recreational therapy settings. Students will be supervised by an onsite supervisor who is NCTRC CTRS certified on a weekly basis. Prerequisite: RT 4100. Frequency: Every Winter.

Addendum O

Effective revision date: January 1, 2017

This is to replace information technology section on pages 191 to 193 of this catalog.

Information Technology Major

The information technology major prepares responsible, well-rounded graduates who understand critical aspects of information technology and their ethical impact on society. Through excellence in teaching, experiential learning, service, and scholarship, the curriculum provides a comprehensive and dynamic course of study for students interested in computer and information technologies. Students study IT in its widest sense as a means of communication and human/computer interaction as well as data management and forensics. The curriculum prepares IT students to serve the community, the state of Florida, and the world through training and education. Students garner theoretical and hands-on skills needed to solve complex computing and technological problems with their mastery of a range of technical disciplines including communications, computing, and databases.

Information Technology Major Learning Outcomes

A successful information technology graduate is expected to:

1. Apply knowledge of computing and mathematics appropriate to the discipline;
2. Analyze a problem and identify and define the computing requirements appropriate to its solution;
3. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs;
4. Display an understanding of professional, ethical, legal, security, and social issues and responsibilities by analyzing the local and global impact of computing on individuals, organizations, and society;
5. Communicate effectively with a range of audiences;
6. Effectively integrate IT-based solutions into the user environment;
7. Recognize the need for and an ability to engage in continuing professional development;
8. Use current techniques, skills, and tools necessary for computing practice;
9. Use and apply current technical concepts and practices in the core information technologies;

10. Identify and analyze user needs, and take them into account in the selection, creation, evaluation and administration of computer-based systems;
11. Identify best practices and standards and their applications.

Information Technology Major Curriculum

General Education Requirements (30 credits)

Students are required to complete 30 credit hours as part of the General Education Program. For specific course requirements, refer to the General Education Program in the Academic Policies and Procedures section of this catalog.

Major Prerequisites (6 credits)

MATH 1200 or higher Pre-calculus Algebra (3 credits)
MATH 2020 Applied Statistics (3 credits)

Core Courses (34 credits)

CSIS 1800	Introduction to Computer and Info. Sciences (3 credits)
CSIS 2000	Introduction to Database Systems (3 credits)
CSIS 2101	Fundamentals of Computer Programming (4 credits)
CSIS 3020	Web Programming and Design (3 credits)
CSIS 3023	Legal and Ethical Aspects of Computers (3 credits)
CSIS 3500	Networks and Data Communications (3 credits)
CSIS 4010	Computer Security (3 credits)
TECH 4310	Web Services and Systems (3 credits)
TECH 4350	Human-Computer Interaction (3 credits)
TECH 4500	Wireless Network Infrastructures (3 credits)
TECH 4900	Directed Project (3 credits) * *OR*
TECH 4950	Internship in Technology (3 credits)*

Major Electives (15 credits)

Select any 15 credits from any of TECH, CSIS, EENG, and CENG courses or

BIOL 1500	Biology I/Lab (4 credits)
BIOL 1510	Biology II/Lab (4 credits)
BIOL 1510H	Biology II/Lab Honors (4 credits)
BIOL 2600	Medical Terminology (3 credits)
MATH 2001	Introduction to Math Models in Biology I (3 credits)
MATH 3030	Applied Statistics II (3 credits)
MATH 3350	Number Theory (3 credits)

*Can be counted only once, either as a core course requirement or a major elective requirement; only 3 credits of each of these courses may be applied to the major.